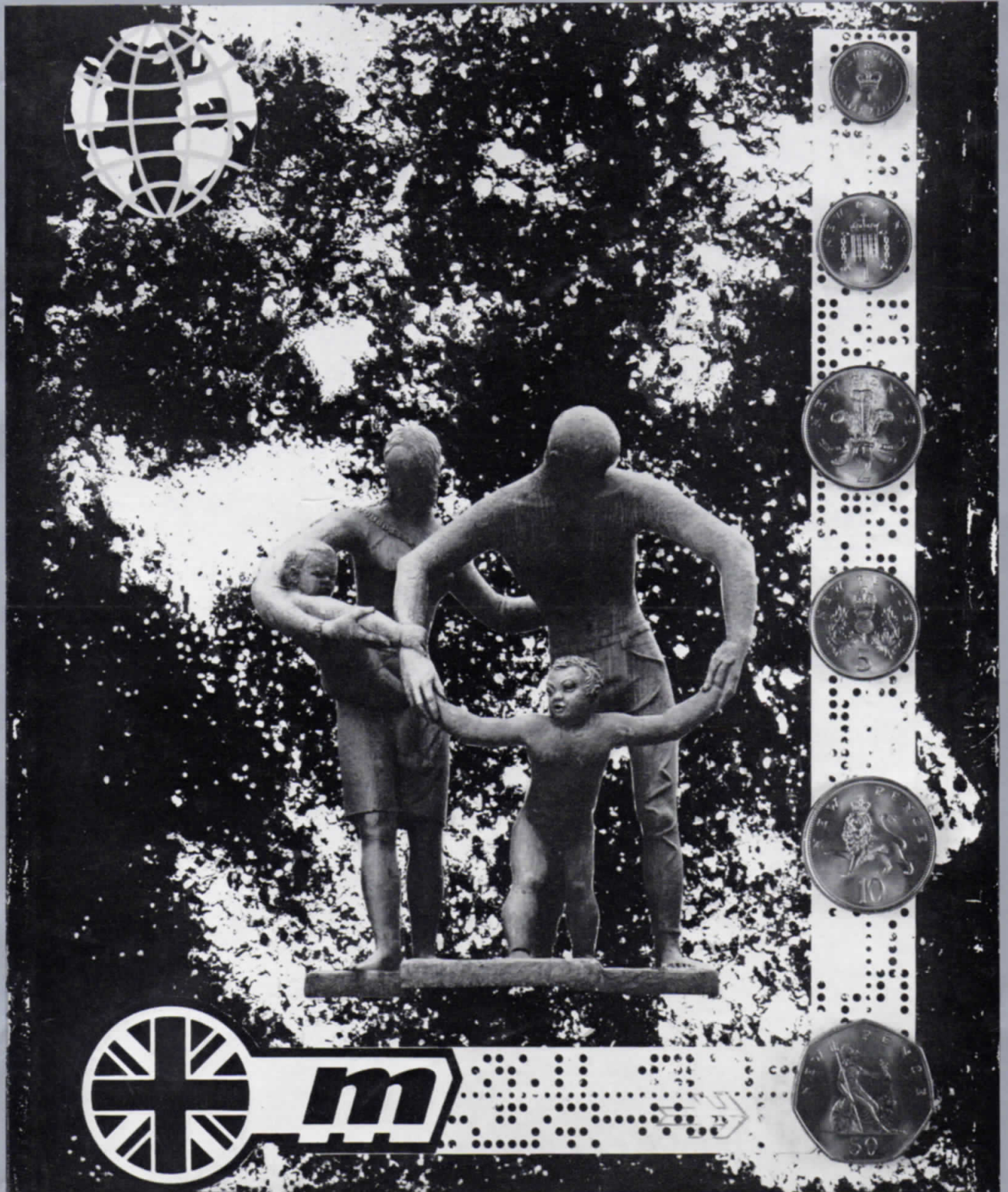


Winter 1969

Wright ahead

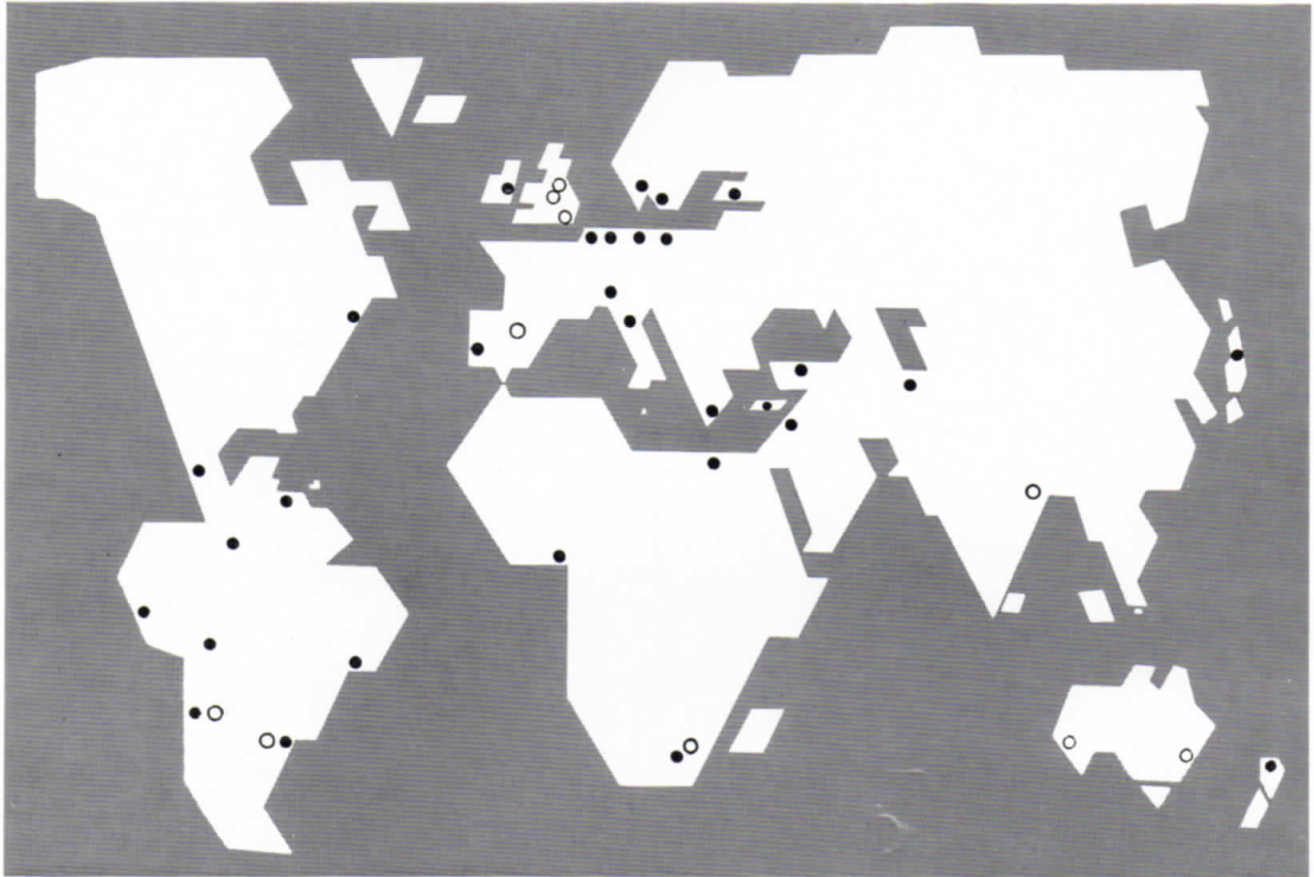
the Head Wrightson magazine



Greetings to our friends all over the world

Key

- Company Agents
- Company Offices



Appointment

Mr T O'Connor, Managing Director of The Head Wrightson Machine Company Limited, was appointed a main Board Director on 5 November 1969



Editorial

Our front cover illustration is designed to portray the close of the sixties and transition into the seventies.

The decade for Head Wrightson has produced great triumphs and some setbacks. We have supplied and installed major iron and steel plants in the United Kingdom, Australia, Canada, Finland, France, India, Poland, Rhodesia, Russia, Spain and Sweden: we were the first British company to design and build oxygen steel making plant – at Consett, followed by further installations at Park Gate, Stanton and Whyalla in Australia: we built the pelletising plants in Montecatini and Kiruna: we were involved in four out of the last five electrolytic tinning lines installed in the United Kingdom and are currently building one at Magnitogorsk in Russia: we provided reactor cores and other equipment for nuclear power stations, Bradwell, Latina, Dungeness, Oldbury, Hinkley and Hunterston: our cooling towers are dotted throughout the land: the skills of our foundries and the drop forge developed in speed, tolerance and finish, largely through our own research and development: we produced powder coating, chromising, stretcher levelling and we extended our activity into the newer fields of fume abatement, effluent treatment, water treatment, municipal refuse incineration and in association with Taylor Woodrow we are building the Invergordon aluminium smelter. The decade opened with the building of mining equipment for the National Coal Board and the last major order of the old year was for the supply of ore processing equipment for the extension of the copper mines of Enami in Chile. These are international achievements of which we can be justly proud.

The record would have failed to add up to real success if we had continued the loss trend of 1967. It is important to have put this into reverse and we speak with confidence in saying that our recovery is well based, our technical reputation is high, our organisation is sound, our knowledge and understanding of the markets in which we are engaged is being demonstrated. Our reaction to change has been sharpened.

