







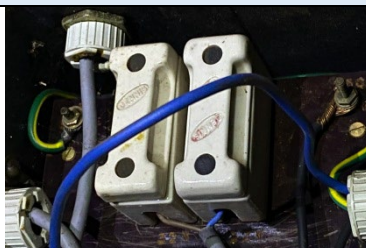

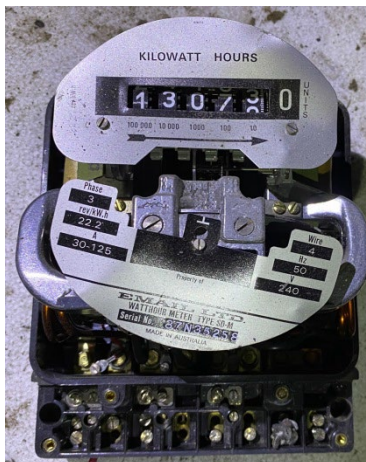

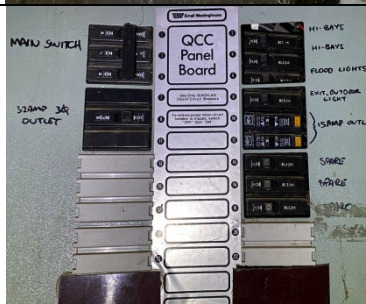


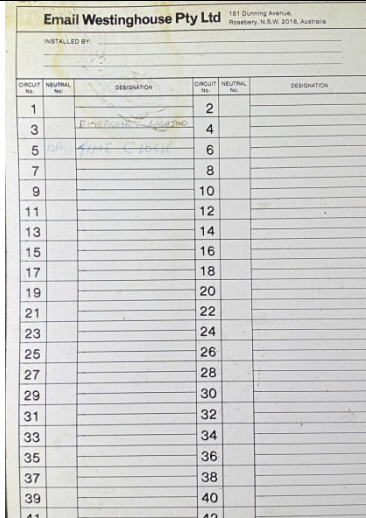


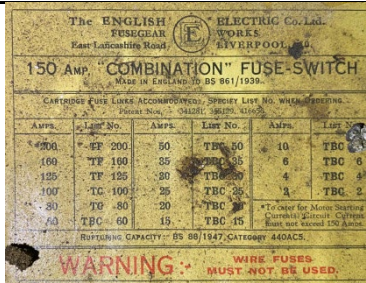
Midland Railway Workshop

Item	Photo Code	Model	Other Information	Date	Location	Notes
Allen Bradley & Co, Millwaukee Wisconsin						
Light Switch		Bulletin 80 Type: L4024	Max Volts - 600 AC & DC		Jones & Lamson Thread Grinder – Machine Shop	
Limit Switch		Bulletin-80 Type: L402L	Max Volts - 600 AC & DC 1LS			
Allen West & Co, Brighton England						
Star-Delta Starter		Type: SD2N No. X228A20	Volts: 220 ~ 40 H.P.: 10 Normal F.L. Amps: 28		Machine Shop	
Anderson & Ritchie, Melbourne Victoria						
Iron Downpipe						
Associated Machine Tools Australia Pty (AMTA)						
Brackenbury & Austin Engineers, Sydney NSW						
Planer		D510	10m x 5m Machine No.1301 WAGR	1940s	Machine Shop - General	
British Machine Tool Makers Association Ltd						
		No.22				
Pillar Drill			Machine No.3252 WAGR	1900	Electrical Shop (Old Tarp Shop)	Previously located in the Machine Shop – General. Possibly the oldest surviving drill at the workshops.
Brookhirst Switchgear Ltd, Chester England						
		No: 0372 V1	Volts: 400/440 Cycles: 50			
		No: 6372 71	Volts: 104/440 DC			
Chas Winn & Co Ltd Makers, Birmingham England						





