AUSTIN

THROUGH THE YEARS



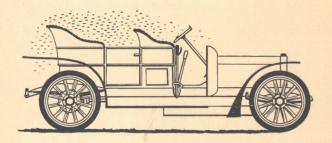
A BRIEF HISTORY OF THE COMPANY



THE AUSTIN MOTOR COMPANY LIMITED . LONGBRIDGE . BIRMINGHAM . ENGLAND

Visitors are very welcome to Longbridge, where they can see the complete manufacture of Britain's dependable cars. Arrangements can be made for parties or individuals, and those wishing to take advantage of the excellent facilities offered, should apply to the Reception Officer, Longbridge.

## Introduction



In January, 1906, before the first Austin car pattered happily through the quiet countryside around Longbridge, there appeared in the preliminary announcement catalogue, these words . . . "The Austin car will represent the embodiment of all the best features in modern automobile construction . . . Only the highest class of material will be used and the supervision during the course of construction will be such as to ensure the very best results."

Thus, the seeds of dependability were sown at the very beginning of Austin production and they have been tended and developed through the years. To-day, Austin cars hold a reputation for dependable service that is unique in the motor industry, and they are achieving successes unequalled by any other British car in the markets of the world.

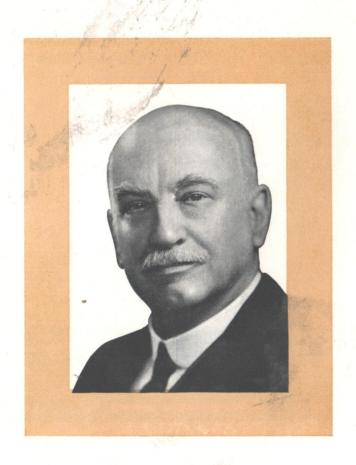
We are impelled by these facts to pay tribute to two generations of skilful and conscientious Austin workers who made these fine cars, to our colleagues in the industry who have maintained the flow of essential materials, and to our distributors and dealers everywhere who have ably assisted us to serve the public and maintain their faith in our products.

To that public we also send greeting, since so many of them have preferred to become Austin owners instead of merely motorists!



### LORD AUSTIN OF LONGBRIDGE, K.B.E., LL.D., 1866-1941

#### FOUNDER AND FIRST CHAIRMAN OF THE AUSTIN MOTOR COMPANY LIMITED



Lord Austin was born in Little Missenden, Buckinghamshire, in 1866, and at the early age of 18 he emigrated to Australia to commence his apprenticeship in a Melbourne foundry. He later joined the Wolseley Sheep Shearing Company and ultimately became manager. In 1893 he returned to England to supervise the manufacture of sheep shearing plant in a Birmingham factory. He was early inspired by the possibilities of mechanical transport, so much so that two years later, in 1895, he designed a three-wheeler, powered by a horizontal two-cylinder engine.

A four-wheeled car of his design was exhibited at the Crystal Palace Exhibition of 1896, and in 1900 his 3 h.p. two-seater carriage secured a silver medal by successfully accomplishing the 1,000 miles trial. Five years later he founded his own organisation in a small derelict printing works at Longbridge, seven miles from Birmingham. So commenced the Austin Motor Company.

Lord Austin was Chairman of the Company for thirty-six years until his death in 1941. His designing genius, organising ability, unfailing energy and faith made possible the outstanding success of the fine, dependable cars that bear his name.

The motto below was displayed in Lord Austin's office for many years.

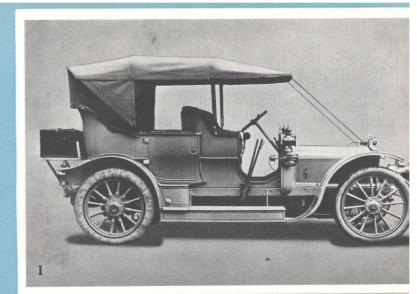
"Most everything worthwhile is born of some dreamer's dream."

