



ROAD ROLLERS

AVELING-BARFORD LTD. GRANTHAM



ROAD ROLLERS



AVELING-BARFORD LIMITED

Incorporating

AVELING & PORTER . . . Est. 1850

BARFORD & PERKINS . . . Est. 1840

GRANTHAM and NEWCASTLE · ENGLAND

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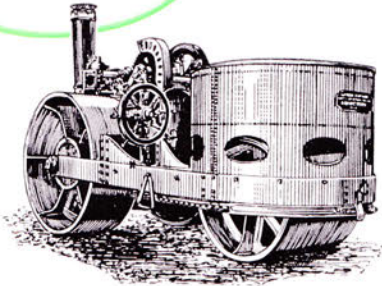
In 1867, Thomas Aveling built the world's first practical steam roller. In 1904, Barford's built the world's first internal combustion engined roller. From the same line in 1927 came the first road roller to be powered by a high-speed diesel engine. Small wonder therefore that the firm which gave the world's road builders these and many innovations which today are standard practice should produce in its latest range machines which are outstanding in every way.

The breeder of horses, the rearer of cattle, the agricultural research worker seeking better quality seed—all realize that a great new strain can only spring from outstanding stock. The prices paid at Britain's bloodstock auctions by foreign buyers are proof of the reliance placed on ancestry to ensure a strain to meet the needs of today. The same recognition is given the world over to the engineering skill of Britain's craftsmen.

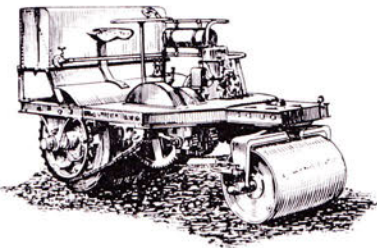
To those who are seeking the best in road rollers therefore, Aveling-Barford offers the double advantage, of machines built by craftsmen to meet today's exacting standard and to designs springing from an experience unequalled by any other roller maker.

We welcome visitors to our factories. We are proud of the skill and high quality components which go into our machines. To those, however, for whom time or distance make a visit impracticable, there remain the alternatives, to seek the opinion of a nearby user or to peruse this catalogue.

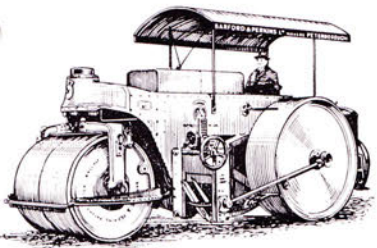
However you seek to satisfy yourself of our claim we know that you will be convinced that with our 'G' Series Rollers, we in Aveling-Barford Ltd, are far ahead of contemporary design and are in fact, as we have always been, the world's leading designers and makers of road rollers.



1867 - The first machine designed throughout as a road roller.



1904 - The world's first motor roller.



1927 - The first road roller to be driven by a high-speed diesel engine.



AVELING-BARFORD ROAD ROLLERS

Each Aveling-Barford 'G' Series Roller possesses the finest combination of features ever built into a road rolling machine.

Many features are new—in some cases revolutionary: others, time-tested and performance proved, are retained from previous models. Combined, they make the finest road roller ever built, with a scope of operation and performance hitherto unattained.

Traditionally, Aveling-Barford Rollers are built to a standard—a self-imposed standard that does not admit the sacrifice of quality to price, and consequently, with their superb design and excellence of construction, they are probably the most expensive rollers to build in the world. We know there are machines available of designs less costly to manufacture, but our unquestioned position as the world's leading and largest makers provides ample proof that our policy is universally approved.

Outstanding among the many features making the 'G' Series Rollers superior to other types is the patent pressure-balancing device. This device enables the weight of the roller to be distributed equally over the three rolls or, alternatively, the maximum loading to be concentrated on the rear rolls. This feature alone adds enormously to the value of the roller because one machine can be used with equal high efficiency for both surface finishing and foundation consolidation, thereby eliminating the need for separate types of rollers for the two jobs.

Another feature of importance is the precision-built gear box of our own design and manufacture which, in conjunction with the quick-reverse clutch, provides a full choice of speeds in both the forward and reverse directions of travel.

Power to weight ratio has been very carefully considered and all 'G' Series Rollers are equipped with multi-cylinder engines specially designed for road roller propulsion which, at normal speed, develop ample power for all duties the roller has to perform, including rolling on any gradient where it is practicable to build a road, or indeed, on which the wheels can grip.

Simplicity of control is an outstanding feature of Aveling-Barford design. All controls are grouped for ease of handling, and when power steering is fitted one steering wheel serves for both hand and power operation.

Other notable points of construction detail on the 'G' Series Rollers include: totally enclosed driving cab; fluidrive coupling; triple-control hydraulic scarifier or mechanical scarifier; differential housed in the gear box, with a lock operated from the driving seat; independent gear drive to each back roll; all-steel ballast type rolls; automobile type electric starting gear; electric lighting for night operation; two independent brake systems, and water tanks with sprinklers to all rolls.

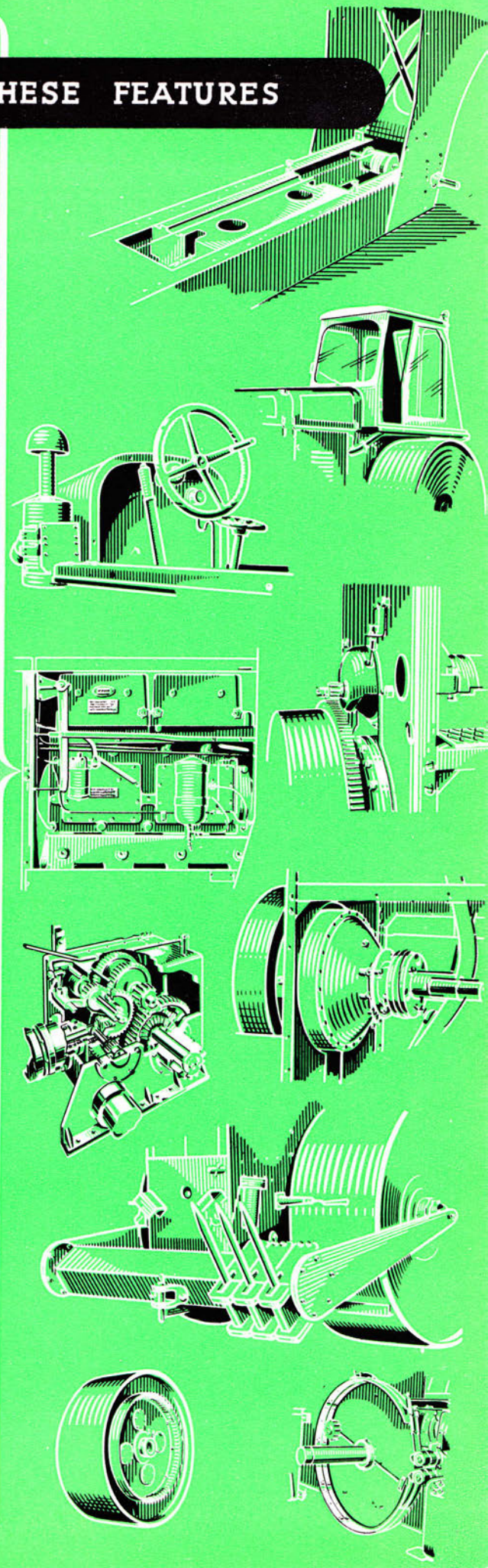
The Aveling-Barford factories, modern in design and layout, are equipped with up-to-date machine tools, many of which are specially designed to meet our particular production needs. All component parts are machined to close limits in jigs, and this, with a rigorous system of inspection, ensures complete interchangeability, thereby greatly simplifying the provision and fitting of wearing parts.

Aveling-Barford have accredited distributors in practically every country in the world through whom spares and service are readily available.

Rollers are our principal product and our output is greater than all other British manufacturers combined: over 80 per cent of the rollers in use in the United Kingdom are of our manufacture.

NO OTHER ROLLER OFFERS ALL THESE FEATURES

- Patent pressure-balancing device
- Multi-cylinder diesel engines with world-wide spares availability
- Heavy-duty four-speed gear box
- Four speeds—both forward and reverse
- Instantaneous and smooth reverse at all speeds
- Dual final gear drive
- Enclosed differential gear with lock operated from the driving seat
- Two independent brake controls
- Choice of enclosed driving cab or awning
- Triple control hydraulic scarifier
- Large diameter, all-steel rolls for water or sand ballast
- Hand or power steering
- Electric starting and lighting
- Flood lighting
- Heavy-duty air cleaner
- Fluidrive coupling
- Operator comfort and ease of control
- Complete interchangeability of parts
- Pleasing appearance and superb performance.



AVELING-BARFORD ROAD ROLLERS

TYPE

GA

Though primarily designed for footpath construction this roller is an extremely efficient machine for all kinds of light rolling. It has all the features that ensure good performance, reliability and economy, including quick-reverse clutch, two speeds in forward and reverse, reversible rear rolls to give 3 ft. or 4 ft. rolling widths, water ballast type front rolls, and grouped controls. Clean design with both sides clear of overhanging parts enable it to roll close-up to obstructions on either side.