The engineering fields in which our skills lie, are all the time becoming larger in scale as well as more complex and it will be increasingly necessary for us to take on larger contracts, not all perhaps for our own manufacture. We have had to redirect our marketing and sales effort and to correlate ever more closely the harmony between our engineering and commercial departments.

The rise in the order intake in the last few months now requires the production skill to achieve output. Performance must follow promise. So must it be through the whole of the decade which we are entering: performance will determine our progress.

Who can describe the close of the seventies? Who wants the site control job for the pelletising plant in the Sea of Tranquillity?

Chile and the ENAMI contract

by P E Rooksby



ENAMI are initials which will soon be very well known throughout Head Wrightson. Who are ENAMI? The initials stand for Empresa Nacional de Minería, a State-controlled organisation which has shares in the small and medium copper mines throughout Chile. The purpose of the ENAMI extension plan is to double the output of copper produced from these mines. The programme of extension will be carried out over the next four years. The negotiation for this contract has been long and involved several months of concentrated work in London where the contracts necessary for a project of this nature have been drawn up between ourselves and ENAMI. They involve a commercial contract and a financial agreement whereby long term finance is made available from this country to ENAMI. The documents are in Spanish and English, Spanish being the official language of the contract.

Head Wrightson are leading a consortium known as the United Consortium (Chile) Limited, consisting of Head Wrightson and the Belgian firm Sybetra. Associated with the consortium are Klockner Industrie Anlagen of Germany who will be responsible to the United Consortium (Chile) Limited for certain purchases which have to be made in Germany. We will be responsible for staffing a co-ordination office in Santiago, the capital of Chile. The staff of this co-ordination office will work

closely with ENAMI engineers in producing flowsheets and design schedules for several varieties of plant, the equipment for which will be procured by HWPEL in the United Kingdom, or by Sybetra in Belgium.

Head Wrightson share of the £18m contract is about £10m. This covers the management and the engineering as well as the UK procurement. It is likely that some equipment will be manufactured in our works on Teesside but it is not yet known how much this will be. HWPEL will be sending a number of their staff to the new office in Santiago, in fact when this magazine is published the following advance guard will be already installed:

George Newell chief engineer of ENAMI project
Andrew Mair commercial manager Chile
Leslie Askey project engineer
Ian Wigmore project engineer
Peter Franklin cost accountant.

The signing of the ENAMI contract in London office on Friday 10 October.
left to right seated:
 W H Adams, Director HW & Co Ltd,
 Don Jorge Manterola, Executive Vice-President ENAMI, and J A Boon representing Sybetra.
standing left to right:
 John Eccles *Managing Director HW & Co Ltd* and James Iveson *Director HW & Co Ltd*



What sort of life will they find out there?

The origin of the name 'Chile' is not clearly understood but in the language of the Amara Indians the word *Chiri* means 'end of the earth'. Chile forms most of the South West coast of the South American continent, from 17° 10 minutes to 55° 10 minutes latitude south. The minimum width of the country is only 10 miles, whilst the maximum width is just over 200 miles. The total population of the country is 9 m of whom 3½ m live in the capital

city of Santiago.

The most usual way of getting to Santiago from the United Kingdom is by air via Buenos Aires in Argentina. Although the flight from Buenos Aires to Santiago only takes about 1½ hours, the plane crosses over the Andes which can normally be seen very clearly from the aircraft and a very barren area it is. Once over the Andes the plane drops quickly into Santiago, a town surrounded by a relatively small area of flat agricultural land which seems to rise quickly to mountainous country

in all directions. For most of the year one can see snow on the tops of the Andes from the centre of Santiago and during the winter a popular pastime is skiing on the slopes which rise to some 12,000 ft, although the highest mountain in the Andes is over 23,000 ft.

The most popular hotel in Santiago is the Carrera which has all 'mod cons' and a restaurant and swimming pool on the roof. The swimming pool, which is a very popular rendezvous, opens in November for the summer season! Do not forget that the seasons are reversed on the other side of the Equator.

The Carrera Hotel forms one side of the main square of Santiago, with the Presidential Palace forming the next side. Most mornings the hotel is a good vantage point to watch the Changing of the Guard which is mounted at the Presidential Palace. The Guard is not an army guard but is drawn from the Carabinera, the police force, and a very smart body of men they are. The 'old guard' is changed with due ceremony in a somewhat similar manner to the ceremonies we see in London. Traffic is very heavy indeed and every street crossing has at least one policeman on it and it is wise to cross at the traffic lights once the policeman has blown his whistle. It is quite frightening to be crossing a main street in Santiago with the seven lines of traffic waiting under starter's orders for the lights to change to green. There is no amber between 'stop' and 'go'.

The climate in Santiago is very acceptable by European stand-points. The town is about 2,000 ft above sea level and the air is dry. Rainfall is not high and can be predicted with accuracy. Winter temperatures seldom seem to fall below 10°C, whilst in the summer the average day temperatures are about 25°C. There is generally a breeze blowing and provided you are in the breeze, the heat does not get uncomfortable.

Social life for Europeans in Santiago appears to revolve round the Prince of Wales Club where there are ideal family facilities for swimming, tennis, golf, hockey, rugby and soccer in very pleasant surroundings.

Cinemas in Santiago are large and modern. Usually English or American films are shown, very often with the original soundtrack and Spanish sub-titles. A good way to learn the language! (contd p4)



Santiago, Luz de Atardecer,
con Vista de la Cordillera de Los Andes



Dear All:
Had a great flight.
Chilean food marvellous
but miss those
English Kippers!
Sobering thought - here
in Santiago Scotch
costs £1 a tot!!

LITOGRAFIA MODERNA S.A. VALPARAISO



The Editor
"Wright ahead"
Head Wrightson + Co Ltd
YARM
Yorkshire
ENGLAND

Chile and the ENAMI contract

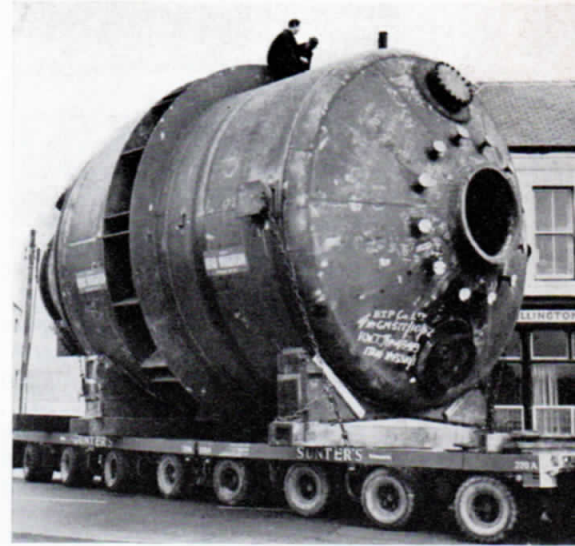
Restaurants are plenty in number and as varied in their quality as any other major town you care to mention.

One minor drawback to feeding in Chile is the meat situation. The Chilean government does not like to import meat from its neighbour Argentina and consequently the supplies of home-killed meat are distinctively limited and one often finds that certain days of the week, or perhaps several days in each month, are declared 'meatless days' when it is prohibited to sell meat either in shops or restaurants. There is, however, plenty of good fish to be had even though sometimes one longs for a nice piece of plaice or halibut, or even a kipper.

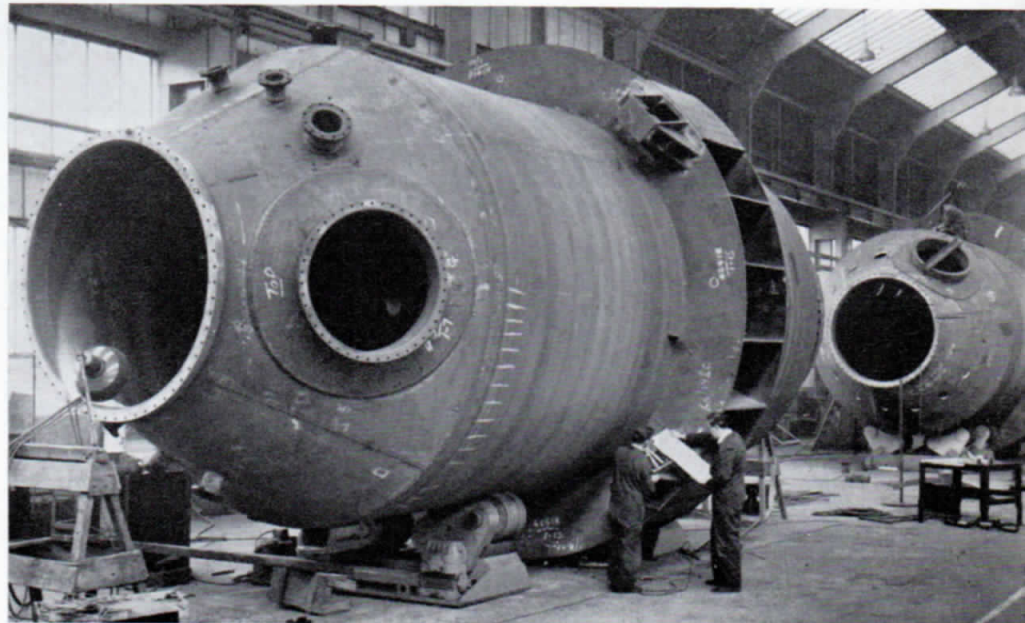
Drinking habits in Santiago bear comparison with any other capital city, except that Scotch whisky is a very definite luxury at £1 a measure! The local gin is good and the local beer is palatable and can be had in draught form.