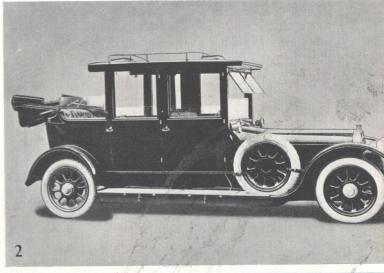
THE first motor cars produced in Britain in 1896 were in reality horseless carriages, designed in a style similar to the horse-drawn vehicles of the day but propelled by an "infernal machine" instead of the then more reliable horse. It was not until some years had elapsed and the "newfangled contraptions" were generally recognised as a reasonably safe and respectable means of transport, that they gradually achieved their own individuality.

The first Austin car was made at the Longbridge factory early in 1906. It was a touring model with a 4-cylinder engine rated at 25—30 h.p. and was in every way a fully-fledged car—a tremendous advance over the horseless carriage style and the early Austin designs of 1895 and 1900. This car, with those that followed, gained considerable popularity and quickly established a reputation for sound, honest design.

By the end of 1908, seventeen different models had been introduced, ranging from 15 h.p. to 50 h.p., and of these the 40 h.p. Endcliffe Phaeton with chain drive was one of the most successful. The following year saw the introduction of the first Austin Seven. This was a single-cylinder open two-seater, and represented an early attempt to produce a really economical, low-powered car.



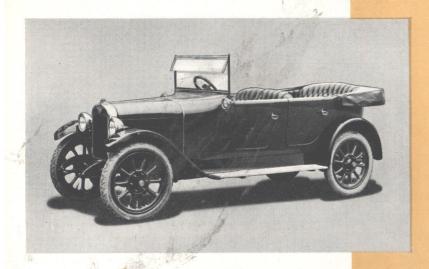




1908, one of the first Austin models, the 40 h.p. Endcliffe Phaeton.

1913 luxury exemplified by the 50 h.p., 6-cylinder Landaulet.

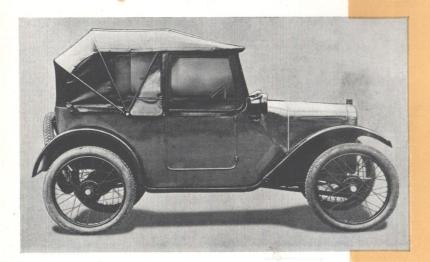
1909, the first baby Austin, a single-cylinder 7 h.p. tourer,



1922

Dependable from the radiator to the last nut and bolt—the Heavy Twelve Tourer with a 4-cylinder engine.

One of the most famous cars in the world—the Austin Seven. Here is the first of a long line lasting 17 years.

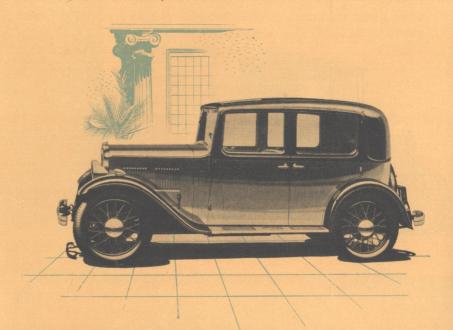


Austin production increased year by year, and by 1910 the annual output was 576 cars. Design also improved both in respect of mechanical operation and passenger comfort. The 50 h.p. 6-cylinder Landaulet provided a good example of luxury motoring in 1913.

Nine years after its inception, namely in 1914, the factory had achieved an output of 1,500 cars a year, which showed substantial progress. But the first world war came as an interruption to the normal activities at Longbridge, and during the national emergency large supplies of war material were manufactured.

Post-war car production was an uncertain process fraught with many difficulties, but the Austin name was soon to the fore with the first newly-designed British car—The Austin Twenty Tourer. The after-effects of the war were, however, not to be lightly discarded, and in the depression of 1920-1921 the Austin organisation in common with many other firms had once again to face the storm of industrial difficulties. But it was in this period of stress that the real foundations of its present success were laid.