Single Head Screw-Cutting Machine		No. 6202, size 4	Machine No.1623 WAGR	Acquired in 1951	Machine Shop-General	Cuts right and left hand threads to a diameter of 4 inches. An extensive collection of thread-cutting tools are stored in a cupboard nearby.
Churchill Machine Tool Co Ltd (The), Manchester England						
Car & Wagon Axle Journal Grinder		Model DAJ	Machine No.2061 WAGR	Acquired in 1954	Wheel Shop Later moved to New Tarpaulin Shop	Many accessories for the machine can be found lying loose nearby
Churchill Double Radius Link Bolt Grinder			Machine No.1980 WAGR	Acquired in 1953	Rolling Stock – Assembly & Repair	Appears to have been used for grinding long curved surfaces, possible for steam loco linkages.
Surface Grinder			5m x 3m x 3m Machine No.1357 WAGR	1950s	Machine Shop – Toolmaking	Used for grinding flat surfaces
					Machine Shop	
Cincinnati Milling Machines Co Ltd (The), Birmingham England						
Milling Machine			Machine No.1120 WAGR	1940s	Machine Shop - General	






Pillarbox Hydro-tel Vertical Milling Machine			Machine No.1624 WAGR	1951	Machine Shop - Toolmaking	This machine was state-of-the-art in 1951. Now superseded by CNC mills.
Colormount Ptd Ltd						
Fashion Board					Metrology Room	Located at 190 Gertrude Street, Fitzroy Victoria
Crompton Parkinson						
					Erecting/Fitting Shop	
Dean Smith & Grace Ltd, Keighley England						
Centre Lathe			Machine No.2543 (2731?) WAGR	1950s	Machine Shop - General	Acquired from the Midland Railway Company in 1964.
Dennis English Electrical						
Fuse					Electrical Shop (Old Tarp Shop)	
Distribution Equipment Company						
AC Motor Starter		Type: TPM 16	7.5KW 10 HP Max AC3 415/440 50Hz			
Eilbeck						



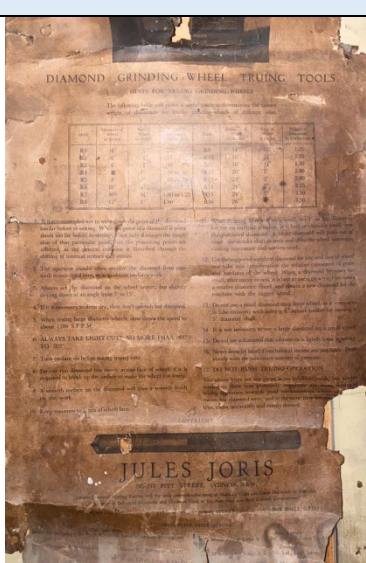

Gantry		MT-805	10t	1960s/1983	Blacksmith Shop	
Email LTD						
Wathour Meter		Type SD-M Serial: 87N35258	Phase: 3 Wire: 4 Rev/kW.h: 22.2 Hz: 50 A: 30-125 V: 240		Electrical Shop (Old Tarp Shop)	<p>Meter stopped at 13073.</p> <p>Company was formed from merger of Electricity Meter Manufacturing Co Pty Ltd and New System Telephone Pty Ltd. Email was incorporated in NSW in 1934 as Electricity Meter & Allied Industries Ltd. It adopted the Email acronym name on 20 October 1951. Their original and longest business was manufacturing electric, gas and water meters, with few Australian houses who would've not had one installed.</p> <p>By 1986, they were the biggest Australian company in the whitegoods industry with major appliance brands they manufactured and sold which included Dishlex, Chef, Metters, Westinghouse, Kelvinator, Frigidaire, Simpson and Malleys.</p> <p>Some of these brands were produced by overseas companies under licence.</p>
Email Westinghouse Pty Ltd						
Drinking Fountain				1951-52		Made in Australia
QCC Panel Board				Pre-1957	Singer Sewing Machine Electrical Shop (Old Tarp Shop)	<p>Email-Westinghouse was renamed Cutler-Hammer in 1957 and then later Eaton.</p>