During the summer months weekend traffic seems to be towards the coast which is perhaps two hours drive away and where there are plenty of opportunities for sea bathing and fishing. Major holidays seem to be spent in the south of Chile where the 'Lake District' offers much the same sort of terrain as found in Canada or Scandinavia. The Chilean people are very friendly and extremely well mannered in their treatment of visitors to their country particularly English visitors. They are a race of people who are very proud of their country which, although by some standards is a poor country economically, has a great wish to utilise its natural resources to the full and expand its standard of living. Chileans who have had a technical education are well qualified in their subjects. There is little doubt that the Head Wrightson people going to work there will find life interesting and if they are prepared to accept the established ways of life in Chile they will have no shortage of friends and acquaintances. There are very strong societies of English, Scottish and Welsh ex-patriots, many of these people being, although now of Chilean nationality, second or third generation descendants of English, Scottish and Welsh families who moved out there when times were bad in the United Kingdom and there were opportunities for miners, engineers, shippers, etc in Chile.

Process plant for British Titan Products new Greatham plant

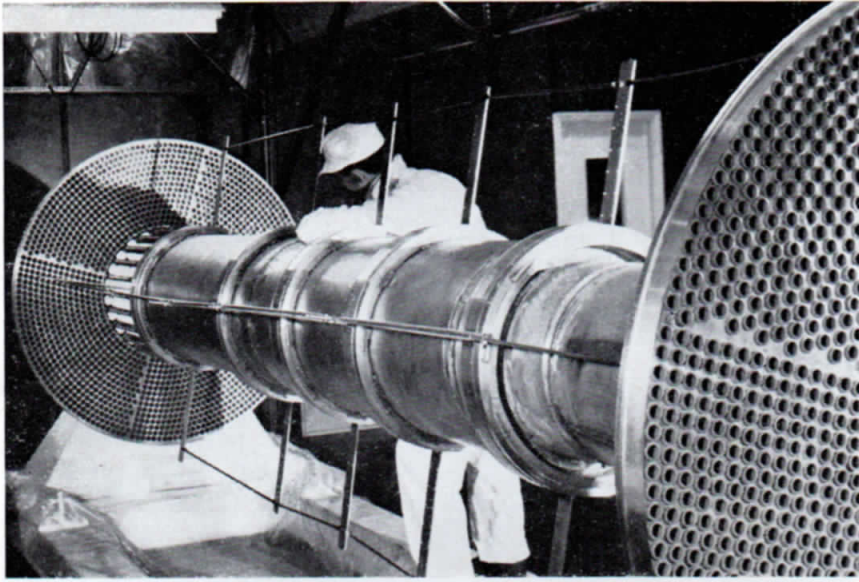


The transportation of one of three vessels en route from Thornaby to Greatham. These vessels manufactured by HWT/Thornaby Works weighed approximately 57½ tons each and were 36 feet long with a support ring 21 ft 3 ins diameter.

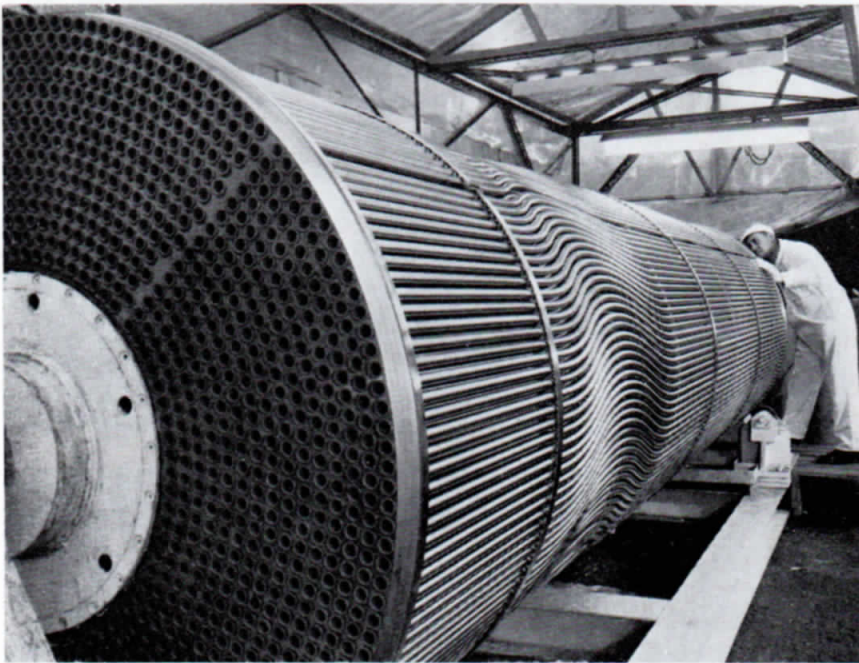


Two of three smaller vessels also for BTP Greatham Plant under manufacture at HWT/Stockton Works. These vessels weighed 38 tons each and were 37 ft 3 ins long with a support ring 18 ft 6 ins diameter. Over 31,000 gallons of water were used in the testing of the first vessel (a weight of 138 tons), completed at Stockton Works, and no leaks were found.

Other equipment being supplied from HWT to the Greatham Plant include 28 heat exchangers in carbon and stainless steels, 4 dump chutes, 2 slurry tanks, 3 scraper vessels and 2 distributors.



Heat exchangers for Dounreay

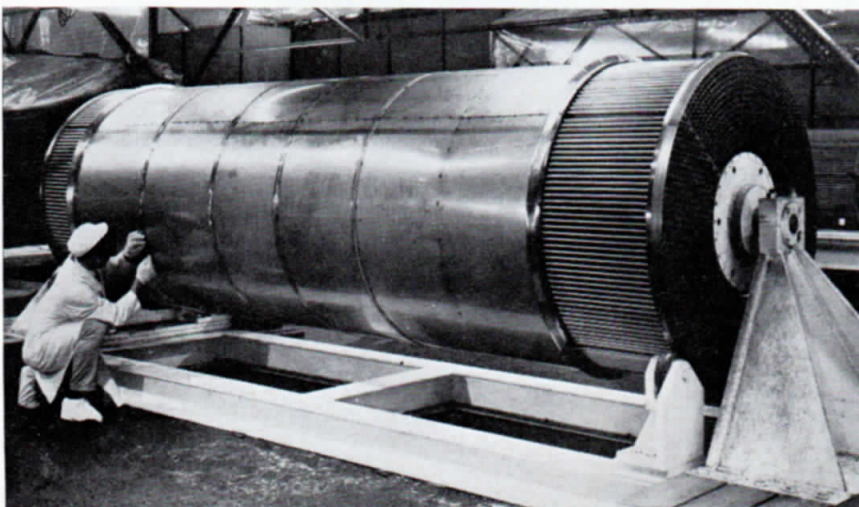


Photographs showing three stages in the manufacture of special heat exchangers in the semi-clean condition shops at HW Teesdale/Thornaby Works.

For the engineering workers involved, the working conditions are of almost hospital operating theatre standard with white overalls, cap, gloves and special overshoes being compulsory wear. Each tube bundle weighs 9 tons and constructed throughout in stainless steel.

The tubes are welded to the tube-plates and the integrity of this joint is of paramount importance to prevent leakage, the complete welds being subject to a stringent test programme which includes radiographic examination.

These particular heat exchangers are part of an order for the United Kingdom Atomic Energy Authority for six exchangers for the prototype fast reactor at Dounreay.



top: bundle positioned in jig with tubeplates and centre ducts prior to tubing

middle: bundle completely tubed and welded with plastic bungs fitted in tube holes for cleanliness