Another popular and successful Austin was the Ten-Four saloon, shown below.



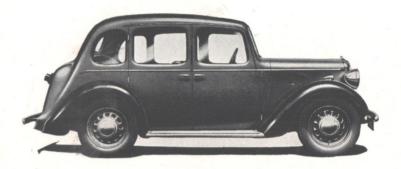
Lord Austin designed in quick succession the Austin Heavy Twelve and the Austin Seven, the former appearing on the market late in 1921 and the latter following in 1922. Both these models were an immediate and unqualified success, and by their wonderful endurance made Austin the standard of motoring dependability. At first the Seven, on account of its diminutive proportions, was the butt of much ridicule (witness the story of the motorist who bought two—one for each foot!). But those who came to scoff remained to praise when the amazing capabilities of the first practicable baby car began to be fully realised.

Between 1922 and 1926 the Austin Motor Company made remarkably rapid progress, and the production of cars increased during that period from 2,600 to 25,000 a year—a remarkable achievement.

1932 heralded another newcomer to the Austin range, namely the Ten-Four, a car whose engine, basically unchanged, continued in production for fifteen years. Meanwhile, the Seven was growing up and the Ruby 4-seater Saloon was a car infinitely more refined than the original design of 1922. There was, however, no fundamental alteration to the engine or chassis of the Seven right up to the time that this little car, beloved of many a motorist, gave way to the Austin Eight in 1939.

The Austin Seven Ruby 4-seater saloon was the stylish descendant of the original "baby" of 1922.

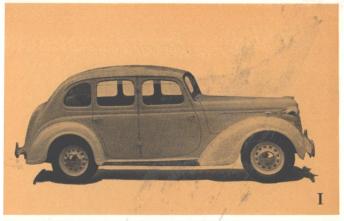




A favourite among motorists everywhere—the "Cambridge".
Ten. Two other models similarly styled were the "Ascot".
Twelve and "Goodwood". Fourteen.



Successor to the Seven, the Eight achieved immediate popularity on its introduction.



1946



1947



Three models which were to achieve considerable popularity appeared late in 1936; they were the "Cambridge" Ten, the "Ascot" Twelve and the "Goodwood" Fourteen. These cars, with others in a comprehensive range, were enhancing Austin prestige in the years immediately prior to the second world war.

In 1939 Austin introduced in quick succession a new Eight in February, a new Ten in May, a new Twelve in August, and production reached 90,000 cars a year. And then, in September, came the second world war. The achievements of the Austin organisation during the period 1939—1945 are too numerous to mention here but it is worth noting that in addition to vast quantities of war equipment the Company produced 118,000 military vehicles.

By the end of the war, new car designs were already well advanced and experimental and development work was progressing, so that in 1947 Austin were able to announce the first British light car of completely post-war design. This was the A40 Devon Saloon which met with unprecedented world-wide success and was acclaimed in the toughest of all markets—North America.

The A40 was quickly followed in 1947 by the six-cylinder Sheerline and Princess models, and the 4-cylinder A70 Hampshire and A90 Atlantic in 1948. The last named took 63 American Stock Car records on the Indianapolis race track in 1949. Production by now had reached 136,600 vehicles a year, more than the total car production of the whole British Motor Industry in 1946; a magnificent achievement in view of the many post-war difficulties in the supply of essential materials.

And so to-day the success story continues. Austins, ahead in design, performance and comfort, still possess that dependability which is traditionally theirs. Whatever the future holds, it is certain that Austins will play their part as they have so successfully done through the years.

The millionth Austin, a 16 h.p. saloon, signed by the people who made it and placed on show at Longbridge.

The A40 Devon was the first British light car of completely post-war design.

Modern design and sparkling performance are exemplified by the A90 Atlantic Sports Saloon.

