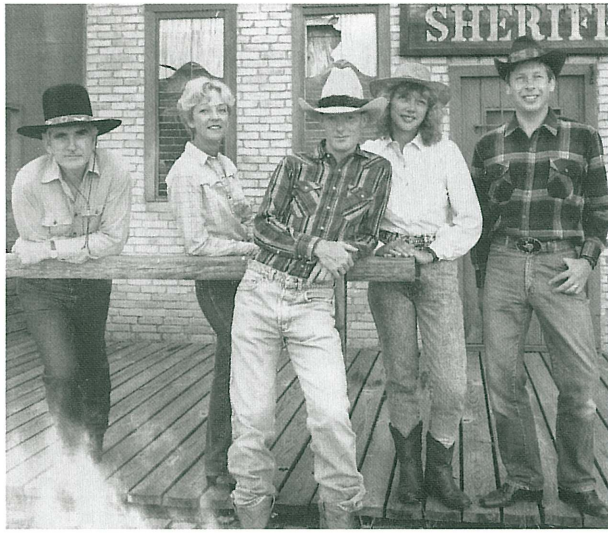


Brush Electrical Machines Incorporated



(Above) Malcolm Stonehouse, Donna Tedeschi, Phil Carson, Melanie Stephenson, Derek King. (Top Right) Tony Tedeschi and Juanita LaBoy. (Bottom Right) Alvin Gray.

We are pleased to announce that after being established in the United States for thirteen years (a lucky number) the Houston office has recently become an American incorporated company.

The board consists of:
W. M. M. Petrie, Chairman of the Board and President

C. P. Jones, Vice President – Finance
D. N. Wells, Vice President – Sales and Marketing

Management Team:
Malcolm F. Stonehouse, Treasurer and General Manager

Derek E. King, Sales Manager, East Coast

Donna Tedeschi, Office Administrator

Since our photograph was taken and with the growing customer base, the Product Support Group under Phil Carson, has added Tony Tedeschi, Alvin Gray and Juanita LaBoy. (Tony and

Donna were married this year to make it a Tedeschi duo). We recently welcomed Melanie Stephenson back after being away for a couple of years in Manchester. With the same management but extended capabilities, BRUSH ELECTRICAL MACHINES INC. will continue to front the company's sales, marketing, parts and service to our USA customers. The family of DAX generators here in the United States has increased to over 100 machines and we can all share in this success story.

All the staff at BEM Inc. appreciate the confidence put in them by all levels of management at Loughborough and the special support and commitment from all parts of the company which get our job done here in America. Our best wishes to all for a Happy Holiday Season. MERRY CHRISTMAS TO Y'ALL!!

Malcolm Stonehouse

Grime and Glory

One of the marvels to the visitor on the footplate of a locomotive is the fire, like a magnet, eyes become affixed, squinting from the white heat, as if hypnotised. This is the domain of the fireman (stoker), the word fireman a misnomer in today's world of the diesel, electric and computer age.

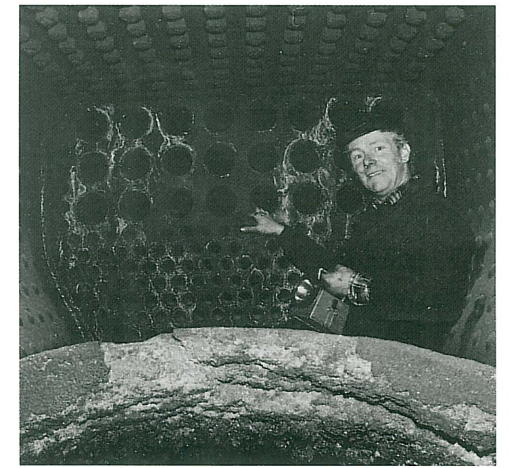
At the beginning of my day (6.00 am on a weekend), I squeeze, sleepy eyed, through the firehole door into the belly of the engine, waking up immediately to the claustrophobic clammy and dusty atmosphere, the still-warm ash embers round my feet from the week's service.