bottom: bundle complete with outer shrouds and spring seals

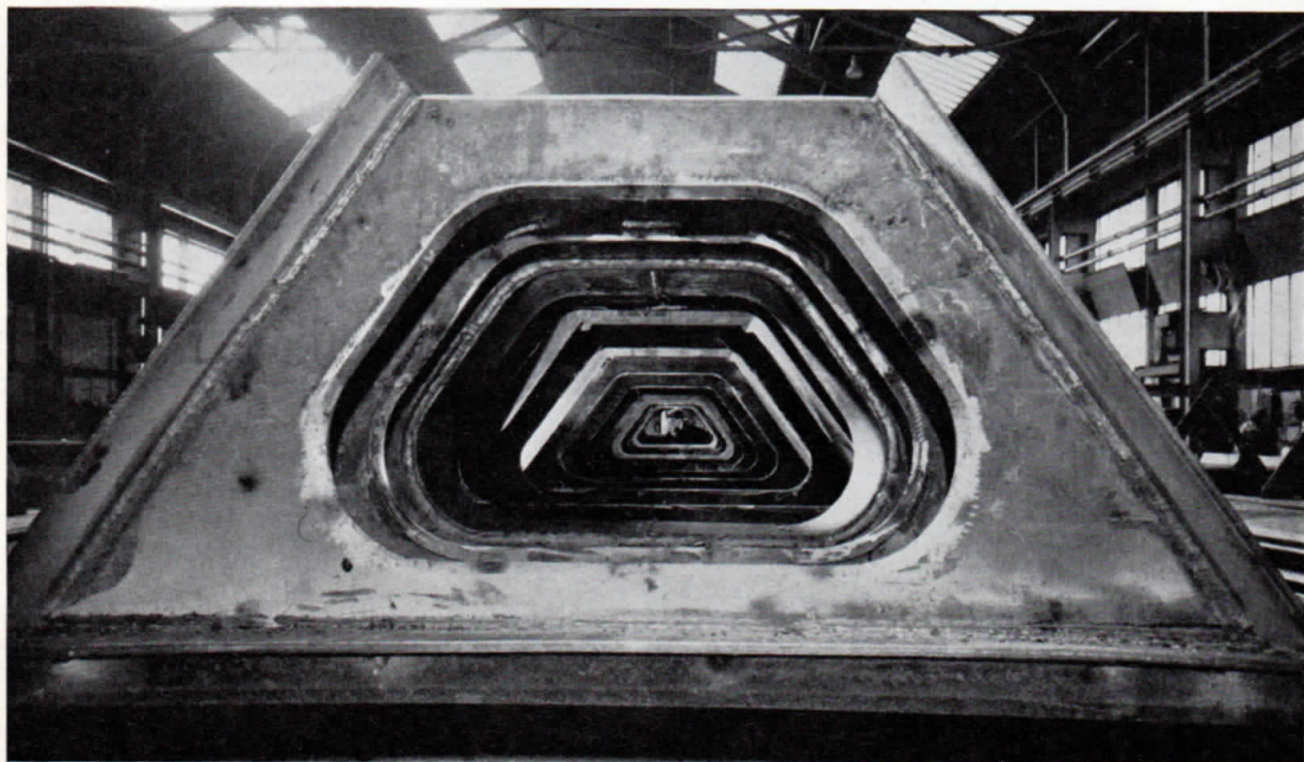
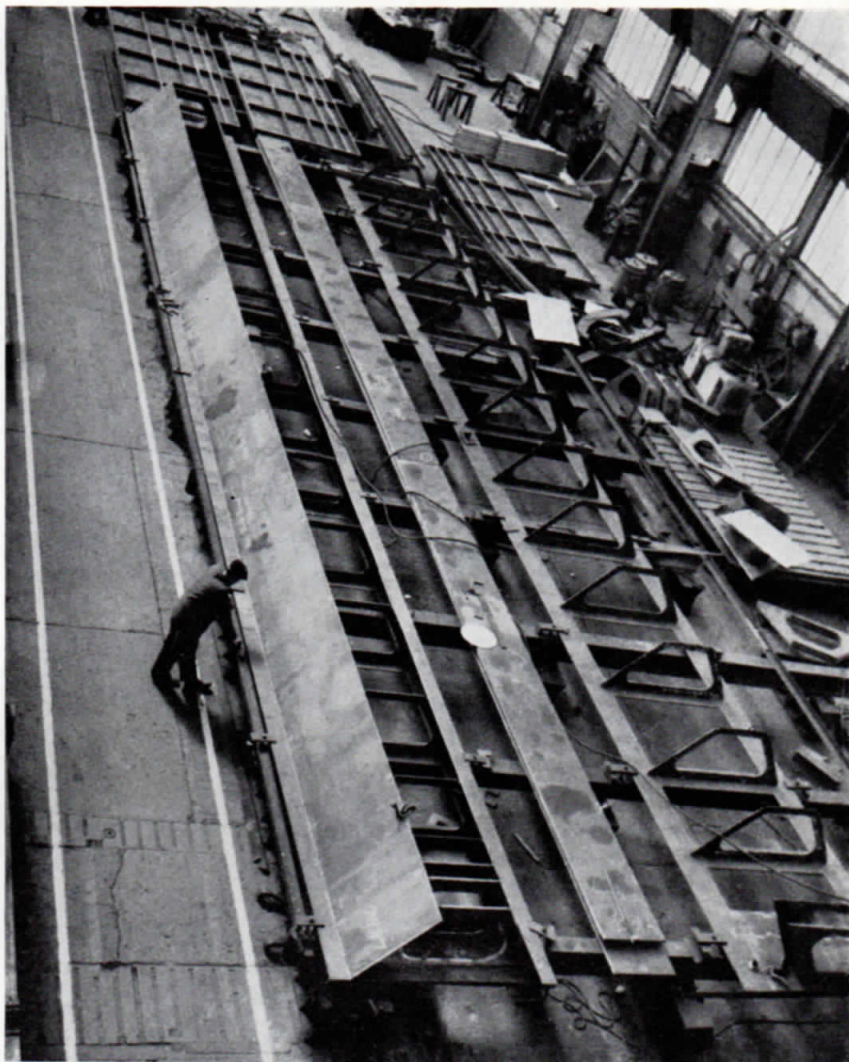
Bridges for M6 motorway extension

The photographs show welded trapezoidal box girders being manufactured to very close tolerances at Teesdale Works. HW Teesdale are supplying and erecting 9 overbridges on the 12 miles extension of the M6 dual three lane carriageway between Penrith and Carlisle.

The spans of the bridges vary from 35 ft 4 ins to 118 ft 6 ins.

The total weight of all the fabricated steelwork will be approximately 540 tons. As with most fabricated steelwork these days, the rust proofing and painting is very rigidly specified. It entails shot blasting and zinc spraying, followed by a five coat paint system. In addition the interior surfaces of the bridges are to be further protected by the inclusion inside the box sections of sachets containing volatile corrosion inhibitor.

The contract was received from Dowsett Engineering Construction Ltd for Cumberland County Council.



Exhibition

Our stand at the Dust Control and Air Cleaning Exhibition at Olympia in September



Training news

Duke of Edinburgh awards

At the time of going to press three of our young technicians will be attending Buckingham Palace on Wednesday 3 December to be presented with Duke of Edinburgh Gold Awards. The recipients are Brian Allan Gray, 21, *HWT machine shop*; David Walton, 20, *R & D electrical workshop*; Ronald Wilson, 21, *HWPEL/do*.

Success of Training Centre open days

The first-year Training Centre at Thornaby had a series of open days, 23-25 July, during which parents, youth employment officers, members of Head Wrightson employees' council, managers with special responsibilities for training, principals of local technical colleges and directors and managers of other companies sending boys for first-year training at our centre were invited to inspect the facilities. During the three days about 200 visitors saw the boys at work and some of the most interesting questions were posed by the mothers.

The open days were widely featured in the press and on television. One newspaper headlined their feature article on the visit to the centre 'The most exclusive school on Teesside'.

right:

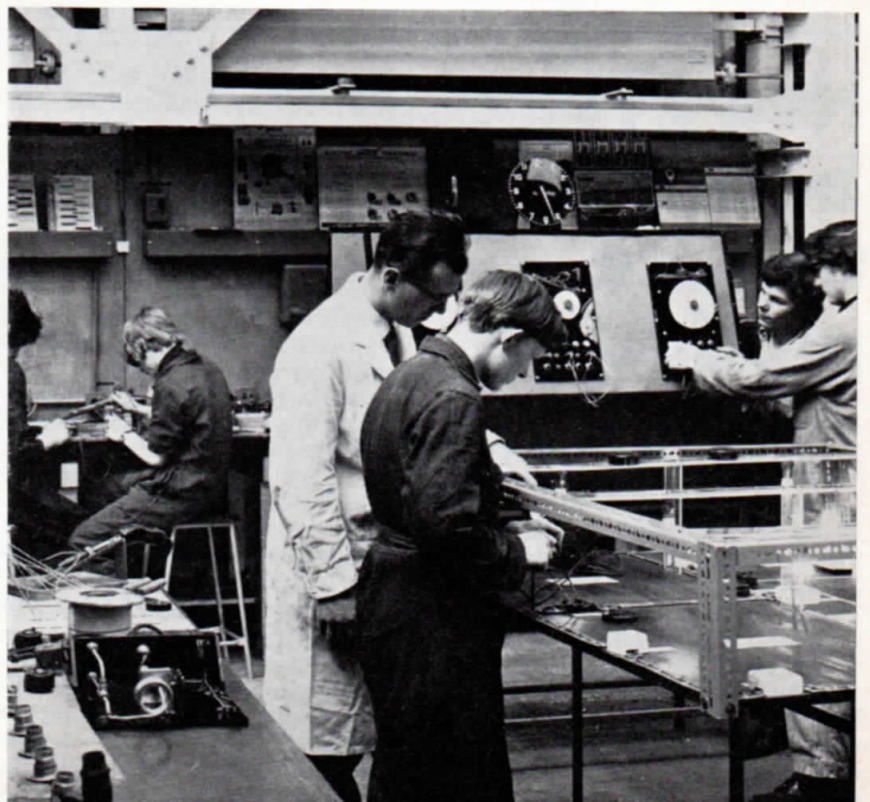
Fred Gamble, senior electrical instructor in the HW training centre, supervising the finishing touches to a display piece of equipment for the open days, this was a model electrical circuit for a bungalow