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# AUSTIN RACING CARS

Motor racing enthusiasts will already be familiar with Austin successes in road and track events between the wars and more especially in the late 1930's. It may not be generally known, however, that the Company's interest in this field dates back to 1908, when the first authentic Austin racing car was built—the 100 h.p. Grand Prix Racer.

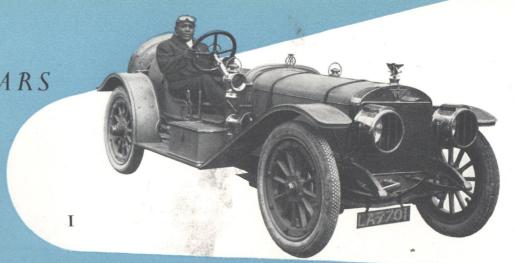
Between that time and the outbreak of war in 1939, Austins of many shapes and sizes competed in nearly every major event in Britain and in many countries overseas. But it was the Seven that achieved the greatest measure of success, holding at one time, all the records in its class. This big-hearted "little 'un," which began its distinguished career in 1923, was a great favourite with drivers and spectators alike, and performed many feats of speed and endurance.

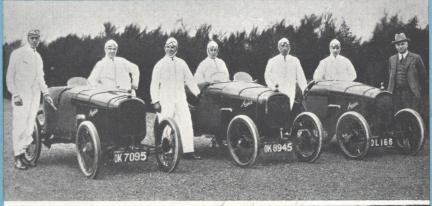
Most famous of all Austin Seven racing cars was the O.H.C. Special. First introduced in 1936 it was, until the outbreak of war in 1939, a regular and sensational runner in trials and racing events. Of only 750 c.c. capacity, it was capable of over 120 m.p.h.

The 100 h.p. Grand Prix Racer of 1908 with Jack Johnson

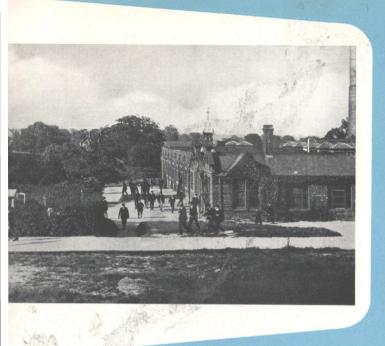
Sir Herbert Austin with the first team of racing Sevens in 1923.

The Austin Seven Special with twin overhead camshafts, at speed on the Donnington Park track in 1938.











120 acres, 20,000 workers, 136,600 vehicles a year.

1906

THE old family album is always an object of great interest, and few people can resist the fascination of turning its pages and glancing at the, perhaps faded, pictures of a bygone era. From the Austin "family album" comes the picture on the left. It shows the main entrance to the 1906 factory with some of the 270 workers leaving at the end of the day, after half completing one car.

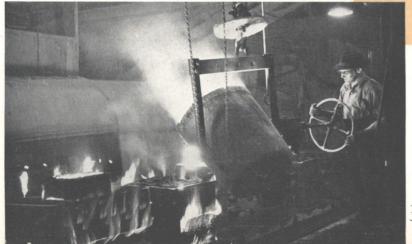
In direct contrast is the photograph below which depicts a stream of workpeople leaving by one of the many exits the modern Austin factory, where something over 600 cars have been completed during the day.

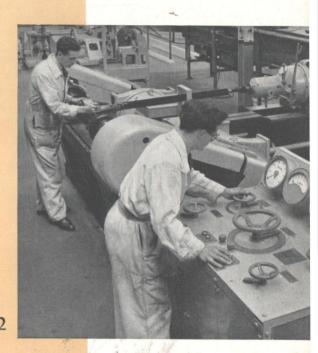
The congestion caused by this rush of humanity is quickly relieved, and workers are soon homeward bound in over 100 buses, 70 trams and three trains. Coaches, private cars, motor cycles and bicycles provide transport for those not requiring the public service "specials," while many employees live within walking distance of the factory.



