

# OTIS<sup>MAGAZINE</sup>



SPRING 1977 — OTIS ELEVATOR COMPANY LIMITED



# OTIS MAGAZINE

## SPRING 1977

### *Welcome to the first issue*

This is a new-style Otis Magazine.

It is, we feel, the natural progression from the Otis Newsletter which did such a splendid job in reporting in-company news and events from all levels.

There will still be plenty of news of the company's activities in the new magazine. But in addition, with the added attraction of colour printing, there will be general interest features. Sport, entertainment, travel—we hope to cover these interests and many more.

Your own contributions on any subject will always be welcome for consideration. And we want your advice and criticisms, too, so that the magazine can improve with every issue. Write to Barry Wheeler London.

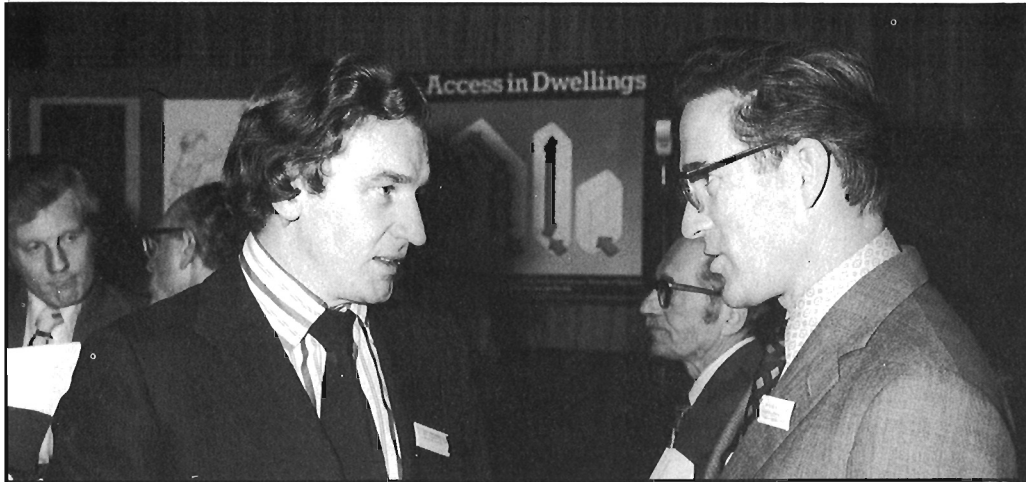
There will be three issues a year—Spring, Autumn and Winter.



*Our front cover shows part of the recently completed ward and treatment blocks of St Thomas' Hospital in London. The photograph on this page is of Greyfriars Development, Bristol. Both developments have multiple installations by Otis.*

Otis Magazine is published by Otis Elevator Company Limited, 43/59 Clapham Road, London SW9 0JZ and edited by IPC Project Publishing. Printed in England by IPC Printers Limited. © 1977 Otis Elevator Company Limited.

# LET US ALL PROFIT



BY NORMAN CUNNINGHAM

I am delighted to take this opportunity to talk to you about profits and productivity. Regretfully, profit has, in certain areas, become a dirty word. Moral pressure has been put on management to feel guilty about making profits and to promote the proposition that companies are only there to provide employment, not to make profits.

This type of thinking is disastrous. Profits are essential to support the society we live in. If we support profits, we support investment. If we support investment, we support the maintenance of existing jobs and the creation of new jobs. Profits make employment. Full employment gives us a better standard of living.

The bulk of current investment in industry today has been provided by shareholders and the ploughing back of profits into further investment. Manufacturing industry in Britain is the key to our success as a country.

Britain is blessed with a heritage of quality people who, on the whole, are hard-working, dependable, inventive and courageous. This is our principal natural resource. In addition, we have unlimited resources in coal and, for the next twenty years, abundant resources in oil. The City of London leads the world in financial services and insurance. Although we are not the largest farming community in the world, we are about the most efficient.

We have other resources but, as an industrial nation, our main strength lies in our people. This is the only resource to get us out of our financial problems as a nation.

Great Britain is in debt to the tune of £56,582 million, £12,000 million of which is borrowed overseas. Our oil has started coming ashore now but it will be 1980 before we begin to repay our debt. Providing oil prices do not collapse, we should get rid of our overseas debt during the ten years starting in 1980.

Meanwhile, the country has to make

*Norman Cunningham (left) with Malcolm Paris, managing director of Bovis Limited.*

its manufacturing industry more efficient and expand it so that we can climb back up the league table of the world industrialised countries. America, Japan and Germany are securely at the top of that league. We have to join them as soon as possible.

It is essential that we increase the productive output of the nation as a whole, particularly in our industry, engineering. The national productive output is called the Gross Domestic Product. Other countries are expanding their Gross Domestic Product—we are not.

Until we do so, we cannot afford to do everything we would like to do to further improve the standard of living in this country and to help the underprivileged and unprotected. We all want to do that.

Now, what about Otis?

In 1976, we had a profit of £3½ million before tax on a turnover of £42 million. To support the society we live in, we paid tax on this of just under £2 million to the government. Twenty-five per cent of our turnover was exported. This is a pretty high percentage.

On productivity, we still have a long way to go. The decline in the value of the pound has made us competitive in world markets but, to meet severe competition, due to the very substantial fall off in orders for lifts and escalators around the world, we have to become more competitive. This means we have to cut costs and increase productivity.

Otis is still the world leader in quality and performance but we cannot depend on that name alone to protect us in a downturn economy when price and delivery on time become the most important factors in the decision by customers as to what type of lift they buy.

Productivity is not just the factory—it is also the construction and service areas. These are areas where we are face-to-face with the customer and where it is essential that we improve our performance.

Delivery from the factory on time is a must. A quality installation on time is a must. A competitive price is a must. Our customers, both at home and overseas, must be satisfied with our performance.

Our security as a company depends on our ability to be competitive and to make profits. If we are competitive, we can sell more lifts, escalators and components around the world.

The principal market we sell into is Britain and parts of Africa, particularly Nigeria. In addition, we are major suppliers to the Pacific Region, principally Hong Kong and Singapore, to South Africa and the Middle East. We also supply components to our sister factories in Europe, mainly France and Germany.

We have to be competitive, both at home and overseas, to provide employment—to provide shareholders with a return on their investment—to provide cash for future expansion.

Since the unhappy days of 1970/71 when we lost money, we have, working together, made Otis Elevator Company Limited a successful and energetic lift company. We intend to remain the market leader in Great Britain. We intend to reduce costs and increase output in all areas within the company. We intend giving an even better service to our customer than we do at present, both at home and overseas. I would welcome your help in this.

I thank all Otis employees for their hard work last year. The higher productivity we are seeking will guarantee a secure future for us all. It will also help put Britain back on top of that world industrial league.

# THE WIZARD OF CLUBS

## PAUL HAHN

*Denis J. Harrington recalls the  
trick-shot golfer who made  
a million dollars without leaving  
the first tee*

He was the only man to earn a million dollars on the professional course without ever leaving the first tee. Yet it must be admitted that the name of Paul Hahn is not to be found among those of the great and near-great practitioners of the game. Nor is it engraved on the top awards, the US Open, Masters and British Open trophies.