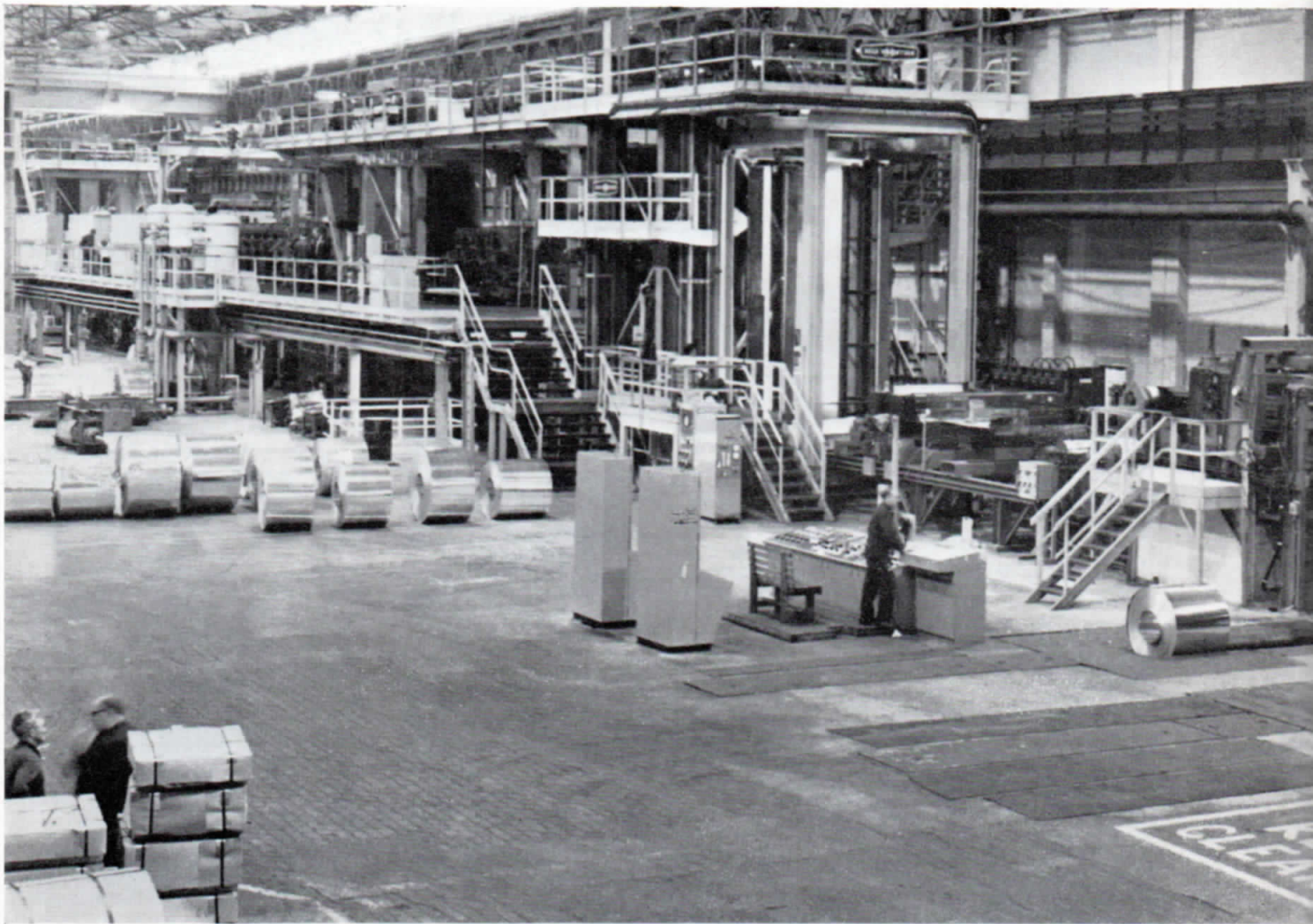
Burton trophy winner 1969

Mr Arthur Burton *HW Teesdale Ltd drawing office* recently donated a beautiful silver cup in memory of his wife Mary, for presentation to the outstanding apprentice of the year in the HW Training Centre. The winner holds the cup for one year and in addition receives an inscribed tankard to retain as a perpetual memento of the occasion.

After very careful consideration of all factors the winner for 1969 is John B Murray, who is now employed as an apprentice electrician at The HW Machine Co Ltd.

John is the son of Mrs J Murray and the late Dr John Murray of Leven Street, Saltburn by the Sea. He was educated at Saltburn Secondary Modern School.





New ETL boosts tinplate production

The new electrolytic tinning line recently installed and commissioned by HW Machine Co at the Ebbw Vale Works of the British Steel Corporation, RTB Division, South Wales Group is already making a major contribution to the new production records at Ebbw Vale. Electrolytic tinning means the application of a very thin coating of tin on both sides of steel strip to give the 'can' finish to the metal. It is a high speed electrolytic plating process which involves equipment built to a very high standard of engineering.

Messrs Richard Thomas & Baldwins Limited were the first British company to introduce electrolytic tinning immediately after the last war, and HWM have been responsible for supplying the 2nd and 3rd lines to this company, now part of the British Steel Corporation.

The new line, built at a cost of over £5m, has a capacity of 5,000 tons of tinplate per week, or in the measurement terms of the tinplate industry this capacity is in excess of 6 million basis boxes (b bs) per year.

Outstanding achievement

Ebbw Vale's General Manager, Mr J H Powell, said 'The commissioning of the new tinning line has been an outstanding achievement and has played a big part in the recent record outputs. I want to congratulate everyone concerned'.

For the first time ever, more than 9,000 tons of tinplate has been made at Ebbw Vale in one week. During the week ending 13 Septem-

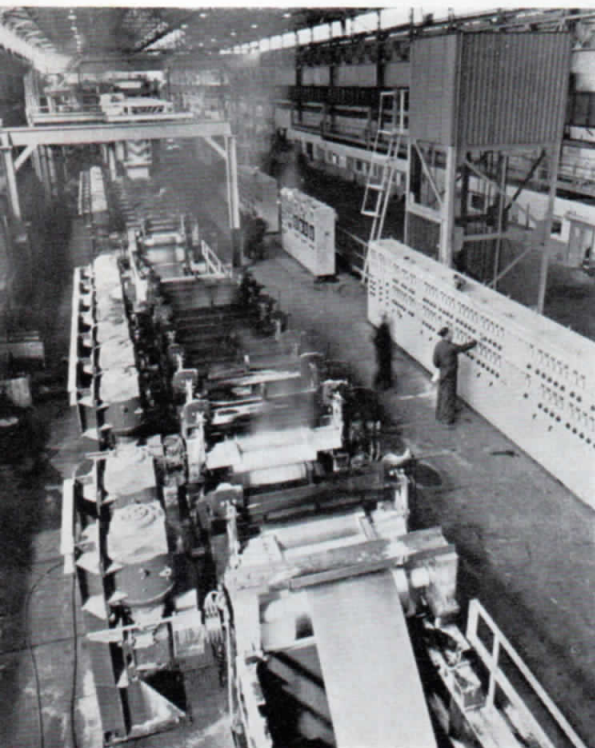
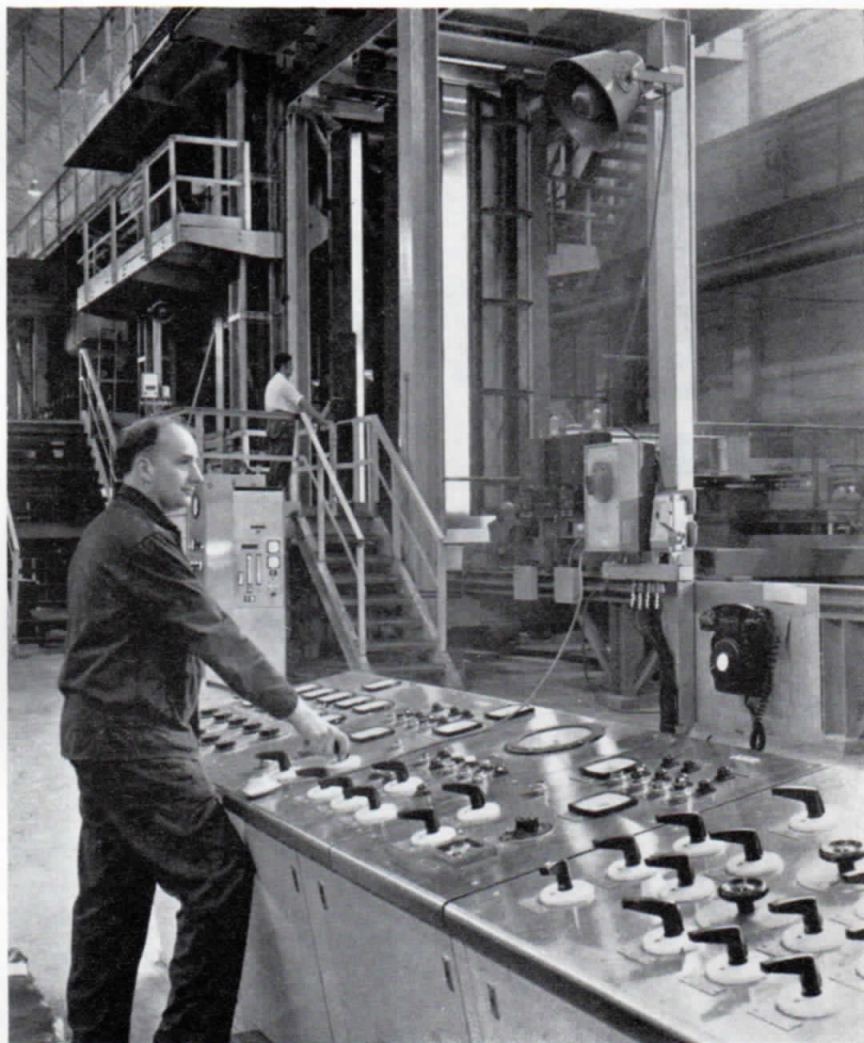
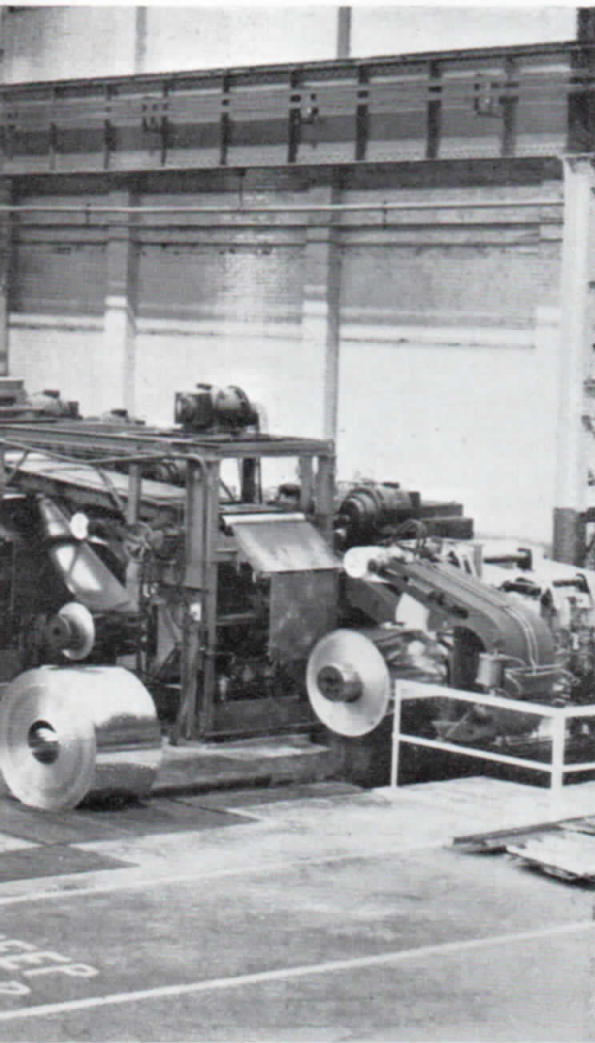
ber, the combined electrolytic tinning lines produced 225,320 basis boxes.