TYPE

GF

These rollers, made in two weights, can be used on most forms of light road work. Noteworthy amongst the many features incorporated in these GF rollers are—the differential which can be locked from the driver's platform; short wheelbase giving outstanding manoeuvrability; two speeds in forward and reverse; smooth, quick-reverse clutch; all rolls of the water ballast type.

Power is provided by a 11-h.p. diesel engine.



This 'GA' Roller is seen rolling the pathway through a municipal park in England.

TYPE

GBV

The largest of the light rollers, the type GBV incorporates the patent Pressure Balancing Device giving it a wide operational scope. Additional features include two speeds both forward and reverse; water ballast type, all steel rolls; quick-reverse clutch; easy accessibility for maintenance; low fuel consumption. The GBV roller is powered by a 17-h.p. diesel engine.

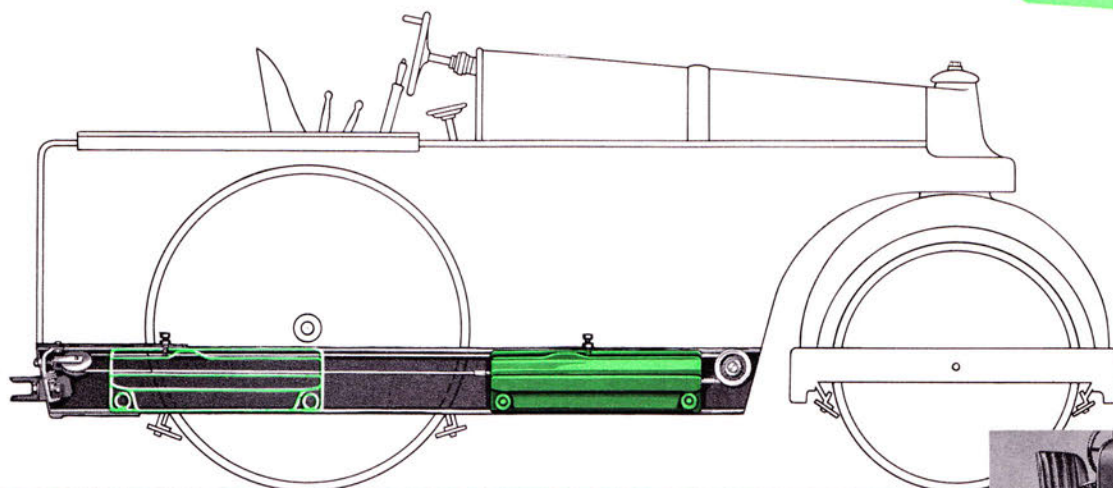


A type 'GF' Roller surface finishing a road near Sheffield.

On a road re-location job, this type 'GBV' Roller is consolidating the sub-base.



DESIGN FEATURES OF 'G' SERIES ROLLERS

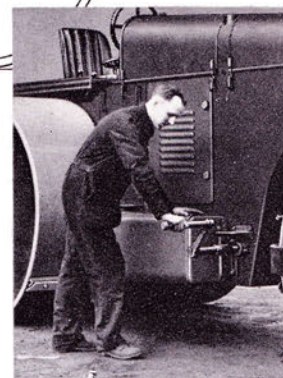


PATENT PRESSURE BALANCING DEVICE

This device enables one machine to undertake every form of road work, including bituminous and asphalt carpeting.

With the trolley-borne counter-weight in the forward position as shown above, pressure per unit area under all rolls is practically equalized—the ideal condition for surface finishing. For foundation consolidation, scarifying, and climbing steep gradients, when the maximum pressure on the rear rolls is important, the weight is moved to the rearward position.

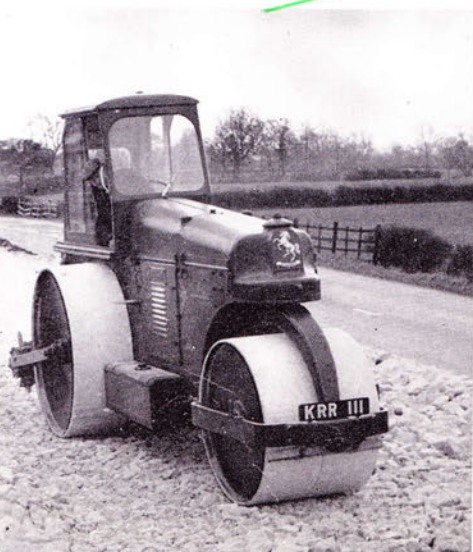
That the Aveling-Barford 'G' Series Rollers fitted with patented pressure-balancing device can outclass all other machines in scope of operation and performance is convincingly shown in the pictures below.



CONSOLIDATING

FINISHING

SCARIFYING



DESIGN FEATURES OF 'G' SERIES ROLLERS



STRENGTH AND POWER

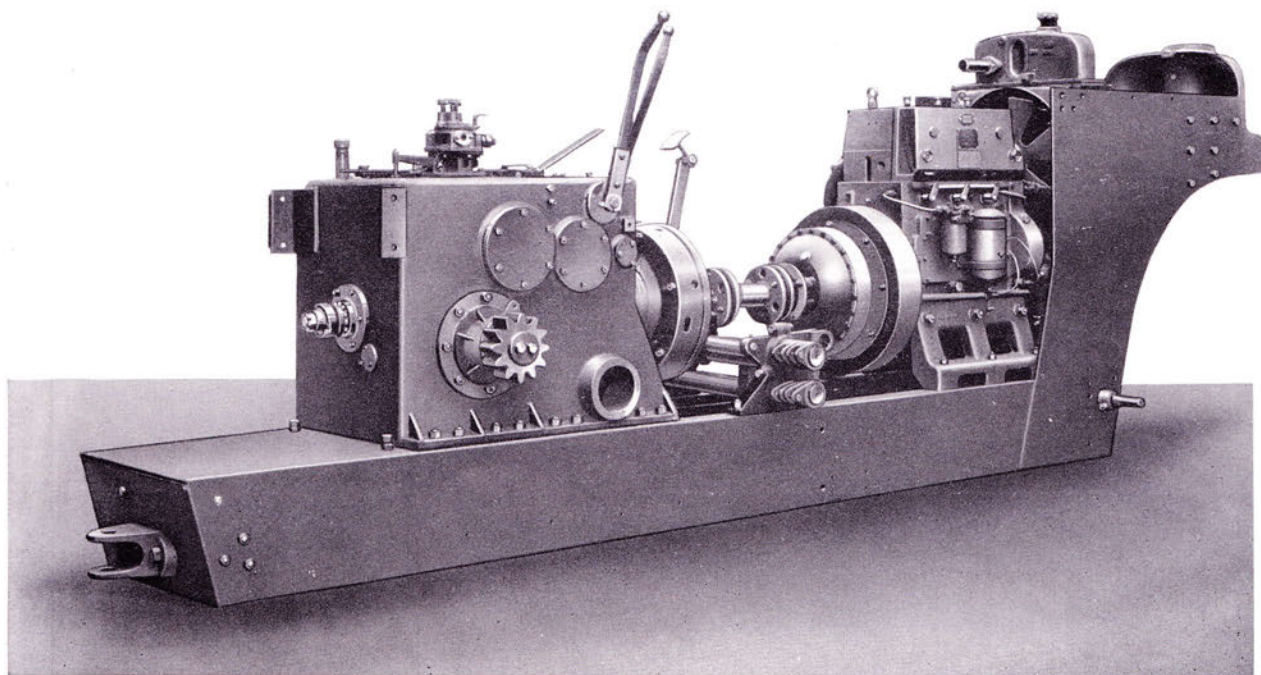
Stripped of their superstructure, Aveling-Barford Heavy Rollers reveal an inner construction that gives them their tremendous strength, power, and reliability.

Forming the frame are two straight, deep section, steel girders, cross-braced and stayed to form a rigid unit which ensures perfect alignment of the engine and transmission throughout the roller's lifetime.

Welded to the forward end of the channels are two steel plate members carrying the

steering head and radiator, whilst bridging the rear end is the sturdy gear box, which, in addition to housing the change speed, reverse and differential gear, also carries the rear axle. Thus, all main working parts are carried by the main frame and not attached to the superstructure.

The frame girders also provide housing for moving the pressure balancing-device, the flanges forming the trackway on which the weight travels.