It is one of my jobs before lighting up, to lift out the firebars, and clean the grate of clinker and ash. How glad I am my mask keeps the dust out of my mouth at least. When this is complete I will sweep the brick or concrete arch and the tube-plate clean of soot and ash, and with the light from my torch dimming in the billowing sooty atmosphere, cough with eyes smarting. In BR days of steam, cleaners were expected to do this all day without any protection from the soot and ash. This is the not so glamorous side, and a far cry from my clean job with air conditioning in Production Control, tapping the keyboard of a computer producing the DAX production charts.

Once this job is done, and the fusible plugs checked, I squirm out of the firebox with relief and a new fire can then be prepared, nowadays first with wood, and lighted with oily rags. As the fire takes hold of the wood I can gradually, aiming with skill, feed the coal from my shovel into the warming fire. Gradually, over a period of 4 to 5 hours, with skilful firing,



In the firebox of 'Butler Henderson'.



the heat generated from the coal burning at up to 1,400°C, where I was cleaning just 4 hours ago, will supply enough heat to produce plenty of steam for the days service.

When you visit the Great Central Railway as many regularly do, to simply just ride for pleasure, or to sample Sunday lunch on the Carillon Dining Train sauntering its way through the beautiful Quorn countryside, or to be more adventurous and book the Charnwood Forester Luxury Evening train steaming into the sunset as the dark of the night approaches, have a thought for the unseen fireman toiling on the hot noisy footplate of that glorious gleaming locomotive, it could be me!!

Barry Nicoll,

Correspondence

The Falcon?

Now is the time, let us pick up the image, it's OUR Logo to show that the Falcon Works!!

A symbol of certainty in uncertain times the Falcon has long been used by many Nations past and present to illustrate and represent power, courage, strength and integrity, it also possesses some special qualities as a fierce look of pride and an aristocratic stance. Useful qualities in this competitive world.

When Brush Electrical Machines discontinued the use of the Falcon as our Logo some years ago, did it unwittingly throw away a silent salesman, a trading asset? You may not think so, but why not try to capitalise on it in our largest market the U.S.A. where it is a very close relative to their national emblem the 'Bald Eagle' indicative of freedom and independence. In the U.S.A. the demand for electricity is growing at a rate of 2½% per year, which represents some 270,000 mega watts over the next 20 years, the equivalent of 270 large coal or nuclear power stations. The visual impact of the Falcon could pay handsome dividends in the effort to satisfy this demand.

European countries such as Germany, Poland and Italy also make use of it. The Middle East strongly favours this symbol of the hawk, falconry thrives in this sector and the countries of the Far East are also very receptive to this sign and to the qualities it represents. It appeals, it is emulated, it is sought out and it is respected and remembered.

The Duke of Edinburgh is a keen falconer, as is the Emir of Dubai.

In the light of recent events surely there could be no better time to re-launch our Brush Logo.

The situation throughout the U.K. indeed the world today and on into the future is very much the same. The message is simple, that the Brush

Falcon is synonymous with power generation is indisputable, from hard nosed North Sea oil men to Korean technicians, they were all eager to receive the Falcon stickers. Charles Francis Brush our American founder would have loved it.

Sell us off – Megga clanger!!

S. E. TAYLOR,
13 Repair Shop.

New Financial Ledger Codes

As many of you will be aware, new finance ledger codes (charges numbers) were introduced on 28th October, 1991, causing some considerable upheaval for everyone who has to write out material buffs, PWTs, Purchase requisitions etc., and for those who punch the information into the computer. I would like to take this opportunity to thank everyone for the high level of co-operation given to the implementation of these codes; it was much appreciated.

Amanda Weston.

Manor Road and Tuckers Road

Many thanks to B.E.M. News readers for their information regarding the whereabouts of housing provided for personnel of Petters Ltd. It would appear that there were two locations, Manor Road and Tuckers Road.