The ETL's put up an even better performance during week-ending 20 September, when they produced 227,470 b bs and in week ending 18 October the output from the new No 3 Line was 103,180 b bs.

Maximum speeds

In the Ebbw Vale equipment a 4,500 fpm coil preparation line prepares the coils for the tinning line and is capable of processing steel strip from 18 inches to 38 inches in width and 0.004 inches to 0.024 inches thick in coil up to 72 inches in diameter and a maximum weight of 40,000 lbs. The process section of the tinning line has a maximum speed of 1,750 fpm whilst the entry and exit sections have a maximum speed of 2,100 fpm.

The entry tower on the line can store 1,500 feet of strip and the exit tower has a maximum storage of



770 feet. This new line will produce coating weights to British and International Standards. Both equal sided coatings and differential coatings can be produced in this range. During the production of differentially coated orders, the strip is marked with a series of printed lines by which it is possible to identify the side having the heavy coating. A computer provides quality monitoring logs, together with facilities to control plating weight and maximum line speed. It also gives the line operator the principal data of the coil being processed on a television monitor. Coils of tinplate from this continuous line can be cut to length, sorted, and stacked on the cut-up line, which has a maximum speed of 1,250 fpm. The Ebbw Vale ETL is an example of the sophisticated strip processing equipment manufactured by HWM who are currently engineering a similar line for Russia.

top left: general view of the new tinning line from the exit end

top right: the inspection and re-coiler station of the ETL

bottom: general view from the cleaning and pickling section

From bath house to by-pass/ from iron bloom to broad flange beam in 2,000 years

by F A Batty

Prior to the building of the Catterick By-pass, an emergency excavation was carried out between September 1958 and July 1959, on the site of the Roman Civil Settlement at Catterick Bridge, which was to disappear during the building of the by-pass.

During this excavation two blooms of iron were discovered and the following brief article explains the purpose served by these blooms.

The Roman Road from York to Scotland known as Dere Street, wrongly called Watling Street, was probably begun by Petilius Cerealis (Consular Governor of Britain AD 70) during his campaign against the Brigantes, the northern tribe occupying Yorkshire, Durham and Northumberland. The road was certainly completed by Agricola during his governorship of Britain from AD 78 to 85, and passed through Aldborough (near Borough-bridge), Leeming and Catterick Bridge continuing to Piercebridge. Amongst the many forts built along this road was Cataractonium sited at Catterick Bridge and built in Flavian times, ie late 1st century. Excavation has shown that a short military occupation in the Flavian period was replaced by civilian tenure for the rest of the Roman era. The town was built immediately outside the fort and the town walls connected up to the fort walls as in the case of London.

In later years the Great North Road deviated from the line of Dere Street and crossed the Swale by a stone bridge at the Bridge House Hotel. When the Catterick by-pass was planned it was found that it would pass very close to, but slightly west of the alignment of, the original Roman road.

In order to ease the gradient before crossing the river, the by-pass would cut through the Roman civil town in a cutting between 30 ft and 40 ft deep and would destroy completely that portion of the site.

In the autumn of 1958 the Ministry of Works undertook a 'rescue' excavation in advance of the building of the by-pass and complete, though in some cases rather hurried, excavation of a site of about 14 acres, representing roughly 1/4 of the total town area was continued until July 1959.

The excavation revealed part of the town wall, together with streets, houses, shops, etc and a very fine bath house which was an early 4th century rebuilding which had not been completed.

Excavation in this bath house to a depth of about 12 ft revealed that a 2nd century bath house had been dismantled to make way for the later building.

In the furnace room of the earlier bath house were found two blooms of iron of considerable size. The excavations had revealed no evidence of ironmaking on the site, but a study of reports of various bath houses throughout the Roman world indicated that in a number of bath houses and notably in the Stabian baths in Pompeii, similar blooms had been used to support the water boilers and metal extensions to the hot water baths, known as testudos, as shown in fig. 2. A study of bath houses at Pompeii, Hufingen in Germany and Boscoreale in Spain, indicates that the usual arrangement of a caldarium or hot plunge bath, was to construct the bath from masonry and concrete, with the usual hypocaust arrangement for under-floor heating.

In order to fill the bath with hot water, a separate boiler was constructed over the furnace with a duct connecting the boiler to the bath. Once filled, the temperature of the water in the bath was maintained by using the testudo, which as can be seen from the sketch, was a cylindrical bronze extension carried out from the side of the bath over the furnace to permit the full furnace heat to be used for heating the water in this section. The testudo was made from a number of bronze plates riveted together to form a metal chamber.

Because of the intense heat in the furnace section, blooms of iron up to 7" square in the centre section were used to support the testudo and the boiler.

This was the purpose served by the blooms which were found at Catterick Bridge, although no traces were found of the bronze testudo or the boilers. These probably disappeared during the later rebuilding of the bath house.

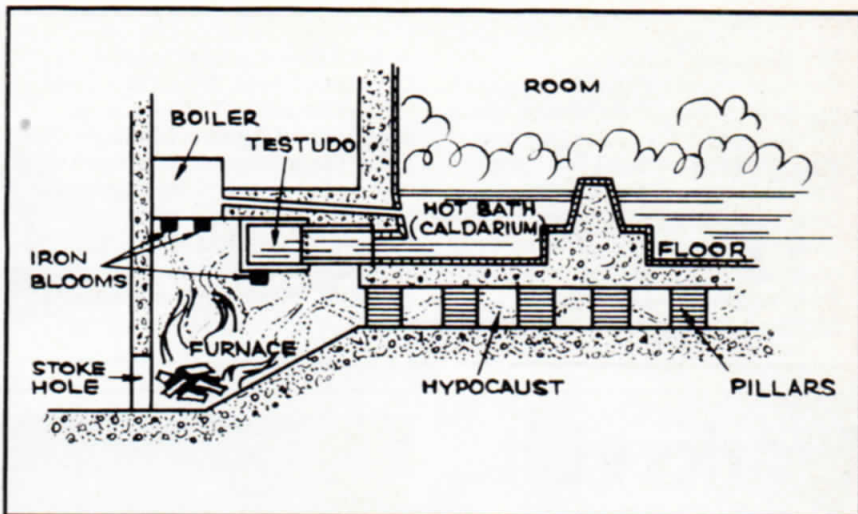
There were no signs of any iron-making activities at Catterick and we must assume, therefore, that these blooms were brought in from outside for the building of the 2nd century bath house.