QCC Panel Board Info Card					Singer Sewing Machine Electrical Shop (Old Tarp Shop)	
Electric Construction Co Ltd (The), Longon & Wolverhampton						
Mercury-Arc Rectifier			5/12116	1939	Machine Shop	Principle of 'Varispeed' System
English Electric Co Ltd (The), London						
Distribution Fuse Board						Made in Australia
Induction Motor		Serial: 58 48 43/96	Size: ALK 1 HP: 3 Phase: Y3 Cycles: 50 Rating: CON	1940s	Electrical Shop (Old Tarp Shop)	Made in Great Britain
English Electric Co Ltd, Fusegear Works, East Lancashire Road Liverpool						
Formed in 1918.						
150 Amp "Combination" Fuse-Switch		c. 8417/27	Rupturing Capacity: BSS 88/1947 Categories: 440AC5	1947	Electrical Shop (Old Tarp Shop)	WARNING: - WIRE FUSES MUST NOT BE USED



200 Amp "Combination" Fuse-Switch		C8417/1108 HDAXP	ASTA20 Certified to: BSS 88/1952 Categories: 440AC5	1952	Machine Shop	WARNING: - WIRE FUSES MUST NOT BE USED
300 Amp "Combination" Fuse-Switch		c. 8417/26	Rupturing Capacity: BSS 88/1939 Categories: 440AC4 & DC4	1939	Machine Shop	WARNING: - WIRE FUSES MUST NOT BE USED
300 Amp "Combination" Fuse-Switch		c. 8417/27	Rupturing Capacity: BSS 88/1947 Categories: 440AC5	1947	Machine Shop	WARNING: - WIRE FUSES MUST NOT BE USED
300 Amp "Combination" Fuse-Switch		c. 8417/223	Rupturing Capacity: BSS 88/1952 Categories: 440AC5 ASTA 20 Certified	1952	Electrical Shop (Old Tarp Shop)	WARNING: - WIRE FUSES MUST NOT BE USED
300 Amp "Combination" Fuse-Switch Box					Electrical Shop (Old Tarp Shop)	
Enviroequip						
Cast Iron Monitoring Bore					Machine Shop	
Federal Electric						
Ceramic Fuse			250v 32A - ACI		Electrical Shop (Old Tarp Shop)	
Fred Town & Sons Ltd, Halifax England						




Freon						
						
General Electric Co Ltd of England, The						
Induction Motor		B10 M/C No. SM38020/2	3 HP 400/440 Volts 4.2 Amps 3 Phase 50 ~ 450 RPM			
General Electric Company of Britain (GEC)						
Safeclip FuseLink		Type SC32	32 Amp 415 Vac 3.5 W Class Q1	1975	Singer Sewing Machine Electrical Shop (Old Tarp Shop)	The GEC SC32 SafeClip Fuselink is designed to provide dependable protection for electrical circuits, making it suitable for a wide range of applications. This fuse link is rated for 32A and is compatible with 415Vac. Designed for straightforward integration into electrical systems.
Grinnell Corporation						
6 inch Model F200 Alarm Valve		Model F200			Shellforge Lane	They are designed to automatically actuate electrically and/or hydraulically operated alarms when there is a steady flow of water into the system which is equivalent to the discharge rate of one or more sprinklers.
Retarding Chamber		Tyco Fire Products Model F211.			Shellforge Lane	Used with systems having a variable water supply pressure , such as ones that are used with public water supplies in order to help prevent false alarms.
H. E. Brehaut Pty Ltd						
Gearbox		Type: 31/2				Hebco Regd