Even so, his name is known to golfers throughout the world. For his was a very special talent. It was the ability to do with a golf club what a conjurer can do with a top hat, a rabbit and a set of cards. He made the uncommon seem normal and the bizarre just routine. He was the great trick-shot artist.

Paul Hahn performed at every important American tournament during his career, including the Masters and the Professional Golf Association Championships, and travelled extensively in Europe with his act.

It was a one-hour production. He had an elaborate style of speech and manner and kept up a continual running commentary on his work. There was a remarkable range of novelty shots which entailed the use of a variety of implements—one hesitates to call them clubs—including a rubber-shafted wood, a hinge-necked driver and a giant wedge.

In the course of his calculated histrionics he would drive a ball over 200 yards while down on his knees. Then he would do it while standing on one leg. Then, for an encore, while blindfolded and sitting on a stool.

Warming to his work he would hit a series of balls alternately and ambidextrously in rapid succession, then two simultaneously, one slicing and the other hooking. An assistant would stretch out on the ground

with a tee in his mouth and Hahn, carelessly continuing his patter, would settle his ball and drive off with a full and powerful swing. Not a trick to be copied by the man who habitually raises divots.

Paul Hahn received a fee of \$1,000 for his one-hour act and usually arrived in his own private airplane. He had a multi-piece personalised wardrobe and lived in the comfort and style earned by a Nicklaus or a Palmer. It was not always like that, however, for the one-time caddy from Charleston, South Carolina.

He was born in 1918 and grew up just across the way from the Charleston Municipal Course. His parents had separated, which was perhaps to contribute to the restlessness of spirit which was to be a life-long affliction, and to earn money in his early teens he became a caddy.

The young Hahn took an interest in the game and was encouraged by the professional, Johnny Adams. The following summer he received a lot of further help and tuition from the talented Henry Picard, 1938 US Masters champion, who was the professional at the country club of Charleston.

By the age of 14, Hahn had progressed enough to get round the course in standard figures or better and at 15 he won the city schoolboys' golf championship.

But financial times were hard, for it was still the aftermath of the great depression, and at 15 Hahn terminated his formal education and set off to see for himself what life was like outside Charleston. It was the start of a journey which would ultimately take him to 41 countries on six continents.

For the rest of the 1930s and on into the 1940s he

wandered, riding the rails and earning what money he could in many ways. He drove taxis, was a guide to sight-seeing expeditions, tried his hand, or rather both hands, at boxing, and cooked in snack bars. He also gave golf lessons on driving ranges and courses when they appeared on the routes of his travels.

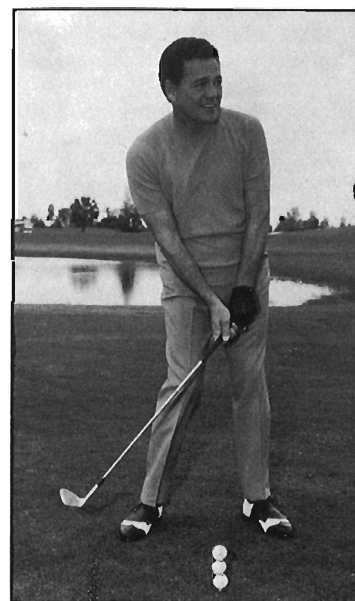
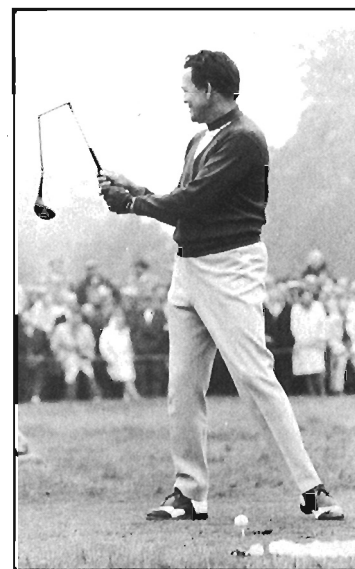
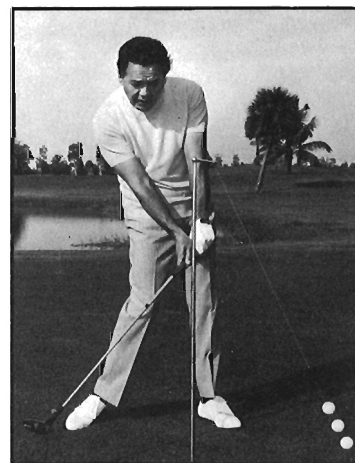
After World War Two, Hahn worked as a professional on several courses and then, in 1947, decided to have a go on the professional golf circuit. The early results were encouraging and he nursed visions of earning fame and money. Unfortunately, later results were equally deflating, and the vision slowly faded.

A few years ago Hahn told me of the time he tied with Lloyd Mangrum by taking a good 69 in the Hawaiian Open Championships, and this in the wake of a previous night out on the town. Vastly encouraged, he resolved to give of his best the next day at the 36-hole phase of the tournament, and went to bed at sundown.

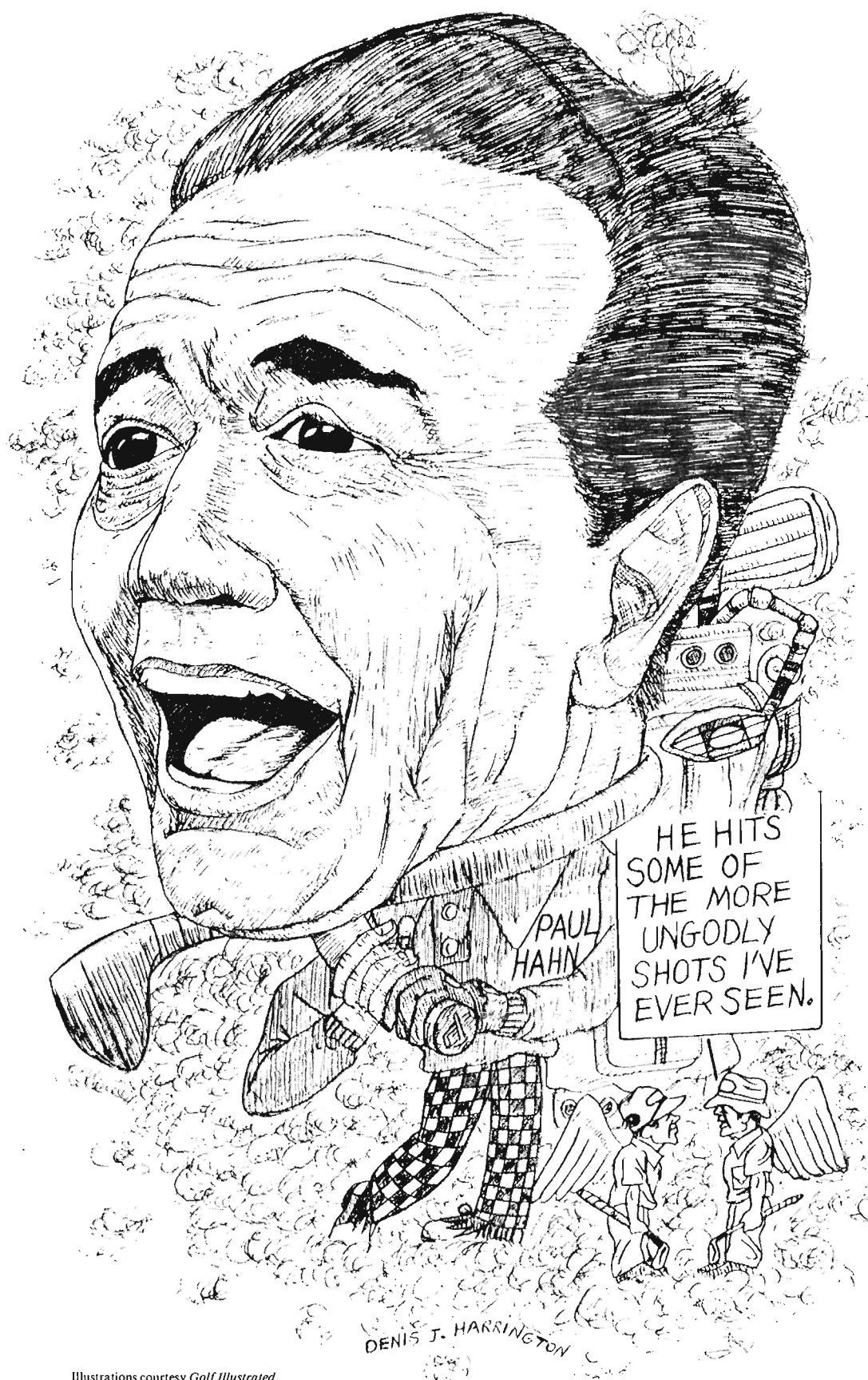
He awoke fit and refreshed, ate a nourishing but sparing breakfast, and went to the practice ground for a warm-up. His first tee shot was a terrible slice which went for a swim in the Pacific Ocean. From then on he steadily and persistently sliced his way out of the money.