TOTALLY-ENCLOSED
CAB

SINGLE-PLATE
QUICK-REVERSE
CLUTCH

ADJUSTABLE DRIVING
SEAT

TOTALLY-ENCLOSED
GEAR BOX GIVING
FOUR SPEEDS BOTH
FORWARD AND
REVERSE

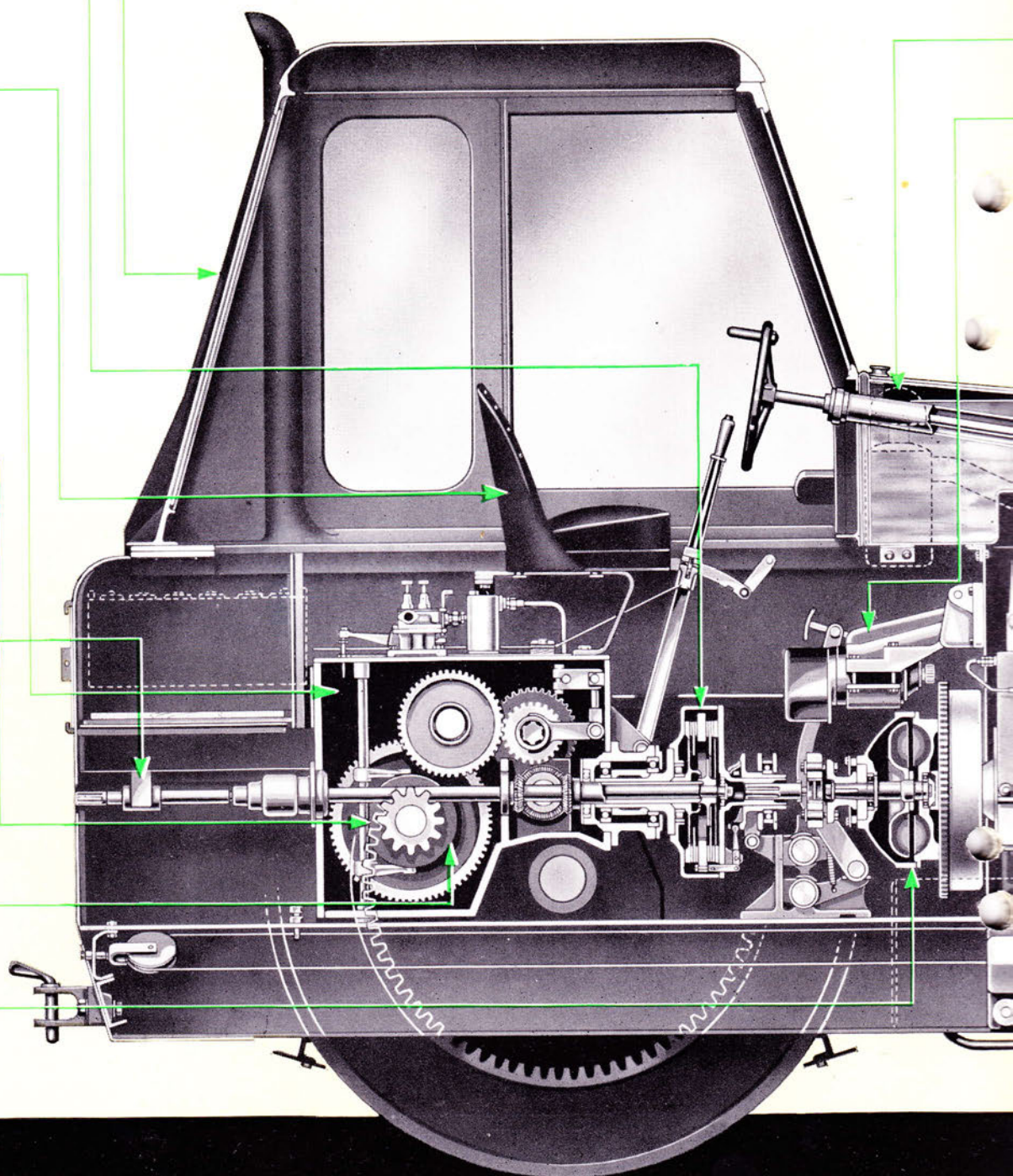
ENCLOSED GEAR
DRIVE TO EACH REAR
ROLL

POSITION OF
AUTOMATIC
DECOMPRESSOR GEAR
FOR EASY HAND
STARTING

ENCLOSED
DIFFERENTIAL GEAR

FLUIDRIVE
COUPLING

AVELING-BARFORD



Supreme in Design -

ES
TY

ROAD ROLLERS

HEAVY-DUTY AIR
CLEANER

ELECTRIC STARTING
(RUSTON ENGINE
SHOWN)