A similar bloom was discovered at Corbridge in 1912 in association with an ironmaking hearth. An investigation of this bloom had been carried out by Sir Hugh Bell of Dorman Long, and fully reported at that time.

right:
Fig 1. Bath house during excavation with pattern of 8 ft square holes, and 2 ft thick baulks later removed



far right:
Fig 2. Section of portion of bath house showing position of boiler and testudo and iron bloom supports



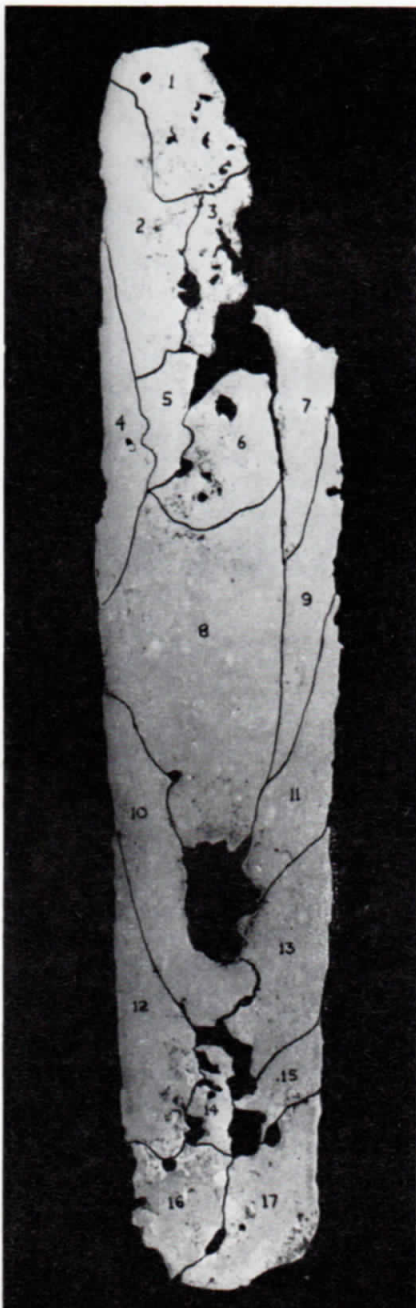
below:
Fig 3. View of completed by-pass showing cutting which removed all trace of the site. Agricola Bridge can be seen in distance



right:
Fig 4. Seven feet long iron bloom as discovered below level of later bath house



far right:
Fig 5. Polished and etched section of smaller bloom with separate portions outlined in ink



below:
Fig 6. Agricola Bridge over the Swale during construction showing broad flange beams in position



Messrs Dorman Long kindly offered to undertake a similar investigation on the smaller of the Catterick blooms. This was carried out under the direction of the late Mr J H Wright, and the results showed a striking similarity between the Corbridge and Catterick blooms. These ancient iron blooms can be classified as porous masses of wrought iron, built up of smaller pieces, which have been fire welded together. The smaller pieces of wrought iron were evidently produced by a reduction process direct from the ore. The low sulphur content of the iron suggests that charcoal was used as the fuel during the reduction, refining and welding processes.

Fig 5 shows an etched section of the small bloom with the boundaries between the 17 small pieces marked. This is only half of the original bloom which would measure 7 feet x 7 inches square at the centre. An etched half section of the small bloom has been preserved and is at present in a show-case in the entrance hall of the offices of the Iron & Steel Institute in London. Immediately on completion of the excavation and recording of the details of the site, the heavy earth-moving equipment moved in and work on the cutting for the by-pass removed forever all traces of this site, the only remainder of which is an inscription on the new bridge over the river Swale which has been named Agricola Bridge.

A portion of the Roman town wall does, however, outcrop on to the Catterick Bridge racecourse, and can be seen, and underneath the farm house on the top of the hill should be the remains of the original Roman fort, which adjoined the civil settlement.

Mr George Taylor

We were deeply shocked to hear of the death, after a short illness, of Mr George Taylor, Sales Director, Head Wrightson Steel Foundries Ltd, on October 25th. George, aged 52, had spent all his working life with the Company, commencing in 1933 as an apprentice. He progressed to Works Manager at Stockton Steel Foundry

and in 1959 was appointed a Director of Head Wrightson Steel Foundries and in 1961 became Director and General Manager. Not all his years at Head Wrightson were in the service of the Steel Foundry, for in 1958 he was in charge of Cupola Mining and Milling Co (a small plant in Derbyshire which Head Wrightson owned for some years) and was later Managing

Director of Head Wrightson Iron Foundries Ltd. He returned to the Steel Foundry as Sales Director in early 1967.

George Taylor was very well known and extremely popular in the foundry world and for many years had represented Head Wrightson on various trade committees concerned with Steel Castings.

Works visit

Photo of Mr D J Hedgecock, director of engineering British Aluminium Co Ltd with Mr R Purnell director and general manager HW Teesdale Ltd. Also accompanying Mr Hedgecock on a visit to our Teesside works were Mr G E White Invergordon project manager BA Co Ltd and Mr R C Baker chief project engineer BA Co Ltd. These three senior executives are seconded to BA Co Ltd from Reynolds Metals Company of America, for the construction of the aluminium smelter at Invergordon.



Welcome visitors from South Africa

Mr K Hurst sales manager HW South Africa recently spent two weeks visiting our works on Teesside. Ken had quite a crowded programme collating all the latest information on HW products.

Mr Frank Harrison, a former member of the Forge DO, recently visited

the old country and met several of his former colleagues. In conversation he mentioned another former Forge member, Syd Collier. It appears that Syd is quite a bowls champion over there, had he been a South African he would probably have been playing for the country – good for you Syd.

ILAFA conference Buenos Aires

Mr N C Lake deputy managing director HW & Co Ltd was leader of the British Delegation to the 1969 Annual Conference of the Latin American Iron & Steel Institute (ILAFA) which is attended by delegations from all over the world. Mr Lake is President Elect of the Iron & Steel Institute and Chairman of the British Metalworking Plant Makers' Association and represented both of these associations at the conference.

Dr K T Lawson director HW Machine Co Ltd also attended the

conference to present a paper entitled 'Powder coatings for steel strip'.

The first commercial powder coating line is now being manufactured by HW Machine Co for John Summers, this line will produce aluminised steel. Dr Holker of Associated Chemical Companies presented a companion paper entitled 'Closed coil chromising process'. This paper described ACC's process for producing a stainless clad mild steel strip which also utilizes the HW powder coating techniques.

HW crane for Invergordon

Mr H Fall HWT erection dept recently took over a new Allen crane from Mr J Berry sales manager John Allen & Sons (Oxford) Ltd.

This truck-mounted hydraulic crane has a three sectional main boom which telescopes to 92 ft and has a maximum lift of 25 long tons. The crane is part of the equipment being used by HW Teesdale in the erection of the building steelwork and installation of the carbon plant and equipment at the new British Aluminium Co Ltd smelter at Invergordon.



right:

Mr Fall (right) receives the crane on behalf of HW Teesdale from Mr Berry

How not to travel from Johannesburg to Teesside

At the end of his contract with HW South Africa, Derek Loudon decided to return to the UK the hard way – by car. Together with Peter Michell, a draughtsman with HWSA, and another friend they prepared an Austin 1800 car for the trip. They sailed from Durban to Bombay calling at Mombasa. This was the most relaxing part of the trip. It took 8 hours to get through Indian Customs formalities: considerably quicker than HW personnel associated with the Durgapur contract had forecast.

Forty miles north of Bombay the first calamity occurred when the overloaded car burst a hydrolastic suspension unit. According to the manual a car with burst suspension can be driven at 30 mph on metalled roads – but they didn't reckon on Indian roads! After 300 miles the rubber bump stops had given up and they were stuck at Indore. The local garage tackled the damaged unit with enthusiasm in spite of being told that specialised equipment was required. For two days the car was worked on under a large tree which was used by the

local pigeons as a convenience. The much spotted car was eventually jury rigged and the journey continued through Agra and the Taj Mahal and Delhi.

At Ambala the suspension again collapsed but more ingenuity fixed it and the car limped on through the Indian-Pakistan border to Lahore and Rawalpindi. Here a BMC garage was found with a hydrolastic unit and the car was quickly fixed.

The drive up the Khyber Pass into Afghanistan and Kabul was most impressive. In the centre of Kabul a large number of hippies had gathered together for enlightenment and hashish – quite an extraordinary sight.

The journey continued through Kandahar Herat and into Iran. Here the roads deteriorated into tank testing tracks and progress was slow.

In spite of having a $\frac{1}{4}$ " steel sump shield, the sump was cracked and the radiator holed when an unseen rock was hit. A Landrover towed the car into Bojnord for repairs, but it was an aluminium sump and the possibility of getting it welded was

very remote. However, a tube of epoxy glue fixed the crack and once more the car was mobile. From the Caspian Sea the route continued through Tehran, Tabriz and into Turkey. Here the final calamity occurred when the universal joint on a drive shaft broke. Attempts to repair this failed so the car was put on a lorry and transported 1,000 miles across Turkey to Istanbul. It was quite an unusual way of seeing Turkey – in a car on a lorry.

In Istanbul the only universal joint for an 1800 was located, but the garage wanted to charge £70 for a part costing £4 in the UK. So now the car was put on a train from Istanbul to Salzburg in Austria. Derek Loudon flew from Istanbul to London while Peter Michell went to Salzburg to await the arrival of the car and have it fixed.

The car is now back on Teesside and is really in not too bad a condition considering the trip. Not the quickest or cheapest way of getting from Johannesburg to Teesside but certainly an interesting one.