Hahn did a bit of self-assessment and came to the reluctant conclusion that he was never going to make it on the professional golf circuit. He abandoned the hazards of playing for a living and settled for the quieter but more financially rewarding career of running a golf shop.

It was in this limbo that he had the idea of getting together a trick-shot act.







Illustrations courtesy *Golf Illustrated*

Very often he had amused colleagues on the circuit with antics at the practice tee for the price of a laugh. Now he worked to perfect a presentation which would be worthy of a paying audience.

When he had got the performance to his liking, and trimmed to make a one-hour show, he went out to make it a special attraction for tournament organisers at such undistinguished places as El Centro, California and Yuma, Arizona. At first there was a remarkable lack of interest by audiences. But he persisted and slowly the audiences became more appreciative and his income actually began to off-set expenses.

After what he called his undergraduate introduction to show business, a span of time in which he gave 320 performances, Hahn found he had put in the bank a gross income of over \$50,000. His niche in life was at last secured.

The invitations from tournament organisers rolled in and for many years no major event in the United States was complete without Paul Hahn—always billed as The Wizard of Clubs.

On 4 March 1976 Hahn died at the age of 58, his weakened heart no longer able to satisfy the demands a vibrant will imposed upon it. He made a million dollars, and lived well, but was always a soft touch for any down-on-his-luck pro golfer or needy caddie. He had known poverty and the memory lingered on.

Paul Hahn played golf shots for laughs and some may dismiss him for fooling about with the holy game. But professional golf is an entertainment. And for the price of his admission ticket that is what the spectator expects—to be entertained. Paul Hahn provided that service in full measure.

# NEWS

## A LIFT IN LIFE FOR CARL

Three year old Carl Hyslop has a physical deformity which means he will never grow to full height. He is a pupil at Springfield Special School, Southdene.

When Otis employees at Kirkby heard about Carl they decided to give him a special tricycle. Drawings were made by Denis Horner, mechanical design engineer, and the

trike was built by first year apprentices under the direction of Joe Hughes, chief training instructor.

It was made entirely from scrap and has an adjustable frame to ensure that Carl can ride it for a long time.

Carl's headmaster says: "We hope the trike will bring Carl out of his shell. He has always been very shy and inward but we did at least get a smile out of him when he saw what he was getting."

In our picture (courtesy *Kirkby Advertiser*) Carl is with his headmaster, Mr Turner (left) and Denis Horner from Otis.



## BENTALLS GO UP IN STYLE



It was a tricky job. The new 7-ton unit (pictured left) had to be moved into position vertically above the existing escalator.

Fifty feet long, it left the Otis Hanover factory by road and arrived at Bentalls of Ealing at midnight. Two cranes unloaded the unit and special wheels were attached for the carefully planned trip through the loading bay and into the store.

Part of the cladding and balustrade were removed from the unit because of the very tight headroom in the loading bay.

Then the escalator was slung from a specially built gantry and moved horizontally into position.

Installation was carried out by London construction department teams supervised by Ted Russell and Bill Bringley.

## ELDON SQUARE SHOPPING CENTRE IN NEWCASTLE

Millions of viewers know a bit more about Newcastle because of the successful TV series, *When The Boat Comes In*. But that is old Newcastle.

Otis has been helping to create the city's new image in the Eldon Square development. In Newcastle they proudly call it the most modern shopping development in Europe, reports branch manager Bill Hogg.

The Otis contribution com-



prises twenty-two 44 UB escalators, four 260 passenger lifts, two 5-ton and one 6-ton goods lifts, and four smaller passenger lifts.

Industrial action involving other contractors caused a six-month delay and charge hands Reg Wilson (escalators) and Derek Nesbit and Phil Adams (lifts) rose to the occasion with their squads to make up lost time. Fitters and testers worked around the clock and that includes tester Brian Johnson, on loan from Manchester.

Eventually the police, warned that there was a night prowler, got to know construction supervisor Alan Nesbit doing his rounds. It was a great effort and it is a shame that Alf Williams, who contributed so much, was in East Africa and not in Newcastle to see the finished job.

Architects: Chapman, Taylor & Partners.

## BIGGEST IN THE WORLD



Otis Iran are working on the biggest elevator contract in the world. It is for the Ekbatan housing project, under construction by the Tehran Development Corporation, and includes 345 elevators worth over 8.5 million US dollars.

The company won the contract after a year of intensive competition from 21 elevator manufacturers around the world.

Architect is Rahman Golzar. Photo: J. Danially.



# Spotlight on BRISTOL

## MY KIND OF TOWN

### John Williams, Bristol branch manager, writes about this intriguing city and the staff who work with him

Over the last few years Bristol has been a boom town. It was always a great trading centre, with its wine and tobacco imports, but the M4 and M5 motorways have put it within remarkably easy reach of London, Manchester, Liverpool and Plymouth. By rail the Inter-City 125 trains make the journey from Paddington in 97 minutes.

The city is an interesting mixture of the very old and very new. At the turn of the century boats still came up the river into the city centre, which is honey-combed with vaults. The Theatre Royal, opened on 31 May 1766, is the country's oldest working theatre and from the back window of my office I look out on a row of beautiful Georgian houses. It is a fine city in which to live and work.

Otis came to Bristol after World War One and we have been in our present premises at 33 Park Street for 21 years. Bristol branch covers the four counties of Avon, Gloucestershire, Wiltshire and Somerset and handles the day-to-day business of sales, construction and service in the area. We have 40 men on construction, 18 maintenance mechanics and four repairmen. The maintenance mechanics also provide, on a rota basis, a 24-hour emergency call back service every day of the year.