N the modern Austin Factory at Longbridge, more of the complete process of car manufacture takes place than in any other single British plant. To this comprehensive quality it owes its exceptional interest as well as its efficiency, for visitors can see virtually the complete flow of motor car production. Not merely the assembling of units and parts derived from widely different sources, not only the machining processes, but the initial preparation and shaping of the raw materials and every subsequent stage of manufacture takes place until a shining, new and dependable vehicle rolls off the finishing lines.

Austin cars are conceived in the Project Room where new body styles are first sketched, then modelled in plasticine. Full-scale drawings are next made and wood models constructed to actual size. Meanwhile,





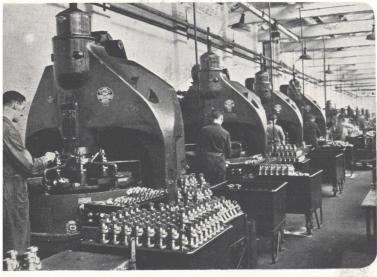
A new Austin chassis begins on the drawing boards in the Designs Department.

Testing an experimental rear axle on one of the many special machines in the Development Department.

Molten iron being poured into moulds in the Austin foundry.



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chassis designs are being produced to meet the required specifications of the new car, and the result of this initial activity is the building of a complete prototype vehicle. The development and experimental stages that follow are of extreme importance in the early life of the car, in that the experience gained from the performance and general behaviour of the prototype is invaluable when full-scale production begins. Thus, many months are spent in testing, modifying and re-testing every major component as well as the complete vehicle in order that the finished car will be equal to the most exacting conditions of operation and provide long-lasting dependability.

The raw material for many of the chassis parts first begins to take shape in the Austin foundry, where the molten metal is poured into previously prepared sand moulds. Some 220 tons of finished castings are made in a week, but by no means all components are cast, and the drop-forging shop accounts for approximately 350 tons of finished parts during a normal week's work.

After the rough edges have been taken off, the castings and forgings pass to the machine shops where the surplus metal is removed and the contact faces are machined and ground. Machining must be carried out within very fine limits, and parts are carefully inspected to see that the required standard of accuracy has been achieved. The various diameters of the camshaft for instance, must be correct to half-a-thousandth of an inch if the assembled engine is to run smoothly and silently.

Completed parts are now brought together in marshalling areas, and on their way to the assembly sections, pass through steam-washing

The Automatic Factory provides a good example of tidy, spacious layout. Each operator is responsible for six machines.

A small section of the Gearbox Factory. The machine nearest the camera cuts 31 gear teeth every minute.

Austin overhead-valve engines being assembled on moving conveyors in the Engine Factory.

machines to ensure absolute cleanliness. The assembling of major units such as the engine and gearbox is carried out behind glass partitions to afford protection from dust, metallic particles and other contamination resulting from nearby machining operations. When assembled and tested, the various chassis units are carried on moving conveyors—there are over 4 miles of them—to the main assembly lines where the chassis is built up stage by stage and gradually assumes a recognizable shape. It is interesting to note, in passing, that there are something like 3,800 individual parts to each complete chassis.

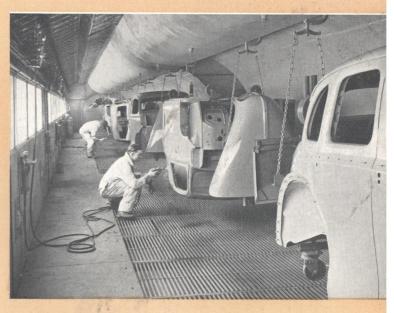
Austin bodies begin as flat steel sheets. These are placed in presses, the largest of which applies a pressure of 1,000 tons, and in a matter of seconds the flat sheet becomes an intricately shaped panel. On the body assembly lines the individual panels are fitted into specially designed jigs which secure



Specially designed jigs hold the body panels in position while they are finally secured by spot welding.