PATENT PRESSURE-
BALANCING DEVICE

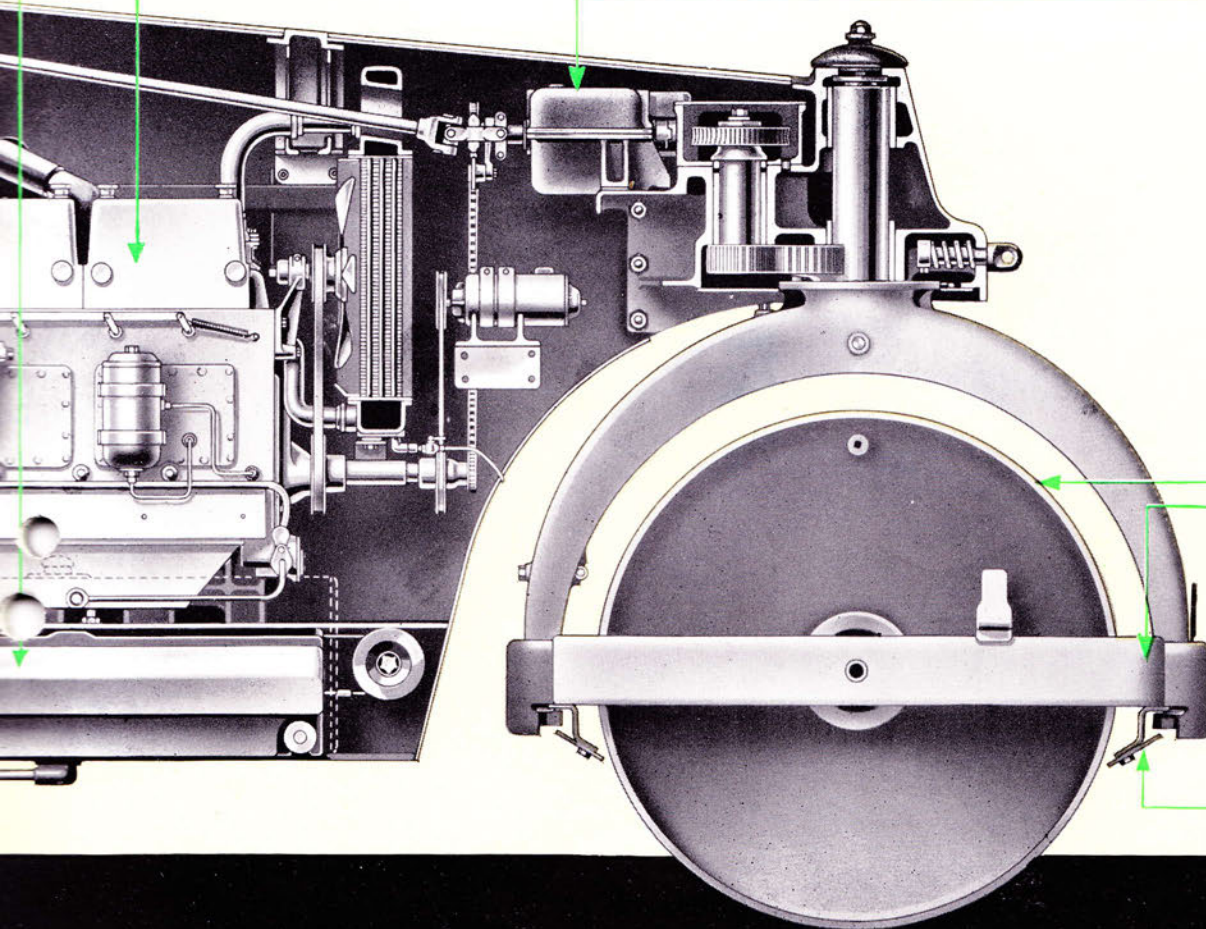
MULTI-CYLINDER
DIESEL ENGINE

POWER STEERING

STEEL ROLLS FOR
WATER OR SAND
BALLAST.—FRONT
AND REAR

UNDERSLUNG
FORECARRIAGE

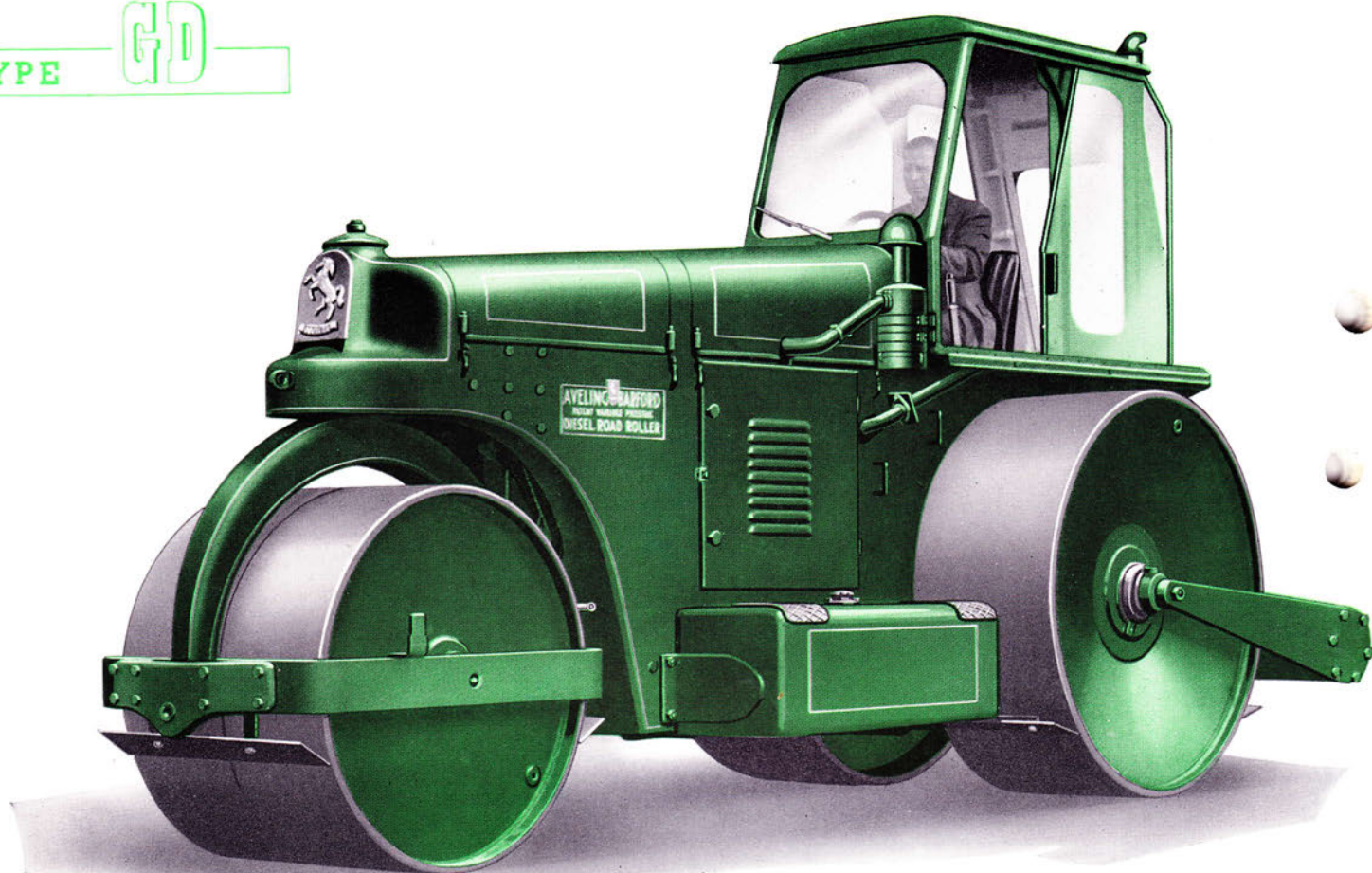
ADJUSTABLE
SCRAPERS ON
ALL ROLLS



Performance - Styling

AVELING-BARFORD ROAD ROLLERS

TYPE **GD**



The 'GD' Type Roller, with its superb design and outstanding performance, is the aristocrat of the roller world. It has every feature that a road engineer could desire and these, coupled with its robustness, economy and reliability under all conditions of service, make its possession a source of pride and satisfaction to every owner.



Hong Kong. A 'GD' consolidates a fill in the course of re-routing the Island Road at Shaukiwan Hill.

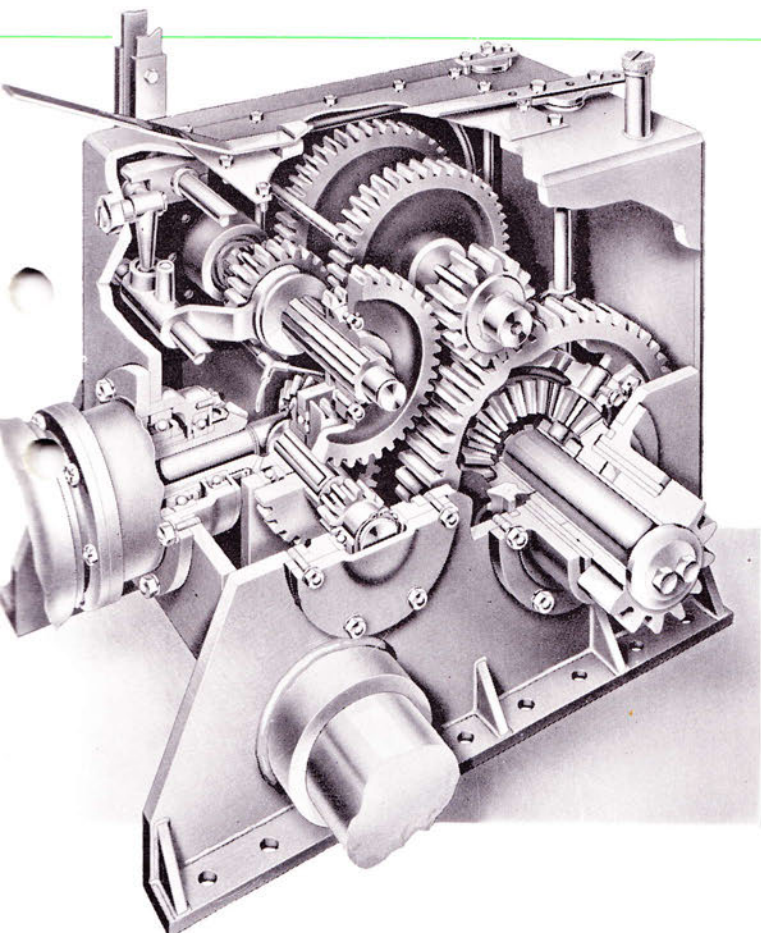


Two type 'GD' Rollers re-surfacing a road in Lanarkshire, Scotland.



A 'GD' Roller working on road development in Venezuela.

DESIGN FEATURES OF 'G' SERIES ROLLERS



GEAR BOX OF 'GD' ROLLER

The most important item in a motor roller is undoubtedly the transmission. All our rollers are therefore fitted with gear boxes of our own design and manufacture.

The heavy 'GD' Roller box illustrated is of extra stout section giving extreme strength and rigidity while ensuring an oil-tight casing. Extra long life for the gears results from lubrication by a constant stream of oil from a cam-driven plunger pump or from collecting trays and feed channels within the box.

A double-acting quick-reverse clutch, also of our own design, transmits the drive from the engine through bevel gears to the change-speed shafts. The combination thus offers four speeds both forward and reverse. A single lever controls stopping, starting and change of direction.

The large diameter dry-plate clutch ensures smooth and instantaneous change of direction, so essential if the roller is to produce an unmarked road surface.

A differential gear enclosed within the box transmits the drive to two machine-cut hardened steel pinions which mesh with the final drive rings on the rear rolls. For scari-fying and hill climbing the differential can be locked by a lever operated from the driver's seat.

The gear box fitted to the type 'GC' Rollers generally follows this pattern but is slightly smaller.

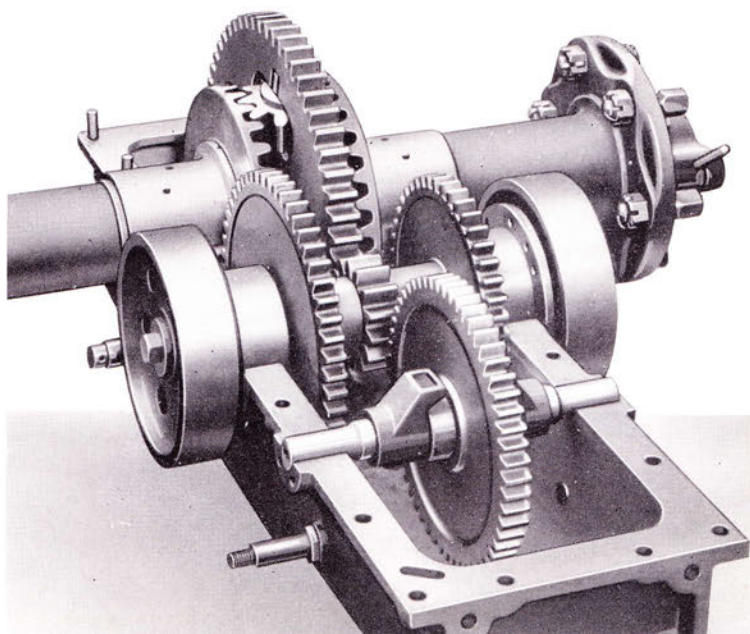
GEAR BOX OF 'GA' ROLLER

The types 'GA' and 'GF' Rollers are fitted with robust cast-iron gear boxes with gears providing two speed ratios in both forward and reverse directions of travel.

In the 'GA' box illustrated, directional control is by clutches mounted on an extended shaft of the gear box: these give smooth instantaneous reverse without snatch or dwell.

The differential gears are housed within the gear box and a differential locking device is provided on each rear roll.

All gears are machine cut and mounted on splined shafts running in ball bearings.