Many of our field personnel have long years of experience with Otis equipment. For instance, G. Richards, some 40 years; Messrs J. Hobbs and K. Seawert over 25 years; and Messrs D. Nurse, R. Wilton, T. Seawert and T. Addicott over 20 years.

In our area we have just under 600 units on maintenance, and that is more than any of our competitors. The range covers everything from single-speed lifts up to high-speed gearless installations. In 1972-73 my predecessor, Bill Whittaker, sold 55 units in the area. It was, as I have said, a great boom period.

The city has many fine, new buildings and Otis is proud to have been associated with their development. Tollgate House, with a 6-car gearless group at 700 ft a minute; Whitefriars with seven lifts and four escalators; Greyfriars with a group of four geared passenger lifts;



*L to R. Alan Mattingley, service supervisor; John Williams, branch manager; Alec Goatley, construction supervisor*

the 18-storey Avon House; the new magistrates' court with seven lifts; the Holiday Inn hotel, built five years ago; and the W.D. & H.O. Wills new factory with 10 lifts and four escalators.

Outside the city our lifts can be found in the new Gloucester Royal Hospital, the Eastgate shopping centre at Gloucester, the Nationwide Building Society head office in Swindon and the Eagle Star offices in Cheltenham.

A branch manager's record depends on the skill and experience of his colleagues and I am indeed fortunate to have around me some of the best men in the business. Alec Goatley, the construction supervisor, has been with Otis for 27 years and served for 14 years in Birmingham before coming to Bristol. Allan Mattingley, the service supervisor, has been with Otis since 1957.

Peter Jones, 13 years with the company, is Allan's service chargehand, mainly looking after the repairs side, and Bob Paice, 28 years with the company, is service representative. Sandra



*Two 10-person installations at the Dragonara Hotel, Bristol*

Janzen and Angela Richardson juggle with our telephones and Telex.

And as for me? As branch manager I must account for myself too. I joined Otis as an apprentice in 1957, went into the drawing office in 1959 and then to service engineering in the old Falmouth Road factory in London. In 1962 I moved to sales engineering, now known as administration, and then to the west London district office in Carnaby Street in 1967 as a sales clerk and later a salesman. I came to Bristol as branch manager in November 1974.

Our branch is a bit unusual in that it also houses the headquarters of Otis southern region.

Joe Cella is the regional construction manager and has recently taken up this post, moving from Reading. The regional service manager is Bill Budden; he has worked in the Minories, Liverpool and Dublin branches and was branch manager in Southampton before his present appointment. The regional sales manager is Bill Whittaker. He joined Otis in 1969 as a sales representative.

Backing up these three regional managers are John Corley, area surveyor; Colin Oaten, regional personnel officer; and Graham Pitt, service superintendent. Sandra Lee works with John Corley and Carol Hockings looks after the general office.

We have a great team at Bristol, both in the branch and regional offices, and reckon we can cope with any job or problem our customers care to throw at us.

*Eagle Star House, Cheltenham*







*Far left: Exterior of the first BHS store in London, and interior of a typical early store in Darlington.  
Left: Testing merchandise in the BHS laboratory.  
Right: Modern exterior of the present-day store in Oxford Street, London, and (above) the always busy scene inside*

## MEET OUR CUSTOMERS

# BRITISH HOME STORES

**There are 101 shops in the BHS chain and more are being built. It is a long way from 50 years ago when no item cost more than one shilling but value for money is still the aim**

**BY MARY BELSHAM**

BHS began as a private company in April 1928 with the acquisition of two London shops in East Ham and Peckham. By the end of the year three more had opened.

Today, it is a public company with 101 stores throughout Great Britain and others are being built. By 1978, when the firm celebrates 50 years in business, five further major stores will have been added to the list. In the course of construction are Leeds, Dublin, Dundee, Bromley and Barnsley as well as

the replacement Manchester store. In addition there is a continuous programme of modernisation and extension of existing stores.

When British Home Stores first opened its doors the maximum price for any item was fixed at one shilling (5p). However, in 1929 it was decided to raise the price limit to five shillings to allow the introduction of drapery departments. This price structure was maintained up to The Second World War and was advertised on the fascia of the pre-war stores.

The range of merchandise was vastly different from today and included such items as broomheads, jewellery and even tortoiseshells. It was very much a case of what could be sold within the price limit rather than a clearly defined range of merchandise.

The managers of the stores in those days worked with a great degree of autonomy. There is an apocryphal story that one enterprising man celebrated the king's birthday one year by staying up all night patriotically painting his tortoiseshell stock red, white and blue.

The last war brought an end to the price ceiling and in the reassessment as to how BHS should develop it was decided that price alone would not be the pivot of the marketing operation. For the future the policy would be a standard of quality in conjunction with value for money.

Allied to the decision to introduce quality standards was the policy of rationalising the number of items on sale and concentrating on certain specified ranges of merchandise which could be developed over the years. This forward thinking has produced a marketing operation which in the year 1975/76 resulted in a sales turnover of over £200,000,000.

The backbone of the business is the men's, women's and children's wear sections, offering comprehensive ranges of merchandise from underwear to coats. Running alongside are the accessory departments covering such items as shoes, gloves, hats and scarves. The promotional theme used in the stores over the past year has been Matchmakers. The concept is that BHS can fulfil all family clothing needs under one roof.

When the decision was reached to gear marketing aims to quality and value for money it was necessary to establish standards of wear on all fabrics used for clothing and

household textiles. This was initially done by using outside test laboratories.

Then BHS set up its own textile testing laboratory because, with the bulk of work flowing through, it enabled the firm to widen the scope of tests carried out within a required time limit.

This quality supervision was initiated for the control on made-up textile items and for fabrics purchased in bulk but over the years was extended to all other merchandise. In 1960 BHS introduced the registered brand name of Prova for all merchandise as a guarantee of quality and a symbol of value.

Two departments have been represented from the beginning. Lighting, which dominates the UK domestic market with a range appealing to all tastes, and public catering. There are 48 air-conditioned self-service restaurants in the chain, with the largest seating 700 customers. Fitted carpets, wood-panelled walls and concealed lighting are a long way from the original cafeterias and cafe bars.

A wide menu of full meals and snacks is available throughout the day as well as a pot of coffee or tea service. Favourite dishes include fish and chips and strawberry flan, 50,000 portions of which are sold each week. British Home Stores prides itself on catering for the whole family in restaurants where over 500,000 customers are served every week.

The kitchens use some of the most up-to-date labour-saving equipment in the country including convection ovens, refrigeration units, heated cabinets and a dishwashing machine designed specially for BHS which will automatically wash, sterilise and rinse 6,000 pieces per hour. Hygiene is all-important and apart from the use of stainless steel for all working surfaces there is strict supervision of every aspect of the preparation of food.

Like all retailing businesses many new avenues are explored before hitting on a development which dovetails with the company image, development plans and the physical problems which can arise because of the widely differing locations and sizes of stores.

In the case of food, the successful formula of "freshness" was arrived at over a period of time. It was decided that the opportunity to buy fresh foods in any quantity required met the needs and wishes of the housewife and would achieve

success in a highly competitive market.

British Home Stores and cheese are now synonymous in many housewives' minds and the annual sale of cheese tops 16 million lbs. Freshness is ensured by cutting schedules which forecast accurately the requirements needed for a day's sales. Nothing is carried over to the next day.