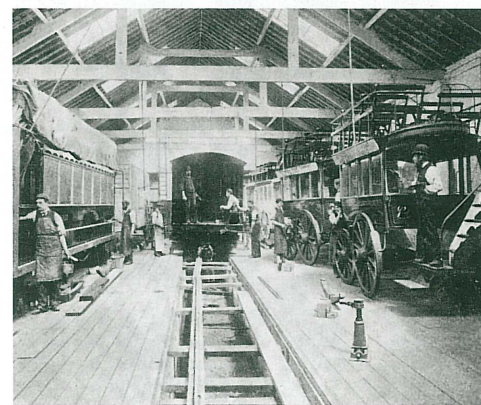
George Toms

Thanks for your support

Mr. Eric Dilkes of Production Control and his family would like to thank all his colleagues throughout the Company, who have generously supported his various fund raising schemes to benefit Heartlink, the East Midlands Children's Heart Care Association.

Glimpses of the Past by George Toms

No. 2. The Oldest Shop in Brush Works



1890

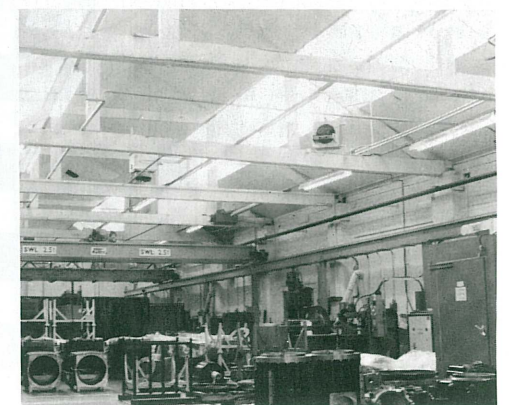
Brush Electrical Machines Limited occupies most of the oldest parts of the Falcon Works. That is the way history was unfurled and in some ways it does limit operations in the smaller shops, but generally speaking most of the shops are suitably occupied or undergoing a process of change.

The oldest surviving shop in the Brush underwent a change during 1990 when space was required in the old 11 Shop for the new Rapid Transit Module. In effect 11 Shop operations were moved into what was once 17/37 Shops, replacing the Detail Shop; Commutator Assembly and DC armature assembly. The 'Pink Room', not the subject of this account, was also occupied.

11 Shop is located between the yard outside the Control Centre and 'Pneumonia Alley', the main gangway linking 13, 18, 19 and 24 Shops. The oldest part of 11 Shop is therefore adjacent to 24 DAX Assembly Shop. The end nearest the Control Centre yard is self contained by means of what are now brick dividing walls and was originally the Tramcar Painting Shop dating from about 1878. The end adjoining 'Pneumonia Alley' also dates from about 1878 and was originally the Tramcar Erecting Shop. Two of the accompanying illustrations show the Painting Shop as it was in 1892, and as it is today in use as a core-building area for A.C. motors.

In 1884 the two shops were extended sideways and capacity was thus doubled in the process. The former outer brick wall of the Erecting Shop portion was demolished and cast iron stanchions installed instead, to give clear cross connection. The Paint Shop remained as it was and the adjacent counterpart partitioned also to keep a dust-free environment.

These cast iron stanchions were cast in the Falcon Works Foundry of 1864 (demolished about a hundred years ago) and bear the legend FALCON



1991

WORKS 1884. Few people have noticed this as it is on the blind side of the shop gangway. Some of the timber beams resting on the top of the stanchions are obviously re-used examples and have slots within them.

One of the 1878 Shops was the scene of festivities long ago when the annual works party was combined with the twenty first birthday celebrations of the eldest daughter of the Managing Director, Henry Hughes.

On the evening of Saturday, 30th August, 1879 there gathered Henry Hughes, his wife and their family of twelve children, together with employees and their wives of the firm, then styled Hughes's Locomotive and Tramway Engine Works Limited. Bouquets of flowers were set upon the tables and sirloins of beef, veal pies, pork pies, tongue, legs of mutton, ham and salmon, tea, coffee and beer were provided as refreshments. Dinner started at four o'clock and 250 people sat down to devour it.