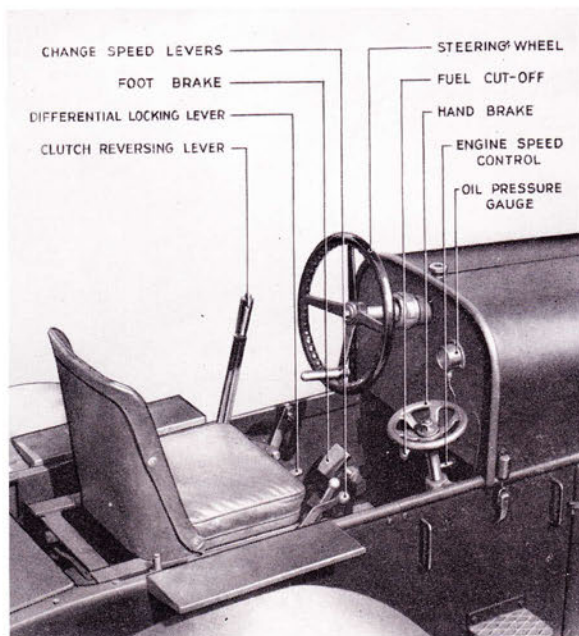
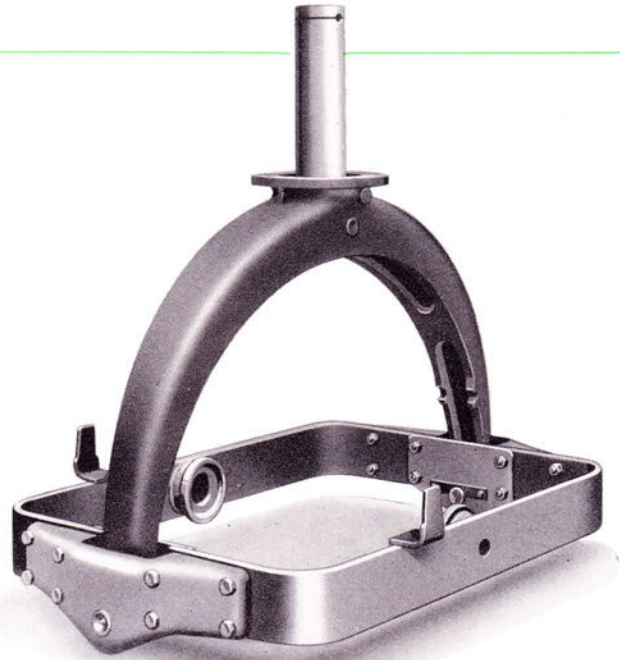


DESIGN FEATURES OF 'G' SERIES ROLLERS

FORECARRIAGE ASSEMBLY

The arrangement of steering fork and fore-carriage adopted on all types of 'G' Series Rollers ensures uniform pressure over the full width of the front roll under normal working conditions, and permits of full steering lock on uneven ground with but little effort by the driver.

Spanning the front roll longitudinally, the fork carries the forecarriage by steel trunnion pins, thereby allowing the front roll to accommodate itself to the road surface without disturbing the stability of the machine.

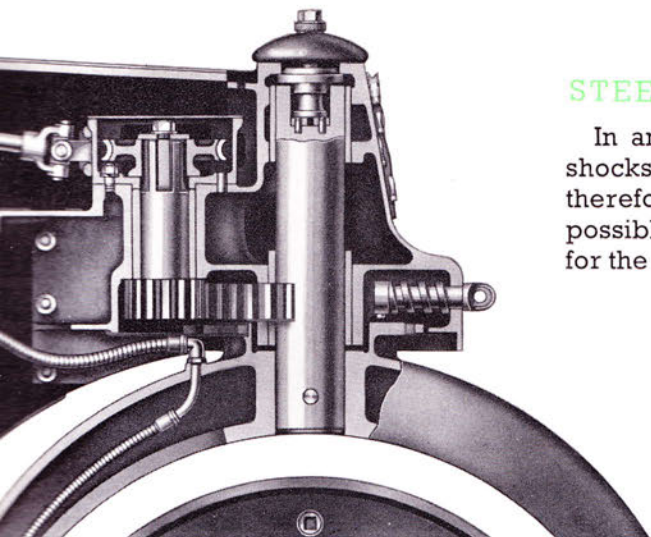


EASE OF CONTROL

With a centrally placed car-type steering wheel and all other controls conveniently grouped within reach, operators find the 'G' Series Rollers extremely easy and simple to handle. Forward and reverse travel is controlled by the movement of a single hand lever at all gear settings: a forward or rearward shift resulting in a corresponding movement of the roller.

A powerful braking system is fitted. It has independent hand wheel or pedal control, the former being for parking. The brakes are of the contracting band type and operate on the machined periphery of the final drive gear ring on each back roll. (See illustration on opposite page.)

When power steering is fitted, both hand and power operation is by the one hand wheel.

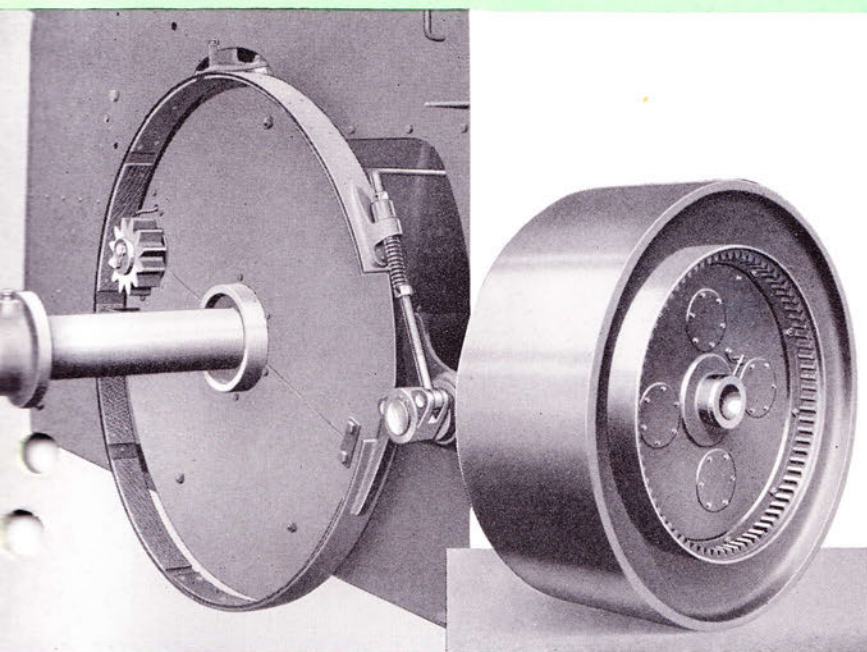
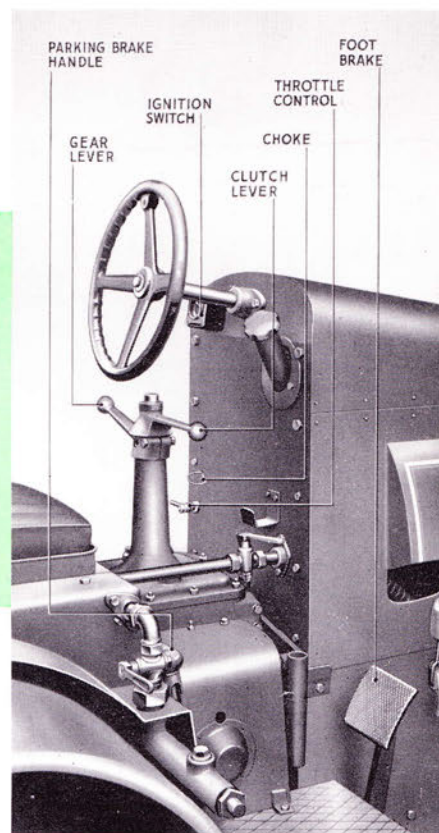


STEERING HEAD OF 'GD' ROLLER

In an unsprung vehicle like a roller, the whole of the road shocks are transmitted to the steering mechanism. We have, therefore, ensured that the gears and bearings are as robust as possible while yet allowing that light and rapid control essential for the successful operation of the machine on black top surfacing.

CONTROLS OF 'GA' ROLLER

Simplicity is the keynote of the design and layout of the 'GA' Footpath Roller controls. The gear change and quick-reverse levers are mounted on a central column and the two independent transmission brakes are conveniently placed for foot operation.

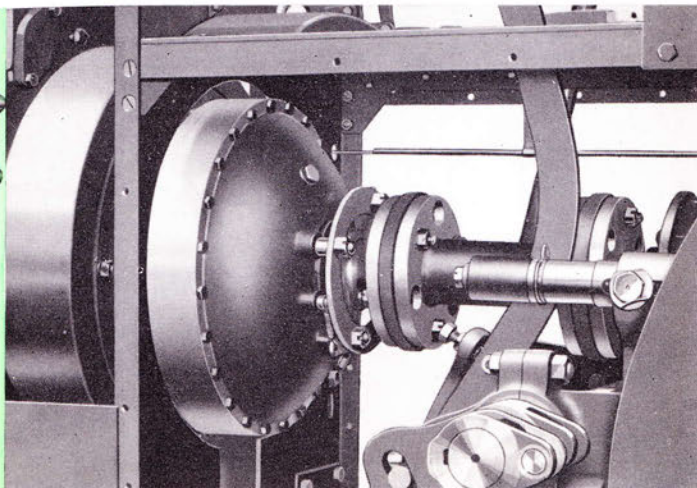
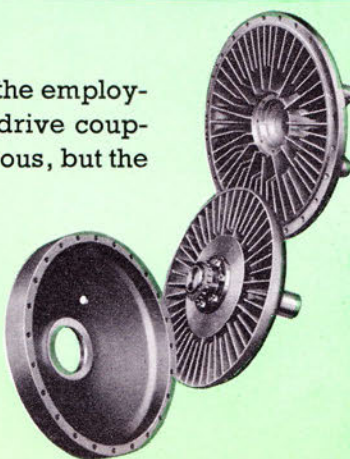


GEAR DRIVE

On the heavier types of rollers, each rear roll is positively driven by spur gearing from the differential shaft, giving balanced traction with equal wear on each roll. The gears, fully protected, are lubricated by a controlled piped oil feed. On types 'GA' and 'GF', the rolls are mounted on live axles.