BHS was the first retail chain to sell British bacon exclusively. Quality control stipulates that only Grade 1 sides are bought from selected curers whose standards of hygiene, cutting and curing are outstanding.

As well as bacon and cheese, BHS sells fruit, cooked meats, fresh chickens, meat, bakery goods and a recent introduction, which has met with tremendous acceptance by the housewife, has been a wide selection of loose frozen vegetables, fruit and some meat and fish items. Once again, the opportunity to buy in any quantity is an important sales factor giving the housewife the chance to budget carefully. It is also a boon to the single person.

The distribution and storage of vast amounts of merchandise presents its own problems and also represents a very high cost factor in the running of any business. To streamline the operation, a distribution centre was opened in 1975 at Atherstone. Under one roof this controls food storage and refrigeration as well as general merchandise distribution, operations previously divided between a number of smaller units. The greater efficiency and cost-saving achieved are reflected in lower prices to the customers.

BHS employs over 23,000 people, most of whom work in the stores, and the firm prides itself on the conditions of work and behind-the-scenes facilities. Staff restaurants offer free lunches each day plus morning and afternoon tea, cakes and sandwiches. All goods, except food, are at a 20 per cent discount for staff.

During 1975 British Home Stores announced the launching of a joint venture with J. Sainsbury Limited for the opening of a series of hypermarkets. The first SavaCentre will open in Washington, near Sunderland, in the very near future, but the rate of growth in this form of retailing will depend on local and central government attitude to applications for out-of-town developments.



# NEWS

## LIVERPOOL

### *New sports club is going strong*

Visiting sportsmen are much impressed by Liverpool's new club house, the result of much hard saving.

The purpose-built structure consists of five Europa Portakabin units. The changing area, with showers, will accommodate two football teams, and there are separate facilities for the referee and linesmen.

The activities area, furnished and decorated to club specifications, has a TV lounge, soft drinks bar and tea-maker, and there is table tennis and chess. Various social functions are held weekly.

A pathway and verandah create an imposing entrance and flower beds are being laid out by the Gardening

Club under the direction of Alan Blackburn.

Officers of the Liverpool Sports and Social Club, and section secretaries, are as follows: chairman, W. Clayton; hon secretary, L. Holmes; hon treasurer, H. Wilson; angling, Stan Clark; badminton, Allan Mills; bowls, Eddie Evans; cricket, Ron Pilling; camping, George Lunt; darts, Joe Herron; chess, Ian Flemming; football, Jack Anderson; gardening, Jim Smith; ju-jitsu, Mike Gallagher; swimming, Harry Jones; sub-aqua, Charlie Cassidy; table tennis, Bill Clayton; canoeing, Ken Morrow; squash, Geoffrey Hull; motoring, Lincoln Holmes.

Last Christmas, Liverpool works committee gave their annual party for retired employees in the new sports club and every pensioner got a substantial cash present. Awards were made by Frank Lawler, mayor of Knowsley, who is a retired Otis specifier. L to R: Frank Lawler, Mrs Lawler, Peter Thorne director of production, E. Dixon.



## LONDON SPORT

### *Gala '76 at the Orient ground*

Steve Waterworth, London Sports and Social Club chairman, reports that Gala '76 held at Leyton Orient training ground was an outstanding success, and Otis Magazine apologises for being so late with last summer's news.

Service Croydon A team won the five-a-side football cup and the tug-o-war cup went to Liverpool MSC (pictured right) who to the strains of We'll Never Walk Alone stayed on at the disco until after midnight. Liverpool have asked for red and white ribbons on the football cup for 1977 as they say that also will be going north.

However, the 90-strong

Birmingham contingent had other ideas and there are reports of serious weight training in the west country.

We hope Gala '77 will attract even more visitors from outside London to come up for the cup.



### DICK PLAYS HOCKEY FOR ENGLAND

Dick Ashby, from Zone Construction, is captain of St Alban's Indoor Hockey Club and a keen player. Spotted by talent scouts he was selected to join the European Tour of Roses Hockey Club —England's 'unofficial' side.

He did well and was picked to play in the first England team at a one-day international at Cardiff. England beat Ireland and Wales but lost to Scotland.

### IAN MILLAR WINS MAX STOKER GOLF CUP

At Burhill Golf Club, Surrey, members of the Golfing Society completed their 1976 season with a stroke play event for the inaugural Max Stoker cup. This trophy is in memory of

## THEY HAVE NOTCHED UP 201 YEARS' SERVICE

At the first social evening of the newly formed Supervisors' Social Fund Committee a group of recently retired employees found they had notched up a joint total of 201 years' service.

Fred Rylett, chairman of the committee, presented gifts to the following (years of service in brackets): Tom Gavin (15), Lou Bingham (30), Tim Thew (18), John Stevenson (19), Fred Hodgson (19), Alec Graham (18), Dave B. Jones (15) and Dick Page (41).

Dick Page made a speech of thanks on behalf of all the recipients and Bill Furlong accepted the gift on behalf of Bob Wilkie and his wife, Chris, who were unable to attend.

the man who was the society's popular and respected president until his tragic death.

After a keenly competitive round the cup went to Ian Millar (construction department) with a nett score of 69 (34 points). Runner-up was Alan Goodin (sales administration department). The trophy was very kindly presented in person by Max Stoker's widow, Sonia.

In the afternoon there were foursomes played in the usual high spirits and the winners were Gordon Pestell (quality control department) and Frank Leonard (construction department).

## SPORTS AND SOCIAL CLUB

Two hundred children attended the Christmas party at head office. Food was provided by the restaurant staff and there was entertainment by Kenny Essex and film shows by Johnny James. Present giving by

## PAUL GRINDS THEM DOWN

Apprentice Paul Lumley won third prize in the grinding section of Craftex '76. A great performance in the face of competition from precision engineering companies like Rolls-Royce and Lucas. In recognition Paul received the director of production's award at the apprentice open day.

Other award winners were D. E. Evans (1st year), M. Joynes (2nd year) and P. McEveoy (3rd year). Most improved apprentice award went to N. R. Everott.

## OTIS ON PARADE

When the Queen visits Liverpool on 21 June there will be an Otis employee in her guard of honour. The 5th & 8th Kings Regiment have been chosen for this royal occasion and among them will be Corporal Bill Roberts, better known to his friends at Otis as timekeeper in 33E department.

Santa Claus (Bob Lake) rounded off a happy occasion. The adults had their fun at a New Year dinner dance at the Yorkshire Grey.

There is a social evening and disco every second Friday in the month, 6pm to 11pm, at the Norwood Centre, Park Hall Road, SE21 (No. 2 bus to St Lukes Church, West Norwood). Club members can obtain 50p entrance tickets by ringing extension 190 at head office.

Forthcoming events: 19 March, dinner dance at Oval cricket ground organised by George Glover, tickets £3.50 by ringing extension 190; 4 June, Gala sports day at Dulwich Hamlet football ground; 8 October, riverboat trip organised by Ted McDermont. See notice boards for latest news.

The following can be contacted for details of activities: Alan Goodwin (golf), Derek Hall and Stewart Bane (football), Barry Lane (cricket). Martin Elliot wants to hear from wine makers and Ken Stenson from anglers.