		No: 8827				
		Type: 6" No: A31				Hebco Regd THIS EQUIPMENT IS THE PROPERTY OF MINISTRY OF MUNITION COMMONWEALTH OF AUSTRALIA Reg No. 119---607
			Machine No.2188 (2344?) WAGR		Machine Shop	
Heldon						
Fitter Core Dryer						
Henry Berry & Co Ltd, Leeds						
Hydraulic Wheel Press		Model WA2586 No.6501/D1)	400t 7m x 2.5 x 3.5m Machine No.1699 WAGR	Acquired in 1951	Machine Shop – Wheel Shop Section	Previously water powered until it was converted to oil. Used for both stripping wheels off axles and to press them on.
John Saunders						
Water Pipe Valve						
John Stirk & Sons Ltd, Halifax England						
Planing Machine			7.5m x 4m x 4m Machine No.172 WAGR	1913	Machine Shop - General	AC-DC generator raises and lowers the planing head via pullets & flat belts. Disused in 1993. Looks almost identical to the Brackenbury & Austin Planer.
Jones & Lamson Machine Co						






Automatic Thread Grinder		TG636	Machine No.1224 WAGR	1946	Machine Shop - Toolmaking	Supplied by Gilbert Lodge & Co (Pty) Ltd Australia & New Zealand
Jones Shipman						
		Model 1011 J & S No.2			Blacksmith Shop	
Jules Joris						
Diamond Grinding Wheel Truing Tools Tip Sheet					Machine Shop	<p>Located at 245-247 Pitt Street, Sydney, they self claimed to be the largest diamond cutting factory and “most comprehensive stock of Made-up Tools and Loose Diamonds in Australia.</p> <p>Jules Joris left Belgium to come to Australia with his wife and daughter on the German steamer Oder. They arrived on 24 February 1930, with Jules bringing his entire diamond cutting business. At the time, Antwerp had 32,000 diamond cutter businesses and there were approximately 7,000 in Amsterdam. They were the two principal centres for diamond cutting but none in Australia, which led Joris to re-start this company in Sydney, particularly as Australian diamonds are the hardest of all diamonds to cut.</p>
Kendall & Gent						
Plano-Milling Machine		(Small)	Machine No.152 WAGR	1923	Machine Shop - General	
Plano-Milling Machine		(Large)	Machine No.153 WAGR	1923	Machine Shop - General	Can plane or mill large workpieces of multiple small ones.
Vertical Milling Machine		CVM60	Machine No.1955/1957 WAGR 4m x 2.5m x 4m 45 inch rotary table	Acquired in 1952	Machine Shop - General	