After dinner there were speeches and presentations. Among the words spoken were the following: "... the engineering industries on the Continent and elsewhere had equalled those of England and now Englishmen must look about for cheaper and better means of getting out work to compete with other countries. What are wanted was that all should take a real interest in the work before them; the best and only way to insure that, was by piecework". Today we have similar parallels. Toasts, songs and recitations followed and then the tables were cleared away for dancing to take place. Outside there was a display of fireworks and several Montgolfier balloons were sent up.

Such then, was the harmony of the Falcon Works long ago. Those shops have seen much activity since then – do readers have their own memories? If so, we would like to publish them in a future issue.

Winding Dept skittles

Employees and families of RMD and Winding Process Departments recently enjoyed a skittles evening organised once again by John Harpam.



Angling Notes

H.S. Angling Championships

The annual Hawker Siddeley Angling Championships were held this year along various stretches of the River Soar.

The eighteen 12 man teams enjoyed excellent weather but had to contend with low water levels and minimum flow during the five hours fishing.

When the results were declared the Brush 'A' team (comprising employees from all the Brush Companies) emerged with 167 points as did South Wales Switchgear. Brush however, with an overall heavier catch, were awarded second place. Coventry based Sphinx 'A' winning the Championship. In the individual Championships B.E.M.'s Peter Gatcombe took third place with 11lb 13oz.

Dave Callison who fished for Brush 'B'.

Peter Gatcombe receives his cup from Mr. Petrie.



6 - 700lb of fish in one netting

On the recommendations of the N.R.A. the Sibley Pond (exclusive to Brush Angling Club members) has been netted to examine fish stocks, and deepened to improve conditions for the fish.

The netting produced 6 - 700lb of fish from which 154lb of small roach, bream, rudd, crucian and common carp were removed to stock holding ponds. David Ford, Area Fishery Officer, commented that the pond had amazing breeding qualities and he recommended the reduction in fish.

The deepening operation by dragline affects only half the pond, in the interests

of the fish, and depths have been increased from two feet to three or four which, with more rainfall, should make five or six feet. Future improvements include the planting of Norfolk reed to stop bank erosion and small leaf trees to break the open skyline. This should improve the character of the area and increase wildlife.

The pond is now back to normal fishing. Anyone interested in joining the club to fish here or on certain stretches of the Soar should contact David Lyons Traction 25 Shop, Steve West BEM 24 Shop or Frank Chaney BEM Fab Prod. Cont.



Mick's Chryst's Best in Show



(Left) Mick Mills, (above) Dad knows his onions, Lorraine Billings with fathers prize winners.

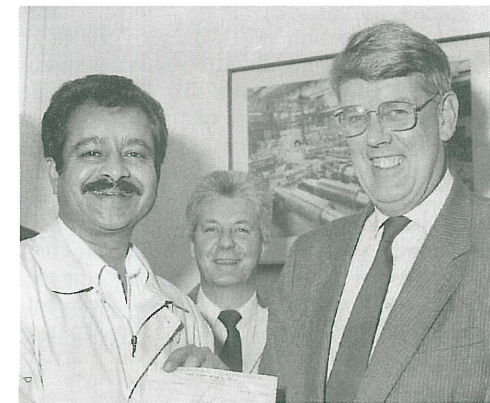
Mick Mills, Foreman in the Central Machine Shop claimed the cups for both the best exhibit in the Show and the best chrysanthemums at the 17th Annual Charity Show of the Brush Horticultural Society. Also featuring in the awards

were Graham Billings, Inspector 42 Shop for onions grown from sets, D. Melbourne for his pumpkin, and Dave Collison and W. Sibson (retired) for their wines. After the Show the Society's fund raising for this year amounts to around £1,000.