# OTIS ARE GOING UP DOWN-UNDER

Melbourne, Australia's second largest city, has a population of about 2½ million. By 1995 it is predicted this will have grown to 3½ million.

Faced with a growing transportation problem for its citizens MURLA (Melbourne Underground Rail Loop Authority) began building an underground railway system in 1971. It

## FAIRWEATHER AHEAD

Arthur Fairweather, zone action group leader, has been appointed project manager for the Otis contract in the Hong Kong mass transit railway system.

This new railway is planned for full completion in 1986. The total system will carry approximately 2.7 million people every day.

The work awarded to Otis on phase one of the system is worth over £6 million and involves the installation of 114 HD escalators and 16 hydraulic lifts. The units will be in 16 stations over a total route length of 13 miles.

Arthur has been with Otis since 1948.

## CECIL JONES

We regret to report the death, last October, of Cecil 'Jim' Jones, after a two-year illness. An advanced fitter in London, he had been 25 years with Otis. A keen footballer, he played for the Waygood-Otis team, helped form Kingley FC in 1964, and at the age of 46 saw the team win a league medal. The family continues to be represented in Otis by his two sons, John and Brian.

should be operational by 1978.

Three new stations will be built under the city and the escalator and lift contract for one of them, Museum station, has gone to Otis-Australia.

Colin McDonall, Director of Marketing for Otis-Australia, told Otis Magazine: "The demand for new, sophisticated escalator equipment was seen as a challenge. But we had the benefit of our own local team's experience with heavy duty escalators and this, plus our overseas colleagues' know-how, gave us a big advantage."

## Management Team

Following the tragic death earlier last year of Max Stoker, director of finance, and also various recent promotions within the company, the UK management team under managing director Norman Cunningham is as follows:—

PETER BAILEY,  
Director of Marketing and Construction.

KEN PAIGE,  
Director of Sales and Service with also sales administration responsibility.

'JOT' TRUNDLE,  
Director of Quality and Codes.

HARRY PETTINGER,  
Director of Contracts and Products.

'BUNNY' SNELLOCK,  
Director of Systems.

ALAN MAINWARING,  
Director of Engineering with added responsibility for the engineering design of London Transport and other HD escalators and trav-o-lators.

PETER THORNE,  
Director of Production with additional responsibility in the areas of distribution and inter-company activity.

MICHAEL HOLT,  
Director of Finance (formerly group financial director of the Fairey Company Ltd.).

BRIAN McLEARY,  
Director of Personnel

Other appointments are:  
TONY ALLEN,  
Financial Planning Manager.

VIC CRAWLEY,  
Operations Accounting Manager.

BAYNE SHAW,  
Financial Controller (formerly with the Bowater Group).



# NEWS

## OTIS START THE FLIGHT RIGHT



Above: 64 RAT trav-o-lator in service at Gatwick Airport.  
Below: 64 RAT trav-o-lator under construction at Heathrow Airport.



Between October 1977 and March 1978 Otis will install four 64 RAT heavy service pallet-type trav-o-lators at London Heathrow Airport. They will go into Pier 5, which extends outwards to the 'air-side' of Terminal 3.

The existing Pier 5 will be extended by Costain Construction Ltd to facilitate the loading and unloading of additional aircraft. One pair of trav-o-lators in the widened section will have 78 metre treadway length; the other pair will run to 129 metres.

The 64 RAT has a 1.4 metre treadway width instead of the normal 1.0 metre width of the heavy service 48 RAT trav-o-lators and heavy-service escalators. The 64 RAT was designed specifically for the British Airport Authority and the increased width allows passengers with baggage or trolleys to pass without congestion.

The trav-o-lators will be driven by two-speed 47 hp motors on 38 BEC machines and will run at 0.60 m/s (120 ft/min) with provision for a slower speed at 0.30 m/s for maintenance purposes.

Provision has been made to increase the speed to 0.75 m/s (145 ft/min) should future passenger flow warrant this.

The placing of this order shows continued BAA confidence in Otis following the installation by Brighton branch of the successful 64 RAT prototype at Gatwick Airport three years ago and the installation under progress at the moment of nine 64 RAT trav-o-lators at Heathrow by London Special Construction Dept.

These nine trav-o-lators are due for completion early in April 1977. They are in the sub-way system, built by John Mowlem & Co Ltd, connecting the new Heathrow Central Underground station with the three terminal buildings.

Treadway lengths of these units range from 69 metres to 114 metres and 300 tons of equipment is being installed.

Our present successful progress to a rigid site programme, under Jim Callow, Bill Lacey and Peter Hann has undoubtedly helped us obtain the new order for Pier 5.

David Coles



## ON THE UP LINE WITH BRITISH RAIL

Commuters on British Railways' new line from Moorgate Station in the City of London to Hertford North and Welwyn Garden City are riding from the platforms to the booking hall on two Otis MYA heavy duty

escalators manufactured at the Liverpool works.

The new units replace two MX escalators which had been in operation since October 1936.

Replacement meant that a lot of design work had to be done by Andy Linton and Peter Haddad, special sales department. Both they and the construction team, supervised by John Nichols and site chargehand Bill Nolan, solved the problems to allow the new line to open last November.

## LO 350 PASSENGER CAR



Lifts must be efficient and yet complement the total architecture of a building. The LO 350 series achieves this aim with a range of nine cars and a choice of lighting and colour combinations.

The range is particularly suitable for hotels, offices and prestige apartments. The many options offer a perfect compromise between expen-

sive purpose-designed cars, with the problem of long lead times, and the other extreme of one-finish systems.

The timber car walls may be internally faced with any laminate from the manufacturers' standard range or with bronze-tinted mirrors, carpet or even clear glass, to protect delicate finishes. A variety of lighting and ceiling arrangements are also available to enhance the wall finishes.

A particularly attractive feature is the omission of faceplate and nameplates. The car buttons—either of the new flush-fit type or touch buttons—are located in the hinged stainless steel car return. The car position indicator jewels are also integral with the car front.

The 350-5 car (illustrated) is one of several installed in the Otis architectural display centre at Clapham Road, London.

The new Elizabethan Age dawned in the grey light of a late February afternoon.

The young Queen who had acceded to her throne in a hunting lodge near Nyeri in the foothills of Mount Kenya, came home to London, to a nation full of high hopes. The analogies with the other Elizabeth were easy and optimism was in the air.

It was needed. For this was a time when butcher's meat was rationed at one shilling and twopence per head per week (about 6p); bacon, butter, margarine and cheese were doled out in ounces; the foreign travel allowance was £40 a year.

The solitary gesture to the new age in that February: sweets came off the ration, so the children at least had something to cheer about.

A whole new generation of parents has now grown up who are too young to recall these things to their own children. We who have grown older with the Queen often forget that. We complain the world has changed for the worse. Far from it!

Britons conquered Everest and broke the news to the world on the day Elizabeth was crowned. That summer, too, England won the Ashes.

And over the years our explorers have been the first to cross the Antarctic continent; we put the first passenger jet airliner into service—and the first supersonic jet; we have produced the fastest men on land, sea and in the air; and while others orbited into space and walked on the moon, it was our Jodrell Bank radio telescope that tracked the first sputniks.

Not a bad record, is it?