FLUIDRIVE

The advantages derived from the employment of the Vulcan Sinclair Fluidrive coupling on a heavy roller are numerous, but the chief ones include:—perfectly smooth take-up of load; flexibility of drive and prolonged life of engine and transmission. The coupling also makes it almost impossible to stall the engine.

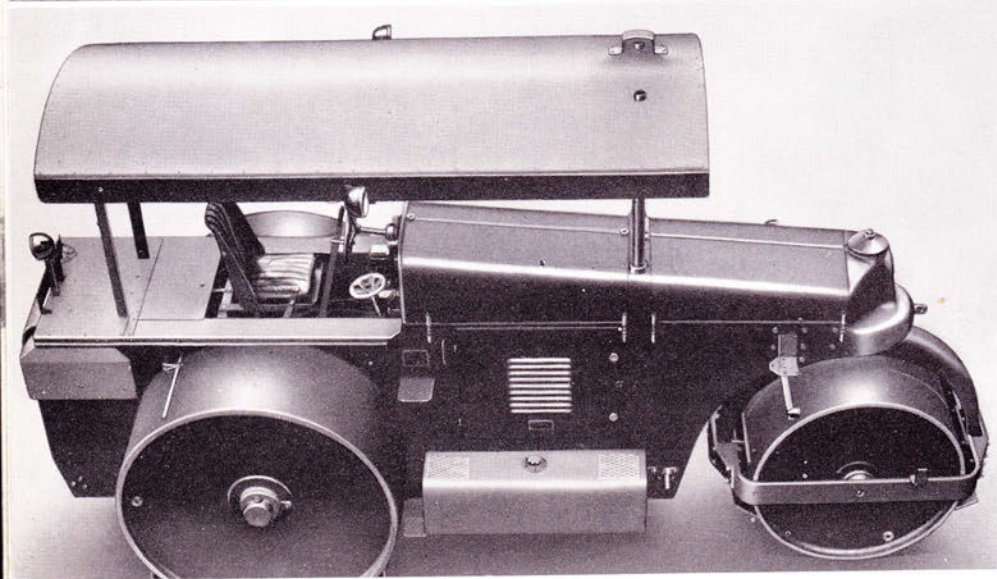
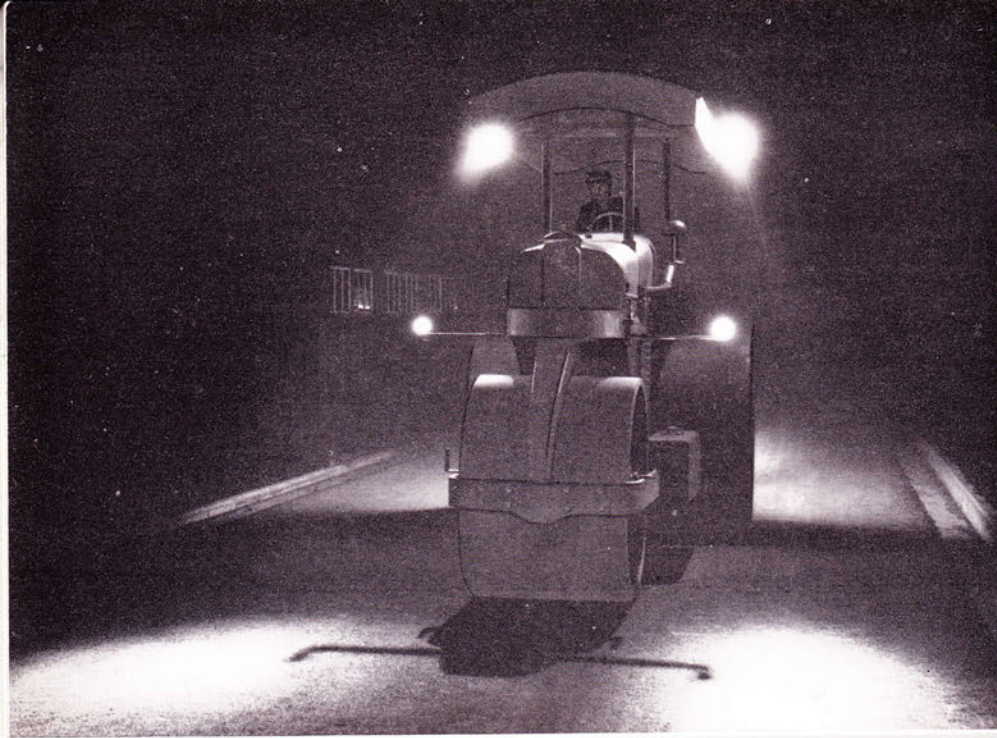


LIGHTING

Where rollers are fitted with an electric starter, electric lighting can be supplied at a small additional charge.

The standard lighting set consists of two small side or parking lights, and two red rear lamps, together with three head lamps—two at the front and one at the rear of the roller. The side lights are mounted on extensible arms so that, in use, they indicate the full width of the machine.

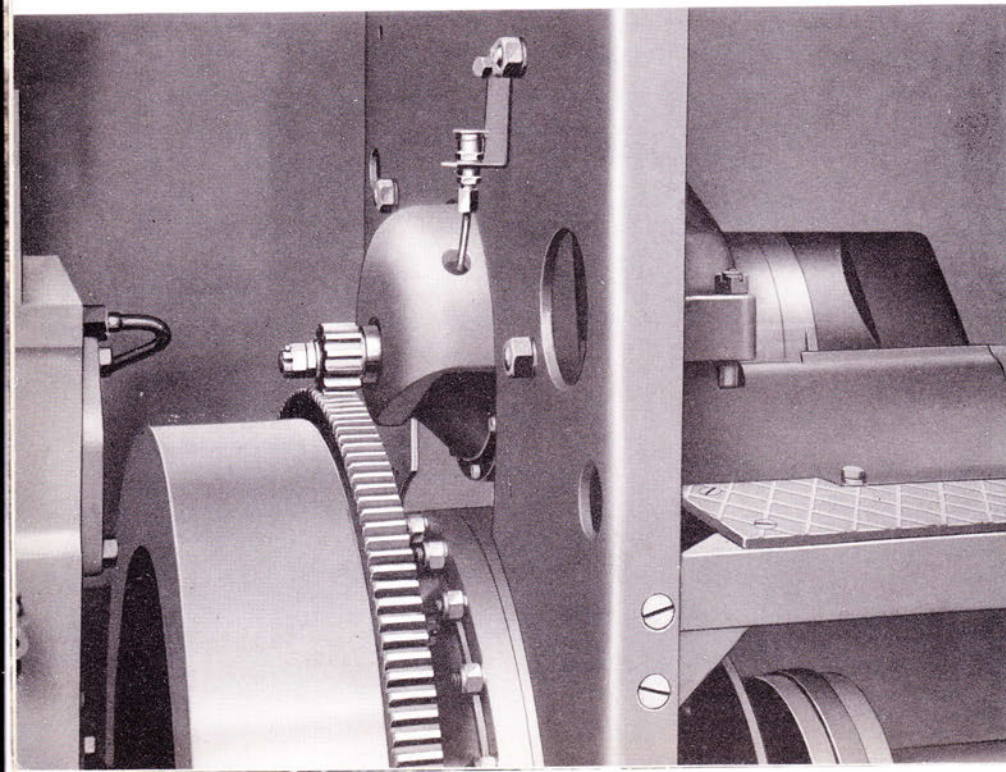
Where actual night rolling work is to be undertaken, a pair of floodlights can be supplied fitted as shown in the illustration, to the top of the awning or cab in such a manner that the driver can direct their light forward for travelling or downward to illuminate the road surface when working.