Small Suggestion Big Prize

Mr. Meraman Odedra received a cheque from Mr. Bob Ayres for £1,750. Quite a Christmas Bonus! Meraman, a press operator in the coil shop, experimented with reduced pressing times for forming Nomex slot end 'U' pieces. He found no difference in quality after reducing the process time from 15 to 8 minutes and volunteered his findings through a suggestion. The insulation pieces are produced in their thousands for a.c. and d.c. traction motors to support the coils at the slot ends.

The committee had no hesitation in making the award and hoped it would be significant to encourage others, particu-



larly piecework operators, to use the scheme.

Early next year Mr. Petrie will award a special prize for his 'Suggestion of the Year'. Look out for the winner in the next issue and if you didn't make a suggestion in 1991 make one in 1992.

Peter Williams

Brush Lights Up Houston December, 1882

What is now the local electricity board, Houston Lighting and Power Company, was first formed in June, 1882, to provide a public lighting service. During initial operations, one of the five generators (of Weston manufacture?) gave trouble causing 10 of the 60 Brush arc lights to be out of order. Private businesses supported the start up Light Company, and although the city was described as "a sea of mud in winter and a sahara of sand in summer", the different trades of the first local Brush arc lights show an interesting mix:

General Stores/restaurants/Millinery shops	24
Hotels	11
Saloons	13
Gunshops	2

Some local folk were inclined to fix initially troublesome or sputtering Brush lights themselves, such that the management declared in a public announcement:

Compared to gas, the new arc lamp contracts for one lamp, cost \$23 (US dollars (15 UK Pounds) per month, compared to coal gas at \$43 per month. The start up problems caused some subscribers to consider having the lights removed, but local commentators cautioned that "any irregularities should

be overlooked for a short time, until the system is perfected, which will not be a great while". By December 14, 1882 (five days late), the *Houston Daily Sun* reported the lights were "working very well, making a most beautiful, clear and steady light". Crowds came into the city to shop for Christmas and view the brilliant electric lights. In other World News the same week, as reported in Houston newspapers: two people arrested in Dublin in connection with recent murders of Lord Cavandish and under Secretary Burke; fire at Hampton Court Royal Palace, 15 miles from London, first reports of damages sustained exaggerated; Mr. Gladstone resigned as British Chancellor of the Exchequer.

Although the City of Houston which groaned under financial troubles had not supported the initial venture, one year later they contracted with HL&P for 32 arc lights for downtown streets. Mr. Edison's incandescent lamp was demonstrated in Houston a year later and around August 1884, the Light Company began to switch from arc lights to this type of electric lamp, as it became generally adapted for indoor/domestic lighting systems.

Derek King,

Brush Electrical Machines Inc.

In Company With Cars

Ford Sierra XR4i

No 5



The owner of our featured car this issue is Barry Elcock of the Repair Shop. He has nothing but praise for his latest mode of transport, but is it justified?

It was introduced in 1983 to boost the Sierras sales figures; thought of by many as just another "boy racer's" it was much underrated. Ford marketing found a niche though, and here it is.

It sports an uprated 2.8 V6 engine with Bosch K Jetronic injection coupled to a close ratio 5 speed box. According to Barry this gives excellent acceleration, can cruise all day at high motorway speeds yet docile around town and able to pull from nearly at rest in 4th gear all the way up without a judder. It features an interesting fuel supply cut off feature for even better economy.

Rarity too has value, this is the only one of its kind at the Brush so a good

example won't be cheap - but still a fraction of the price of a Cosworth yet definitely *not* a fraction of a car.

TECH. SPEC.

150 bhp 2.8 litre V6 Engine
Max. Speed 130 mph
0-60 8.4 secs
37 mpg @ 56 mph
29 mpg @ 75 mph
5½J Alloy Wheels on Low Profile 195/60 VR Tyres
Electric windows
Electric Mirrors
On board computer
Ventilated front discs
Sports Seats
Extra instrumentation

Want to know more? Stop Barry and ask him, he's never been asked so many questions about a car since he's owned this one - a few more can't hurt. *Andre Zippelins*