Back in 1952 we were the hub of a mighty Commonwealth—and on the verge of a great social, economic and constitutional upheaval. No mention then of the European Economic Community which we were to join by the majority vote of the people—an unheard of thing—and so throw in our lot with Europe.

History may regard that as the great event of the reign, but for most of us what matters is the impact on our everyday life of things of lesser moment.

And hasn't our way of life changed?

In 1952 we were a nation of listeners. Radio was the great medium. Comedy shows like *Take It From Here* and *Ray's a Laugh* had audiences of millions. The Archers were already tilling Ambridge and Richard Dimbleby came Down Your Way every Sunday afternoon.

We still queued for the cinema every week, where the Ealing comedies were proof that British films were as good as, if not better than Hollywood's.

We hardly ever heard of television. Only one national paper—the *Daily Graphic*—ran a regular Last Night's Look, and that was only in the London editions, for television was not yet nationwide.

But it was on the march. In July 1952 a White Paper on the future of the BBC had a vague reference to commercial television.

What really unleashed the monster was the Coronation the following June. The cameras went inside Westminster Abbey and the whole glorious pageantry, albeit in black and white, won the first mass audience for the small screen: more than 23 million viewers.

Our entertainment standards changed, too. In 1955 a brash new sound boomed out in a film called *Rock Around The Clock*. A year later rock n' roll had taken over the ballrooms and the sedate waltz, along with the fox trot and the quick-step, was relegated to Old Tyme Dancing for has-beens out of their teens.

So into the Swinging Sixties and the euphoric days that took their keynote from four young men with electric amplified guitars and a set of drums, who brought a



## SOUND THE TRUMPETS

**JACK GILCHRIST recalls Britain's achievements in the 25 years of the reign of Queen Elizabeth II**

new rhythm to music and a new concept to entertainment.

The Beatles. Gone now, but never forgotten. They left the scene to other, lesser mortals, but they were perhaps the epitome of that youthful, bubbling decade when London was the swinging city.

The seventies came in with a morning after the night before feeling...

By then, of course, most of us were reconciled to the other great influence on the age: the motor car.

At the beginning of the reign the motor industry was still recovering from the war effort and most of its output went to boost exports. Then, in '59 came two events: the M1 opened between London and Birmingham and the mini car appeared—the one the beginning of the network of motorways, the other the start of the rash of cars to fill them.

When Elizabeth became Queen a minority of families owned a car. In her Jubilee year there few families without at least one. One reason is that there has been a massive redistribution of wealth, especially in the later years; and it is still going on.

Many feel that the levelling process has been too much a levelling down rather than a levelling up... but all is not gloom.

England did win the soccer World Cup in 1966; in 1967 Glasgow Celtic shattered the Latin monopoly of the club championship by winning the European Cup; and a year later Manchester United followed their good example.

We have also produced a succession of motor racing aces: Hawthorn, Moss, Clark, Stewart... and to show that we are not finished yet, James Hunt carries the banner of world champion into Jubilee Year. Should he retain the title in 1977 it really will be something to rejoice about.

And, of course, rejoicing is what Jubilees are all about. The word comes to us from the Hebrew *yobel*, which is the ram's horn used to announce the years of jubilee in the Book of Leviticus.

It is also a time to take stock, to stop still



*Achievement. James Hunt, 1976 world champion racing driver, celebrates winning the British Grand Prix with a magnum of champagne. Edmund Hillary and Sherpa Tensing preferred mugs of tea after returning from the Everest summit in 1953.*

a moment and to take a look at the future.

Social standards have changed, divorce is simplified, marriage less stable and often ignored; women enjoy more freedom and equality is at least guaranteed by law.

Of course, there are problems... great ones, small ones; national and international; and those no less pressing that concern ourselves alone. But when has there been a time without problems? They are there to be overcome and individually and as a people the British have always found a way to do so.

The 25 years the Queen has reigned have been eventful; it needs no magic crystal ball to tell us the years ahead will be no less so.

On the night of 6 June at Windsor she will light the first of a chain of bonfires that will blaze across the land. In times past such beacons were a call to action. It might be no bad thing if the Jubilee beacons are a call to action to bring about the Golden Age we believed in 25 years ago.

There is still no reason why the new Elizabethan age should not be as great and as memorable as the old.



# NEWS

## NIGERIAN DELEGATION VISITS OTIS UK



*Eurafric assistant buyer S. Tollett (left) with three of our guests and production manager Bob Wilson.*



*Armature winder Peter Joynes has an interested audience while he explains his work.*

Nigeria is an active Otis agency territory supervised from the UK. Last October Otis in London entertained a delegation of Nigerian architects and engineers brought to UK by Daniel Auzan, general manager of the Otis Division of the Nigerian Motor Industries Ltd and Simon Oni, our Nigerian sales manager.

The Nigerians had an enjoyable but hectic visit. They toured the Otis building, heard a talk by Neville Sheldon, sales engineering manager, and attended a lunch organised by managing director Norman Cunningham at the Inn on the Park, where guests included British architects and engineers with Nigerian project involvement, the Nigerian High Commissioner and Chief J. O. Sobowale Benson, president of the Commonwealth Institute of Architects.

Over the following two days our guests went to the Motor Show, inspected Otis installations in the Shell building and the Festival Hall and visited the House of Commons.

They rounded off their trip to Europe with two days in Paris and inspected our

installations at Charles de Gaulle airport before leaving for home. Our thanks to Brian Olver, of Eurafic Trading Co, who spent so much time with the visitors.

The Nigerian federal government is building many apartment blocks and Otis have received orders for 20 VR 892 lifts. Even more recently we have been asked for 10 PD1093 installations for two luxury apartment blocks built by D. C. Savage. Otis International in New York gave us great assistance in negotiations.

Our Nigerian agents are now capable of handling most installations. But because of the number of 260 units being erected some UK personnel are going to Nigeria to help.

The Lagos secretariat has two blocks of 13 floors with two triplex 2,000 lbs at 300 fpm and three simplex 2,000 lbs at 300 fpm. Personnel involved are: T. Seawert, Bristol; B. Young, Cardiff; D. Collins, Southend; B. Bosworth, Leeds; M. Taylor, Leeds; A. Bowns, Notts; G. Cassidy, Notts and J. Gibbs, LCR.

The Murtala Muhammed airport at Lagos has 18 lifts, both passenger and goods,

and eight escalators and trav-o-lators. Value is over £1 million. Personnel involved are: P. Bamfield, Brighton; L. Szabo, Brighton; M. Noble, Leeds; A. Simpson, Sheffield; T. Salmon, Soton; J. Baynam, LCR; J. Dallimore, Soton; R. Crudginton, Plymouth; E. Parker, Bournemouth; D. Copeland, Sheffield and S. Rafferty, Birmingham.

The Eko Hotel has four units 3,000 lbs at 350 fpm, Otis 260-4, 14 stops and one duplex pair 3,000 lbs at 350 fpm, 14 stops. Personnel involved are: A. Franklin, Luton; A. Alberici, Plymouth; K. Seawert, Bristol; R. Gaywood, London and G. Coles, Bristol.

Necom House has six units, 3,000 lbs at 700 fpm, Otis 260-6. Two units make 30 stops, the rest make 27 stops. Personnel involved are: D. Nurse, Bristol; R. Hawes, Southend; T. Callaghan, Bristol; P. Wood, Southend; A. Garton, LCR and D. Preston, Birmingham.