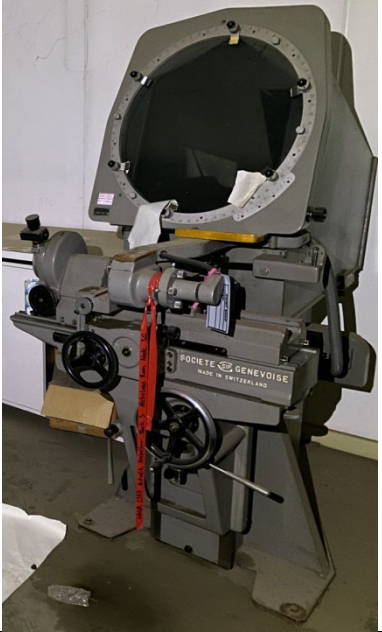


Lancashire Dynamo & Motor Co Ltd (The), Trafford Park, Manchester						
Electric Motor		No: 57276	Size AA50 Volts: 220 Amps: 40 BHP: 15 RPM: 740 PH: 40		Electrical Shop (Old Tarp Shop)	Associated with Crypto Electrical Co Ltd Founded in 1899, they manufactured electric motors and also had a branch in Toronto, Canada. In 1920, they entered into an arrangement with the Crypto Electro Co, Willesden England, to manufacture motors 10HP or less. The two companies merged in 1932 to form Lancashire Dynamo and Crypto.
Macbro						
Pedestal Grinder		No. 12017 (cover)	Machine No.1248 (1235?) WAGR	1946	Machine Shop - General	Appears to have been acquired from the Ministry of Munitions in 1946.
Markal Thermomelt						
High Temperature Indicator Heat Stick Market					Machine Shop	
Maschinen Fabrik Oerlikon						
Iron chains		3 tons		1904	Main Store	Famous German company, although it appears that the chains are now manufactured in India.
McColl Electric Works Pty Ltd, Melbourne						
Alternating Current Squirrel Cage Induction Motor		5030	No. KK360 Type: OZ50		Machine Shop	

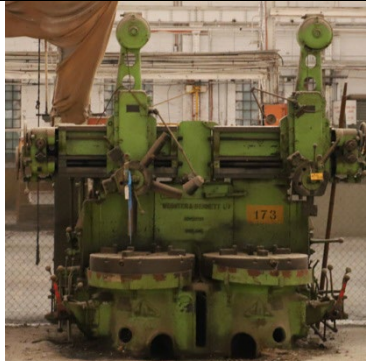


			Volts: 41.5 Style: 50-859 RPM – 1430			
Mercer, St Albans England						
Metropolitan MFG Co, Redfern NSW						
Una-Dome Bell					Machine Shop	Located in Regent Street, Redfern.
Metropolitan Vickers Elec Co Ltd, Manchester England						
Precision Grinding Machine Induction Motor		Type: KZ4126 No: 39734 F1	HP: 7.5 ½ HR Volts: 400/440 A: 9.6 CY: 50 RPM: 1450 PH: 3		Machine Stores	
Moser-Glaser & Co						
		Type: K0,2 2b/3b No. D6657/4	W leer à vide: 3,5 V: 230_ /I 6 / II 125 250 / III 4 VA: I 100 II 100 III 4 A: I 16,7 II 0,8 III 1,0 50 Hz		Metrology Room Workshop 3	
Newall Engineering Co, Peterborough						
Length Measuring Machine			Machine No.2286 WAGR	Acquired in 1941	Toolroom Metrology Room	Made in Switzerland. Measures to 1/100,000 of an inch. Bed labelled Kendall Engineering Co, Peterborough.
Nilsen Electrical Services						
Direct On Line Starter		CAT No: OJ15 Model No.1	Line Volts: 415 Coil Volts: 415 Freq: 50 Amps: 50 Range 42-63 Amps		Machine Shop	




Fuse Combination		CAT No: NFC 100 Type: 1 37801	th: 100 A Volts: 440 ~ 50 Hz	1975	Erection/Fitting Shop	
Manual Direct On Line Starter (Hebco Pedestal Grinder?)		Type: OJ5 1460NI	Amps: 20/33 Phase: 3 Volt: 415 Freq: 50		Machine Shop	
Oliver J. Nilsen & Co Pty Ltd						
Aux Hoist Switchgear		8NU.06	Ser No. 293 Line Volts: 41.5 Coil Volts: 65 RPM: 25 MAX SWL 43 Tonne Main Hoist SWL 43 Tonne Aust Hoist SWL 10 Tonne			
Hoist Switchgear		6NU.06	Ser No. 288 Line Volts: 44.0 Coil Volts: 34 RPM: 12.5			

Travel Switchgear		5NU.05	Ser No. 294 Line Volts: 41.5 Amps: 34 RPM: 12.5			
Traverse Switchgear		6NU.06	Ser No. 295 Line Volts: 41.5 Coil Volts: 20 RPM: 7.5			
Switchgear		11998	Line Volts: 44.0 Coil Volts: 44.0			
Orsdal						
Valve						
Ormerod Shapers Ltd, Hebden Bridge England						
Shaper			Machine No.1451 WAGR 2.5m x 1.5m x 1.5m	Made in 1950s	Machine Shop - General	
Parkson Universal						
Milling Machine		No. 3N	Machine No.s 1820/1838/1839/1981/2014 WAGR 2m x 2m x 2m	1952	Machine Shop - General	Flat belt drive inside.
Pulley Speed Chart					Machine Shop - General	Made by J. Parkinson & Son, Shipley England