Body panels being shaped by giant machines in the Austin press shop.



Completed body shells are sprayed with synthetic enamel in this 130 feet long paint finishing plant.

them firmly in their correct relative position while they are joined together by electric spot-welding. There are approximately 800 welding points on each Austin body. Completed body shells are thoroughly cleaned, sprayed with primer paint and then passed through a rotary spray plant where the final coats of synthetic enamel are applied. The bodies next travel into a gas oven in which the enamel is baked at a temperature of 240°F—260°F, to give the lustrous, durable finish familiar to many thousands of Austin owners all over the world.

Meanwhile, in another section of the body factory, upholstery is being made, fascia panels prepared, roof linings and carpets cut to shape, and window glasses, dust-proofing strips and many other parts marshalled. Thus, as the shining body shells move down the trimming lines they are gradually fitted out until, fully equipped, they are ready for mounting to the waiting chassis.

Testing, adjustment, cleaning and inspection of the now complete new Austins finally prepare them for the road and a long life of dependable service.

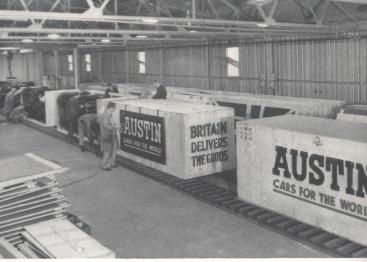
More Austins are exported to the markets of the world than any other single British make of vehicle, nearly 84,000 being sent overseas during 1949. This entails considerable organisation, and the Austin Motor Export Corporation Limited was formed in 1946 to handle the ever-increasing volume of trade. Five main methods are adopted for sending cars abroad:—(1) Car supplied to an overseas' visitor who takes it back to his own country when he returns (must be within 12 months); (2) Finished car driven by road to the docks; (3) Finished car sent by rail to the docks; (4) Finished car packed complete in a wooden case; (5) C.K.D.— "Completely Knocked Down" cars packed in cases to be assembled at their destinations.

A general view of the sewing room, where the various sections of upholstery are made up.

Finished Austin cars being crated for export.

Building for the future. A fine new assembly and body mounting plant in the course of construction.







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## LOOKING AHEAD





HE Austin factory at Longbridge resembles, in many respects, a small town with its own railway sidings, station and loading bays, 5 miles of roadways, an internal police force, restaurants and canteens, medical and welfare services, a rehabilitation centre—the first and finest of its kind in Britain—electric power plants, and a large engineering and maintenance staff. These varied departments are too numerous to describe in detail but they form an integral and necessary part of Britain's largest single motor works.

At the time of writing, intensive work is progressing on a new layout for certain areas of the factory, a great new assembly shop is under construction and the very latest equipment is being installed. For the Austin Motor Company is planning a larger volume of production than the present capacity of the plant permits, and before long there will be even more dependable Austins plying the roads of the world.

At the head of this vast and still growing organisation is Mr. L. P. Lord, Chairman and Managing Director, whose outstanding personality, ability and energy have gained for him and for the Company a primary position in the British Motor Industry. Under his direction Austin workers have produced a range of cars and commercial vehicles that have astonished the world by their performance and won acclamation for their success. And with the promise of his continued leadership, we at Longbridge look forward to the future with high hopes and unabated confidence.

Mr. L. P. Lord, Chairman and Managing Director of the Austin Motor Company Limited.