NIDB House has four units, 2,500 lbs. at 500 fpm, Otis 260-4, 18 stops. Personnel involved are: A. Watson, Southend; E. Williams, Cardiff;

J. Barnes, Luton and A. Douglas, Manchester.

### BOB BROWN TO NIGERIA

Bob Brown has worked in Bermuda, South America and Jamaica for Otis and has now been appointed project manager for the contract at the new international airport in Lagos, Nigeria. He has been with Otis for 14 years.

Bob has spent a great deal of his time out of the country over the last few years and his considerable experience of overseas work will be invaluable on this major contract in a most important territory.

### RAY MARTIN

A senior tester from London construction department, Ray Martin died tragically in a car accident in Lagos, Nigeria, last January at the age of 28. An apprentice, he had been with Otis for 11½ years.

All colleagues and friends at home offer their deepest sympathy to his relatives.

# last page

## WITH BOOTHROYD

It must have been about three years ago that I sent my tail suit to Oxfam. Not a lot of use, I hear you saying, to some underclad Soudanese or Bengali. But he wouldn't have got the suit, just the money, via the Oxfam shop in Brighton where I unloaded the thing.

I've dined out in Brighton once or twice since, and any waiter who caught me giving him a critical once-over can rest easy in his mind. I wasn't inspecting him for mustard stains or stuck zips, only wondering whether, by some interesting chance, he was waiting on me in my suit.

As far as stiff shirts and white ties are concerned, I became convinced, three years ago or whenever it was, that I should never be called on to suffer them again. All praise to the deformatised life, I've murmured many times since then. I can slip into a black tie and drip-dry ruffled shirt in five minutes flat, given a bit of prudent pre-brushing.

Tails are something different. As I said to the lady on my left, who had shivered a little at this grand banquet, I'd have gallantly spread my tail coat over her goose-pimpling shoulders, but the riot of engineering thus exposed to the diners behind me would have been just too humiliating.

The invitation hadn't only stipulated white ties, with orders and decorations, but had said on an accompanying directive, "It will be appreciated if ladies will wear tiaras".

We both of us ignored both. I couldn't find my defence medal, and my wife has no tiara. For my part, a man who's going to wear somebody else's braided trousers, brought from London in a black cardboard suitcase with the hirer's name printed on it, is already inured to blushes. If his chest and lapels feel naked, compared with those of his fellow guests, decently masked by stars, sashes and glittering baubles on coloured ribbons, it's just too bad.

In any case, our host, himself practically extinguished under a wealth of fur tabards, gold chains, assorted dingle-dangles and enamelled scutcheonry of obscure but ancient significance—need I say this was a City of London affair, where the pomp leaves any royal occasion a poor second?—was a true gentleman.

He would not have us chucked out by the omni-present pikemen, just because we couldn't raise a tiara between us. I would have yelled as they flung us down the steps, "Think yourself lucky, mate, that my waistcoat ends aren't hanging out loose in front!"

No, it merely occurs to me, as we near the end of another banqueting season that many a young wife, brought up in the mere dinner jacket age, has no idea what goes into a husband's full evening elegance, especially when it's

hook  
me  
up,  
darling



John Holder

come in a black box and he doesn't know, until he looks inside, what devices of bracing and buckling and securings of alignment have inspired this particular feast of tailoring and haberdashery.

First, handle the collar with care. It's honed to a fine edge, and capable of carving a tough duck. You could lose an ear. Second, remember that starch is always most liberal where it's least needed, if at all, viz., at buttonholes. Open these in advance, with a handy nail-file, skewer or gimlet. Attach the collar to the shirt before donning either, otherwise a long period of holding your elbows above your head, probing around the back of your neck where you can't see, may cause giddiness.

Even when donned, straining to get the collar tabs over their stud can dislocate thumbs. Extend these buttonholes with a scissor snip, muttering what the heck, if the well-known hiring Brothers start beefing I'll *buy* their confounded collar.

Tying the tie is simple. Isn't it the same design as your black one? Yes . . . except that the black is silk, smooth and manoeuvrable, but the white is piqué and intransigent, ending up, after six goes, inside one collar wing and outside the other, with as much symmetry as a lopsided rice pudding.

Oh, and of course you pre-studded that swine of a shirt, while you could still find the starch-obliterated stud-holes? If not, you've two choices: you can get what needs to be a 4 ft. arm up your inside front and plunge around at random testing for perforations, or dismantle all the good work to date and start afresh from your undervest.

Waistcoats? As with film sets, nothing exists beyond what the camera's, or anyone else's, eye can see. The loose bits round the back are united by clipping in a strip of adjustable elastic.

You have no faith in this, and if, while waiting to be presented, you fiddle nervously under your tails, you may either release your waistcoat ends, or dislodge your buckled trouser-tightener by mistake, thus freeing a billow of bunched black paunch . . . which won't, luckily, billow too far, provided you've found hidden under your waistcoat points the buttonhole that locks on to a corresponding pants button and causes you, if you're wise, to walk at the stoop, because any sudden throwing back of the shoulders can explode all.

"I think something's gone at the back," my wife said to me, as we went off along the Mediterranean-blue carpet. My hand flew round in a panic. "Not you, you fool, me," she said.

I couldn't see anything.

But you might remember, ladies, on these occasions, that you aren't the only ones who are on the alert for something to give.

**BASIL BOOTHROYD**



# REBUILDING A FAMOUS HOSPITAL

St Thomas' Hospital stands on a superb site across the River Thames from the Houses of Parliament. Rebuilding has been progressing for many years and the North Wing, major part of the second stage, was completed in 1976. Gassiot House was completed in 1972 and also contains the Nightingale School.

The second stage includes 630 beds in 27 wards, eight major operating theatres, six major laboratories and many administrative and support departments.

The compact multi-storey ward and treatment blocks are served economically by vertical communications systems. Lifts have been installed which provide for the requirements of patients, goods and equipment and staff. Generally separate facilities are provided for these categories of transport, but in all cases, each lift is capable of carrying a bed. The main element of the lift installation in the ward block is a six car group, of 32 person/bed lifts at 500 ft./minute. These carry the main patient bed and visitor lift requirements. There are also two separate clean supply lifts and two dirty disposal lifts,



*Top right: St Thomas' ward and treatment blocks from Westminster Bridge. Right: Otis six-car group of 32 person/bed lifts at 500 ft/m. Above: View of the Houses of Parliament from a ward window.*

which also serve as firemen's lifts. Similar principles apply in the treatment block which is served by two bed/passenger/supply lifts and two dirty disposal lifts.

St Thomas' understands rebuilding. The first attempt was at Southwark in 1212 AD; there was reconstruction under Edward VI in 1551 after Henry VIII closed the hospital for 11 years; further reconstruction from 1693 to 1709 when Sir Christopher Wren was a governor; and the final move to its present site in 1871.

Otis is proud to have been associated with the latest rebuilding of one of London's oldest teaching hospitals.



*North Wing architects were Yorke Rosenberg Mardall; Consulting engineers, Steensen Varming, Mulcahy; quantity surveyors, Franklin and Andrews; management consultants, PA Management Consultants Limited; main contractor, John Laing Construction Limited.*

**SPRING 1977  
OTIS ELEVATOR  
COMPANY LIMITED**