Penn						
Lubrication Protection						
Radix Pty Ltd						
DW Transformer		GR5 BS5 794	Watts: 60 Frequency: 50 Volts		Workshop 3	Double Wound Variable Transformer.
Selig Sonnenthal & Co, London						
Screw-Cutting Lathe			Machine No.550 WAGR	1898	Electrical Shop (Old Tarp Shop)	<p>Purchasd by WAGR for £50. Gp-bed and legs are original but a number of heavy modifications have been made since, in order to operate it as a coil winder.</p> <p>Located at 85 Queen Victoria Street, London from 1871. They also had premises in Lambeth Hill (south-east of London) and a factory in Coventry.</p> <p>Whilst little seems to be known about the products they manufactured, Selig Sonnenthal & Co are more well known as agents, importing products for leading engineering retailers. Between 1880 to 1910, they described themselves as “importers of American & other foreign engineers’ tools & machinery wholesale & export, hardware & machinery merchants & contractors for metal & railway materials of every description”.</p> <p>They later shortened their name to Selson, taken from the first three letters of both names.</p>
Singer						
No.2 Sewing Machine		Model No. 132K6	Machine No.1865 WAGR	1951	Electrical Shop (Old Tarp Shop)	Previously had a sewing machine installed on the table
Singer MFG Co (The)						
Electric Transmitter		Cat No: K593158 Serial: K596468	Volts: 230/250 CYC: 50 HP: 1/3 PH: 1 RPM: 1425 AMP: 2.2		Electrical Shop (Old Tarp Shop)	SIMANCO Made in Great Britain
Power Circuit		Part No: 198843	½ HP 250 VAC 1 Phase		Electrical Shop (Old Tarp Shop)	SIMANCO Made in Great Britain


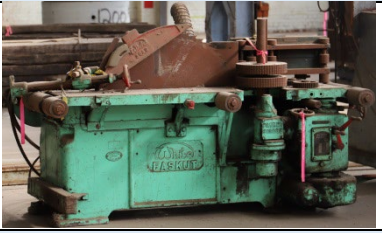





Societe Genevoise D'Instruments de Physique (SIP) Geneva						
Profile Projector (Shadowgraph)		Type: SIP AP-6 No: 321 Standard Scale no: 8635	T: 20°C Machine No.2357 WAGR	1959	Toolroom Metrology Room	Made in Switzerland Modern version of the Cussons projector but more versatile and precise specimen manipulator
Tos Kurim						
Horizontal Borer		Type: H80 No. 20841	Spindle ø80 mm Table 1120 x 900 mm XYZW 1000 x 900 x 1000 x 710 mm		Machine Shop	
Town						
4-ft Radial Drill			Operates with a Tilting Box (8093) instead of the normal box table.	1946	Machine Shop - General	Frederick Town Acquired for the Tool Room and transferred to the Flanging Shop in 1982 to replace an old radial drill. Second one was acquired in 1951. 3 different models photographed
Webster & Bennett Ltd, Coventry England						