# Figures and facts

#### **EMPLOYEES**

		DOT TO	OV	er 20,000
				3,300
		1.19		2,000
over 2	5 years	' servi	ce	1,800
rked pe	er week			800,000
ages (w	orks ar	nd stat	f)	£192,750
	over 2:	over 25 years rked per week ages (works ar	over 25 years' servirked per week ages (works and staf	over 25 years' service

#### FACTORY

Length of internal roadways 5 miles
Length of internal railway track 6 miles
Total length of cable in internal works
telephone system 15 miles
Coal used per year 70,440 tons
Oil fuel used per year 422,228 galls.
Water consumption per year 267,337,694 galls.
Gas consumed per year 421,915,468 cu. ft.
Power House generating capacity 9,900 k.w.
Total electricity load 15,000 k.w.
Total volume of all works buildings 60,000,000 cu. ft.
Valuation of plant and buildings before
deduction of depreciation £8,359,338
Estimated cost of buildings under
construction £750,000

#### MATERIAL FOR PRODUCTION (per week

Timber (for doc	or frame	es, tr	uck boo	dies,	
etc.)				9,	890 cu. ft.
Carpet		• • •			$4\frac{1}{2}$ miles
Roof lining and	fabrics		• • • •		45 miles
Hides					1,200
Hair and fibre (	for uph	olste	ry)		8 tons
Sound insulating	materi	ial			6 tons
Glass (windscree	ens and	wind	ows)	40,0	000 sq. ft.
Paint				7,	250 galls.
Steel pressings					2,000,000
Total body part	s			2	21,000,000
Lamp bulbs					45,000
Sparking plugs					14,000
Length of electric	wiring	cable	(approx	)	180 miles
Total chassis pa					2,000,000

#### PRODUCTION EFFICIENCY

In 1910 one car was a week's work for	104 Austin Employees
In 1926 one car was a week's work for	16 Austin Employees
In 1946 one car was a week's work for	8 Austin Employees
In 1950 one car was a week's work for	6 Austin Employees

#### SPARE PARTS

CA

Orders handled	per week		 3,000
Individual lines	stocked		 35,000
Spare Parts desp	patched per	week	 250,000

#### USE OF SALVAGED MATERIAL (per year)

YELLOW METALS (bra	ass and	phos-	
phor bronze)		'	 460 tons
Enough to make	kitche	n and	
bathroom taps for	,		
—Re-smelted for the	ne prod	luction	
of ingots.			

ALUMINIUM	and	Light	Alloys		 470	tons
Enough	to	build	230	pre-		
fabricated	d h	ouses-	-Re-sm	elted		
for the p	rodu	ction	of ingo	ts.		

LEATHER	Cut	ttings				60 tons
			manufactu			
A PROPERTY OF THE PARTY OF THE			industrial ;	gloves	S	

RO	OF LININGS	and C	alico		 15 tons
A	Used for inc boot, shoe, linings.	ubator c slipper	urtair and	ns and glove	

RPET Cuttings			 14 tons
Used in the toy	trade a	nd for	
making hassocks.	slipper	inner	
soles, polishing	pads,	etc.	
Remaining mate	rial is	pulled	
into felt.			

#### PACKING FOR EXPORT

Number of complete cars crated in one
week 814
Crates for C.K.D. vehicles and spare parts
(average per week) 700
Total of timber used per week 27,000 cu. ft.
Waterproof lining paper used per week 180,000 sq. ft.
Nails used in crates per week 2½ tons

#### WORKS POST OFFICE

Letters and postcards despatched per week	17,000
Average cost per week of letter post	£400
Parcels despatched per week	4,000
Average cost of parcel post	£200
Internal works post—number of postmen	11

#### WELFARE SERVICES

Dining rooms				 	12
Snack bars				 	4
Cooked meals	served a	year		 805	,000
Subsidiary mea	als served	d a year	ar	 1,500	,000
Canteen staff e	employed	l		 	175
Ambulance sta	tions			 	8
Qualified Nurs	es			 	25

A modern Health Department, which has been built as a memorial to the late Lord Austin, includes X-ray apparatus and deep ray and radiant heat equipment. There are two resident medical officers, and two specialists attend two or three times a week.

Operated in close association with the Health Department is the Rehabilitation Shop. Here injured workers can exercise stiff limbs and at the same time do a useful paid job of work by operating light machines fitted with special manual or foot controls.

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