Sport & Social

The Teesdale machine shop cricket team, winners of the 1969 interdepartmental competition

back row left to right: D Carr, B Howat, K Close, B Roberts, A Roxborough, B McLean
front row left to right: M Bradley, G Watson, D Brocklesby, A Jennings, H Armstrong



Cricket section

The 1969 season was quite satisfactory with both the 1st and 2nd elevens finishing in the top half of their respective divisions. The 2nd eleven also reached the final of the Knockout Cup for the second year running but this time had to be content with the runners-up trophy. During this winter we are again taking advantage of the excellent facilities offered by the Sports Centre at Norton Road, Stockton. Cricket practice will be held each Monday commencing at 6.30 pm on 19 January 1970. Anyone interested in joining these practice sessions would be made welcome.

Interdepartmental competition

This year the Teesdale Machine Shop won the trophy for the first time, beating Yarm in an exciting final. Mr J M Semple, *chief accountant*, presented the trophies to the finalists.

Bowls

The departmental single rink competition produced an extremely close final, in fact the last two ends were played in the twilight of the evening. Finally HW Teesdale DO beat the Steel Foundry after 18 ends as the following table shows:

	HWT/DO	HWSF
5 ends	4	4
10 ends	11	11
15 ends	15	15
18 ends	17	16
Teams	J Wennington R Frost E Atkinson L Berry	T Dobson C Mason T Osborne C Clarkson

Senior Staff Guild

A very successful Smoker was held on 30 September in the 'Jet-Miners Inn' at Great Broughton. This delightful olde worlde place proved a perfect setting for a get-together, and all those who attended left the 'Jet-Miners' in the happy frame of mind that the world wasn't too bad after all.

At the time of going to press the next event is a wine and cheese party with tasting contests, prizes, etc.

It must be emphasised that a fair amount of work is involved in arranging such events. If they prove successful then it gives the Senior Staff Guild Committee the satisfaction that they are achieving their aims - being worthy of the name 'Guild' which, as described in the dictionary, means 'bond of people with common interests'.

HWM autumn social

A very pleasant evening was held on Thursday 9 October in the Fountain Hotel Ormesby, by sixty members and guests of the HWM staff benevolent and social fund. During the evening, presentations of cups and trophies were made by Mr T O'Connor and Mr P J Llewellyn for the following summer competitions:

Bowls drive

Winner J J Byers
Second A Burton

Photography

Colour slides G W Waller
Colour prints R Bargewell
Monochrome prints *large* J Wilson
Monochrome prints *small* R P Irvine

The overall winner of the four photographic competitions was Mr R Bargewell who received the Llewellyn Cup which he retains for one year.



Mr R Bargewell *left* receives the Llewellyn Cup from Mr P J Llewellyn
Mr T O'Connor is in the background

Mr T O'Connor *managing director* donated a new trophy the O'Connor Cup to the photographic society and this was accepted by the society's secretary, Mr T Weatherhead, for a monthly competition of colour slides.

Ladies v gents contest

This took the form of a game of rounders which was won by the gentlemen, although the decision was strongly disputed by the ladies' team, Mr P Kobayashi received the winners' cup from Mr O'Connor amidst shouts of disapproval from the ladies.

The programme continued with two delightful presentations to Mr J Wilkin who retired on 3 October after nearly 33 years' service with Head Wrightson. Mr O'Connor presented Joe with a cash gift on behalf of the staff benevolent and social fund. Mr J I Stalker

chairman of the fund committee also made presentations to Joe and Mrs Wilkin on behalf of all the members, of a cut glass vase and a floral bouquet to mark the occasion of their ruby wedding anniversary.



Mr & Mrs J Wilkin

Retirements

N Peacock HWT Stockton Works
After 30 years at 'the Forge' Norman Peacock recently retired to enjoy, we sincerely hope, a long and healthy life of leisure.

Norman was well respected for his honest opinion throughout his career. He was leading hand plater almost throughout his service and also took an active interest in the HW athletic and social club.

W Hunter HWT DO

On the eve of his retirement on 26 August a gathering of colleagues of Mr W Hunter took place at the Blacksmiths Arms, Swainby. Mr Hunter received a Parker writing set from Mr H Morris *senior engineer heat exchanger and pressure vessels dept* on behalf of all his friends at HW Teesdale.



George Doidge adjusts the mike for Ralph Langstaff following the presentation to Ralph of a 400 day clock by Ray Wade on behalf of HW Teesdale bridge yard personnel
The occasion (reported in the last issue of Wright Ahead) was Ralph's retirement after 27 years service in Teesdale ambulance room.

At this season of goodwill, we extend to all our retired personnel our sincere best wishes

A shipwright's family tree

Answering a sudden call for assistance from the Wallsend Slipway Eng Co Ltd recently, Ed Sanderson our 'dock gate consultant' visited site to advise on possible repairs. A chance remark by Ed was that his great grandfather had been foreman shipwright at this yard when the gates were installed 75 years ago.

On delving into this it seems that there is something of a record in the shipwright world with the coming to light of this hitherto 'unknown' member of the family. It appears that the Sanderson 'shipwright tree' now is as follows:

William Greave	<i>great grandfather</i>	1822-1906/84 yrs
Jack Sanderson	<i>grandfather</i>	1843-1928/85 yrs
William Sanderson	<i>father</i>	1877-1957/80 yrs
Our Ed	<i>continuing</i>	1901-1968 yrs
Total years		316 yrs
Period of time		1822-1969 147 yrs
Total working years		233 yrs

and whilst it has not all been spent to the benefit of HW it still makes interesting reading and is a record of which many a family could be proud.

There are not many dock gates in the country which have not had the attention of one of this family. Between them they have either made or repaired or stepped or unstepped a total of 290 pairs, a great number of them in the service of HW. Among their many accomplishments are the lining off of the old Mauretania and the setting out of the stern frame of this ship by old Jack Sanderson who, having started work at 9 years of age, could neither read or write but managed to do his calculations with a steel square and a steel rule. Gates to the Panama Canal had a Sanderson's (Old Bill) attention as did the Bradwell and Dungeness Boilers (Ed). The Egyptian Bridges and gates produced by HW were put in by Bill and there are many other notable engineering jobs carried out by them.

It is becoming interesting to see the new generation of dock gates replacing the old, many of which we find installed by a member of this remarkable long serving shipwright family.

Lodging accommodation

Lodgings are required from time to time for hourly paid and staff employees coming into the district on a temporary basis. Employees who have accommodation available to offer such persons are asked to contact the Group Personnel Manager at The Friarage, Yarm, giving details of accommodation available and weekly terms.

From the family album

The HW dramatic society flourished from 1952 until 1958 and during this period produced sixteen full-length plays. Their theatre was Teesdale Hall, amazingly transformed for each production. Each play ran for three nights, Wednesday to Friday, the latter performance usually presented to a capacity audience.

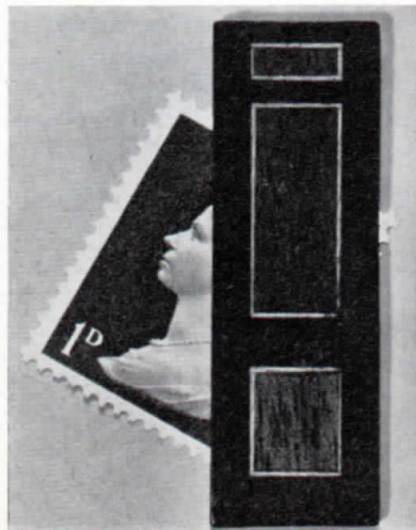
The productions were: *When We Are Married*, *On Monday Next*, *The Feminine Touch*, *Quiet Wedding*, *I Have Five Daughters*, *John Marlow's Profession*, *An Inspector Calls*, *Easy Money*, *The Camel's Back*, *Job For The Boy*, *Champagne For Breakfast*, *Night Was Our Friend*, *The Blue Goose*, *Will Any Gentleman*, *Mate in Three*, *Someone Waiting*.

top: *The Camel's Back*
middle: *Quiet Wedding*
bottom: *I Have Five Daughters*



Craftsman-ship of yesteryear

The miniature door photographed on top of a 1d stamp



The reputation of the firm is everyone's concern but HW Steel Foundry would be interested to know if any Company or Division holds so zealously an article as photographed. It was made by Jack Mowbray who eventually became foreman pattern maker about 1925. This miniature door was made approximately 70 years ago in the pattern shop situated in the old factory, now demolished. The size of the door is only $1\frac{1}{2}'' \times \frac{1}{2}'' \times \frac{3}{32}''$ and comprises 21 pieces using two

types of mahogany and lance wood. The custodian of this masterpiece is the oldest HW pattern maker employed, who on retirement traditionally hands it on to the next official 'doorman'. The door will, no doubt, be in circulation for many years to come. The present holder — who else but Bill Hopper, *HW steel foundry*.

Marriages

The Friarage

Mr P Urwin to Miss J Soppett
computer

HW Iron Foundries

Mr C Todd to Miss E A Batkin
wages

Mr B Wastell *moulder* to Miss D
Leeming

HW Process Engineering Thornaby

Mr P Moore to Miss A Gwilliam
DO typing

HW Stampings

Mr J Beadnall *DO* to Miss V
Goodchild

HW Teesdale

Mr H Marchant *structural* to Miss
C A Lynas



Mr & Mrs B Wastell



Mr & Mrs P Urwin

Iron Foundries. bird's-eye view

Head Wrightson Iron Foundries Ltd located at Yarm Road, Stockton-on-Tees continue the very earliest products of HW. Today the tunnel segments, general engineering and iron and steelworks castings including ingot moulds, bottom plates, slag ladles are produced on a large scale by modern specialist foundry plant and equipment