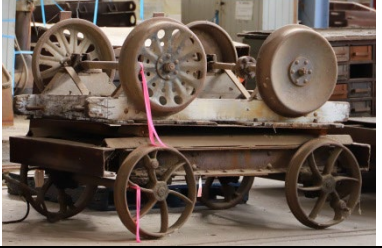

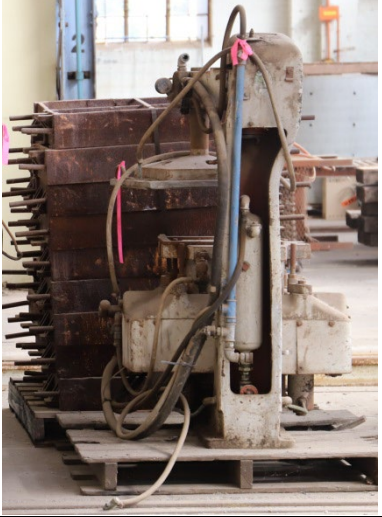

Duplex Boring & Turning Mill			Machine No.1089 WAGR	Acquired in 1941	Machine Shop – General	Two machines joined together and run by the one operator. Each mill has a 5-face turret allowing 5 pre-set tools to be swung as needed. Partly flat-belt drive.
Wilco						
Dual Power Socket		MRW3 – DPS01 MRW3 – DPS02	CAT PT88 15 Amp		Shellforge Lane	
Dual Switch		MRW3 – DS01	CAT PT--		Shellforge Lane	
Electrical Outlet					Electrical Shop (Old Tarp Shop)	







<p>Electrical Outlet</p>			<p>PT35</p>	<p>250 V – 10A</p>	<p>Electrical Shop (Old Tarp Shop)</p>	
<p>Electrical Isolating Switch</p>		<p>MRW3 - LIS01</p>		<p>250V 10A</p>	<p>Shellforge Lane</p>	
<p>Industrial Switch</p>		<p>MRW3 - OR01</p>	<p>PS 110</p>	<p>250V 10A</p>	<p>Shellforge Lane</p>	

WM. Asquith Ltd Makers, Halifax England

Mobile Radial Drill		Machine No P: 16525	Serial No: PU898 Assembly No: FS7050 5ft 9 inches Machine No.1377 WAGR	13 February 1948	Machine Shop - General	FOR SERVICE APPLY GILBERT LODGE & CO PTY LTD AUSTRALIA & NEW ZEALAND
Wormald Bros Pty Ltd						
Grinnel Sprinkler System					Electrical Shop (Old Tarp Shop)	
Sprinkler System		Model F200	6 Alarm Valve Listed 467A			
W & T Avery (Aust) Pty Ltd						
Scales					Main Store	
W & T Avery Ltd Birmingham						
Cast iron platform scales with weights		174	Machine No.8014 WAGR No.298	Acquired in 1920s	Electrical Shop (Old Tarp Shop)	Used for weighing bags of dog spikes <i>W & T Avery Ltd</i> was a British manufacturer of weighing machines, founded in 1730 by James Ford, who began the company in Digbeth (Birmingham, England) . It was later owned by Joseph Balden, who died in 1813 which led to William and Thomas Avery taking over the business. Five years later in 1818, they renamed the company to W & T Avery. GEC bought them out in 1979, later changing their name to GEC-Avery.

						<p>GEC acquired the Dutch company Berkel in 1993, which led the company's name to change to Avery Berkel.</p> <p>When Weigh-Tronix took over the company in 2000, the company was renamed Avery Weight-Tronix, continuing to operate today in Smethwick, West Midlands in the United Kingdom.</p> <p>Whilst this online image of the scales platform is clearer than the photo I took, the one inside the Electrical Shop (Old Tarp Shop) also has LTD inscribed after AVERY.</p>
White Faskut						
Power Feed Circular Saw		No. 3642	<p>Machine No.2035 WAGR</p> <p>Patent 313883</p>	1952	Blacksmith Shop	Modern saw with grooved rollers to grip and mechanically feed the wood being cut
Unknown						
					Machine Shop	
					Machine Shop	
					Machine Shop	
					Machine Shop	
					Machine Shop	

					Main Store	
					Main Store	
					Blacksmith Shop	
					Blacksmith Shop	
					Blacksmith Shop	
					Machine Store	

					Machine Store	
					Machine Store	
Hebco Pedestal grinder?					Machine Store	
					Machine Store	
					Machine Store	
Dust Extractor					Machine Store	