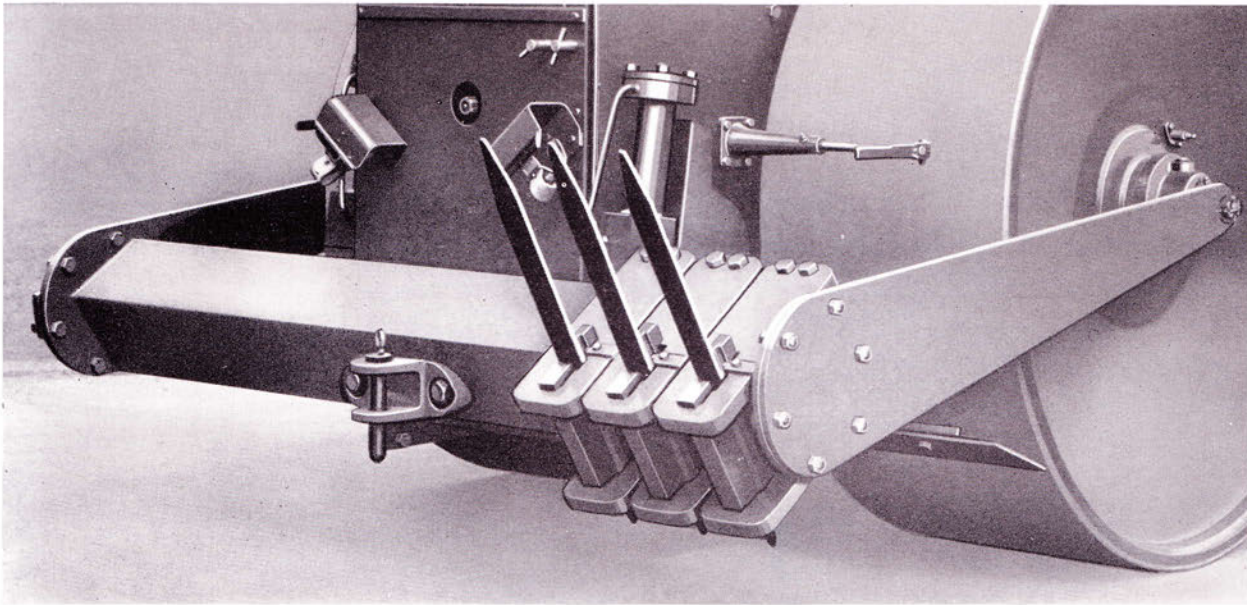
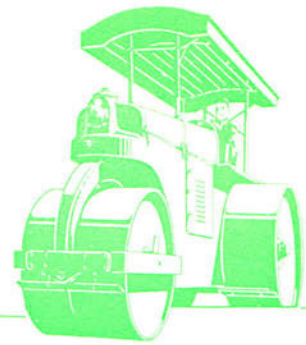
ELECTRIC STARTING

A highly efficient, electric starting system consisting of a starter motor, dynamo, and large-capacity, heavy-duty batteries, can be fitted to all except the lightest roller. The charging dynamo is driven from the engine crankshaft, and the batteries, wood cased, are housed in weather-proof metal containers fixed on either side of the roller.

The starter illustrated is as fitted to rollers powered by Ruston engines.



DESIGN FEATURES OF 'G' SERIES ROLLERS



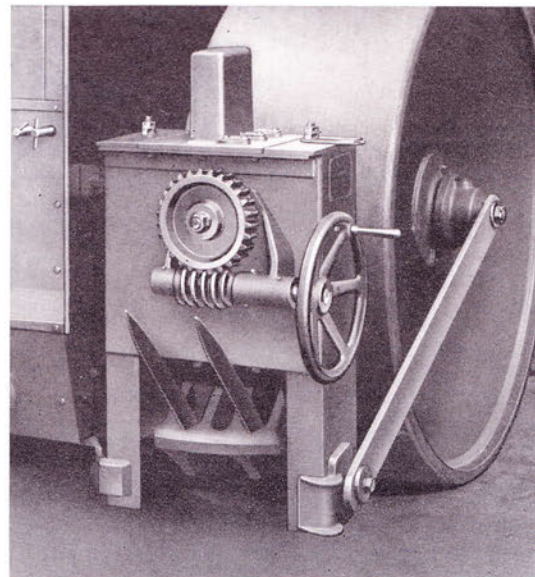
AVELING-BARFORD HYDRAULIC SCARIFIER

Highly efficient and easy to control, this scarifier is built for the tough road jobs. Its powerful rams ensure quick penetration of the tines, provide a powerful holding-in force, and a rapid lift for the avoidance of man-hole covers or other obstructions in the road.

Provided with triple control, the scarifier can be operated by the driver from his seat, or by a man from either side of the roller. Tines can be mounted either on the near- or off-side of the beam.

'PRICE' RESILIENT SCARIFIER

This manually operated scarifier has spring-loaded tine holders and a patent shock absorbing device. A patent cotter box simplifies the removal of bent tines. It is available in one, two and three tine sizes.





AVELING-BARFORD ROAD ROLLERS

General Description

POWER UNITS. Diesel. Diesel engines are fitted as standard on types 'GF', 'GBV', 'GC' and 'GD' Rollers. Of medium speed, four stroke, vertical type, they are governed to operate at 1,500 r.p.m. Cooling is by thermo-syphon assisted by large-capacity radiator and fan. A circulating pump is supplied for special conditions. Forced feed lubrication is employed. Automatic decompressing gear facilitates hand starting.

Petrol. A four-cylinder industrial type petrol engine, operating at a governed speed of 2,300 r.p.m., is fitted to the type 'GA' footpath roller. It has forced feed lubrication, and water cooling by pump, radiator and fan.

TRANSMISSION. Gear Box. Of steel plate or cast iron according to size of roller. On types 'GC' and 'GD', the gears provide four forward and four reverse speeds, and on other types, two speeds in both directions. All gears, including the final drive pinions are of heat-treated steel with machine-cut teeth. Shafts are of high-tensile steel and mounted in ball or roller bearings.

Differential Gear. Bevel and pinion type, enclosed in gear box.

Lubrication. Oil bath, supplemented by built-in pump or collecting trays and feed channels which maintain constant stream of oil over gears.

Clutch. Types 'GF', 'GBV', 'GC', 'GD'. Double-acting, fabric-lined single-plate type, controlled by a single hand lever, backward or forward movement of which give a corresponding direction of travel to the Roller. Change of direction is immediate with smooth action.

Type 'GA'. Separate fabric-lined cone clutches for forward and reverse travel are fitted.

Final Drive. Types 'GBV', 'GC', 'GD'. Each rear roll is separately gear driven by a pinion of the final drive shaft which engages with a cast steel internal gear ring bolted to the inner face of the roll. This drive is enclosed.

Types 'GA' and 'GF'. The rear axle, mounted in the gear box is gear driven.

FRAME. Types 'GBV', 'GC', 'GD'. Deep section steel channels with steel side and saddle plates.

Types 'GA' and 'GF'. Steel plate bolted to gear box.

PRESSURE BALANCER (Patent 526,519).

Types 'GBV', 'GC', 'GD'. A heavy cast-iron mass arranged to travel between the flanges of the frame channels. The weight is mounted on rollers and can be moved by means of a wire rope and winding drum. A locking device is provided to retain the weight in the desired position. Fully to the rear, the device gives maximum compression. Forward, its effect is towards equalization of the rolling pressure under front and rear rolls.

STEERING FORK. Types 'GBV', 'GC', 'GD'. Cast steel.

Types 'GA' and 'GF'. Fabricated steel.

FORECARRIAGE. Steel construction throughout, with trunnion pins carried in generous size bearings.

STEERING. Types 'GBV', 'GC', 'GD'. By car-type wheel operating steering fork through worm and wheel reducing gear to

a pinion and segment movement which effects a further reduction.

Types 'GA' and 'GF'. By car-type wheel and bevel gearing.

ROLLS. Of steel plate, electrically welded. Hubs are fitted with renewable bushes. All types of rollers can be water ballasted. Types 'GC' and 'GD' can be arranged for ballasting by sand.

AXLES. Of heat-treated steel, exceptionally large in diameter and ground on all bearing faces.

BRAKES. Types 'GBV', 'GC', 'GD'. Contracting band type, acting on the large diameter drums formed by the final drive spur ring on each back wheel. Independent control by hand wheel or pedal; the former is for parking.

Types 'GA' and 'GF'. Two independent foot-operated transmission brakes: both can be used for parking.

SCRAPERS. Either spring-loaded or adjustable and full width of rolls according to type of roller.

FUEL TANK. Of welded steel plate.

CONTROLS. Grouped for ease of handling with steering wheel in centre and others within convenient reach.

DRIVING SEAT. Upholstered and covered in good quality, hard wearing, waterproof material.

DRAWLUGS. Fitted front and rear on types 'GBV', 'GC' and 'GD'. Fitted rear only on type 'GF'.

OUTFIT. Kit of tools, housed in built-in box.

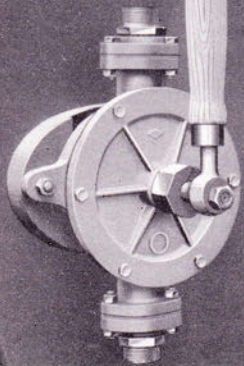
FINISH. All rollers are finished Orange as standard.

BURGESS AIR CLEANER

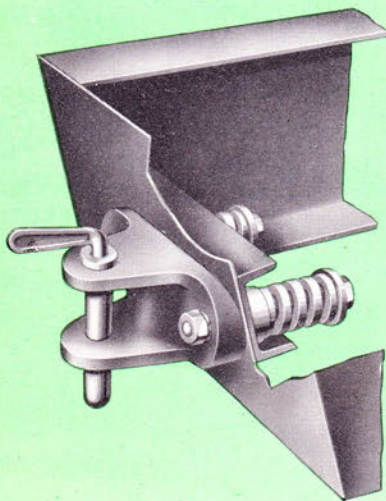
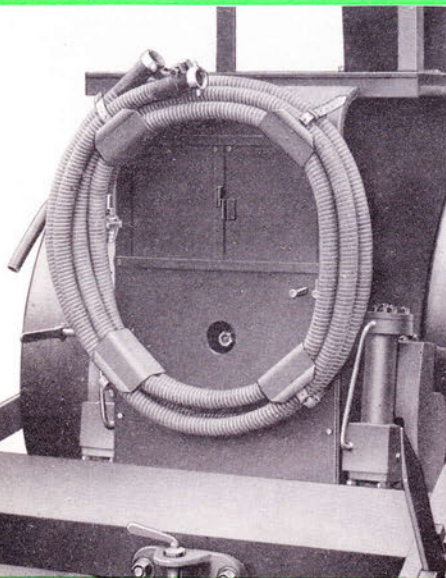
By its triple extraction action employing reversal of air flow, oil turbulence, and oil saturated screening elements, this fitment ensures almost complete protection against the entry of dust into the engine cylinders.



Extra Fittings



**HAND PUMP
AND HOSE**



SPRING DRAW BAR

CAB. Types 'GC' and 'GD'. Totally enclosed and fitted with sliding doors. Glazed to give all-round visibility.

AWNING. Sheet steel, and fitted with stout rot-proofed canvas side and end curtains.

SCARIFIER. Choice of:

Hydraulic, carrying up to three tines.

'Price' Resilient. Manually operated, in one, two, or three tine sizes.

WATER TANKS AND SPRINKLERS. Types 'GBV', 'GC', 'GD'. Tanks are of sheet steel plate. Water to the sprinkler pipes is delivered by pump. Sprinklers can be operated independently. Types 'GA' and 'GF'. Tank of steel plate with gravity feed to sprinklers. All sprinkler pipes are reversible for easy cleaning.

HAND PUMP AND HOSE. Semi-rotary pump with armoured suction and delivery hose.

POWER STEERING GEAR. Type 'GD'. Mechanical, with drive from engine shaft.

Type 'GC'. Hydraulic, giving full power, or power-assisted operation. Both types are operated by the normal steering wheel.

FLUIDRIVE COUPLING. Vulcan-Sinclair, heavy-duty type.

ELECTRIC STARTING AND LIGHTING. 12-volt system, with battery, control panel, lamps, dynamo and starter motor. (Not available for type 'GA'.)

FLOODLIGHTING. As above, but with headlamp mountings on cab or awning.

SPRING DRAW BAR. Types 'GBV', 'GC' and 'GD'. For hauling miscellaneous items of equipment.

LAMPS. Oil burning, for parking.

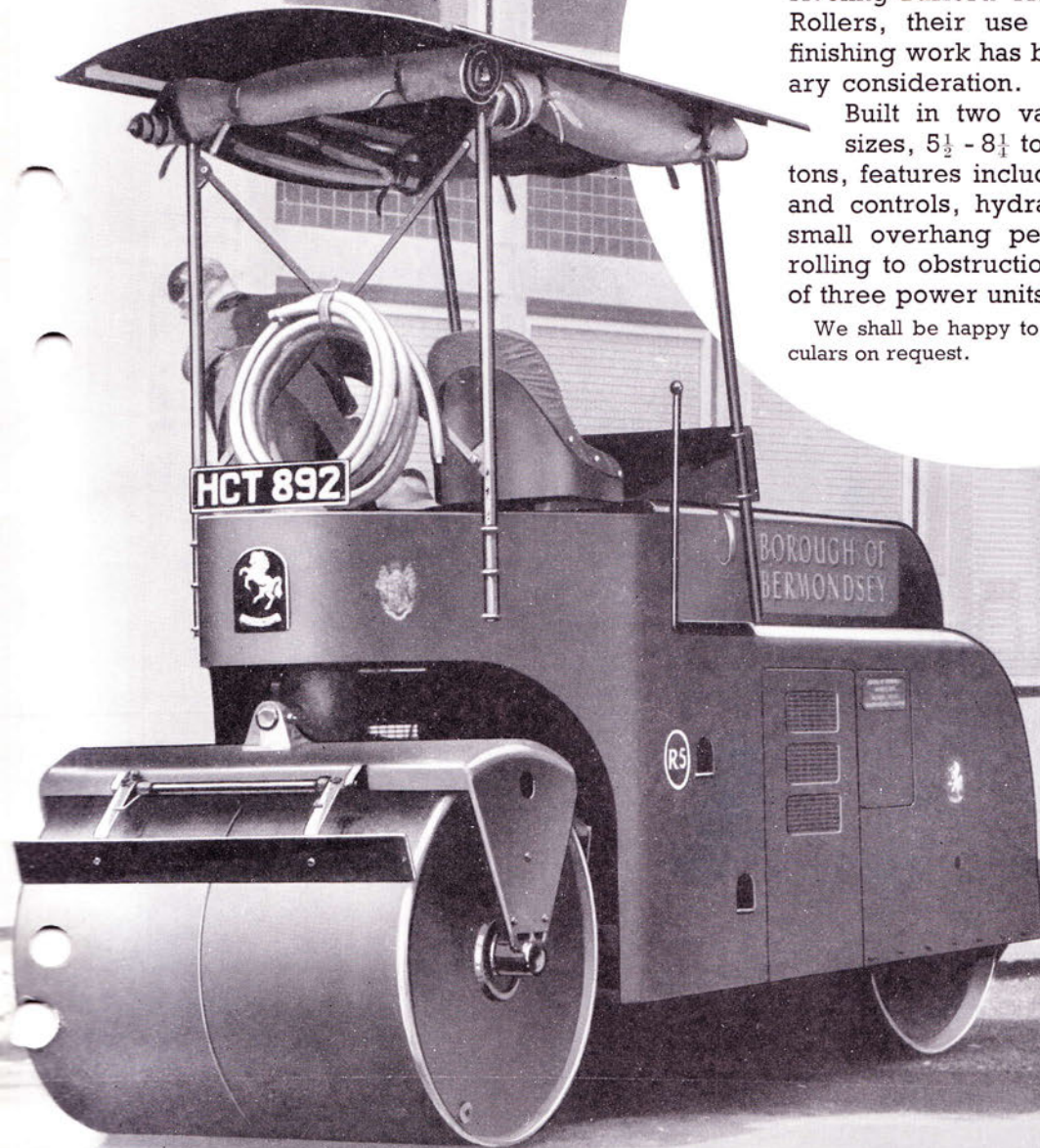
Dimensions, weights and other particulars, including illustrations, are not binding in detail and we reserve the right of modification

TANDEMS TOO!

The ever increasing use of hot fine mixes has created the need for a single purpose high-speed finishing roller. In the design of the Aveling-Barford 'TR' class Tandem Rollers, their use for black-top finishing work has been the primary consideration.

Built in two variable weight sizes, $5\frac{1}{2}$ - $8\frac{1}{2}$ tons and $7\frac{1}{2}$ - 10 tons, features include:- dual seats and controls, hydraulic steering, small overhang permitting close rolling to obstructions and choice of three power units.

We shall be happy to supply full particulars on request.





99-H GRADER

With its all-wheel drive and all-wheel steer, the 99-H is unequalled in performance and scope. Fitted with 13-ft. blade, hydraulic controls, 100 b.h.p. Leyland diesel engine. Attachments available include scarifier, bulldozer, snow plough and loader.

MAINTENANCE GRADER

Will handle, at low cost, many of the smaller grading jobs. Equipped with 9-ft. blade, hydraulic controls, 42.5 b.h.p. diesel engine. Attachments available are scarifier, bulldozer, road planer and snow plough, all readily interchangeable.



7 1/2 CU. YD. DUMPER

Massive, simple, with a high power to weight ratio, it will move most dirt at least cost. 150 b.h.p. diesel engine, two-way steering, four speeds both forward and reverse, and hydraulic tipping are amongst its many features.

4 1/2 CU. YD. DUMPER

Patent reversible driving seat permits use on highway. Four speeds both forward and reverse, gravity or power assisted tipping, 54 b.h.p. diesel engine. Special body available for quarry work.



3 CU. YD. DUMPER

To match the output of the small excavators. Built primarily for off-road operation. Two-way steering, four speeds forward and two reverse. 42 b.h.p. diesel or petrol engine. Gravity, power-assisted, or controlled tipping.

1 CU. YD. DUMPER

Designed for the rapid conveyance of earth and building material on sites where unmade ground and limited space prohibit the use of larger vehicles. Speeds up to 12.68 m.p.h. 24.6 b.h.p. engine.



CALFDOZER (Trade-Mark)

Will equal the output of ten men on such jobs as site levelling, backfilling trenches or earth moving. 4-ft. 6-in. wide blade adjustable for angledozing. 9 b.h.p. petrol engine. Weight, 32 cwt.

TRENCH CUTTING MACHINE

One-man operated, this machine will cut flat-bottomed clean-sided trenches to a depth of 4 ft. 11 in. or 18 in. wide, at speeds up to 175 feet per hour, according to soil and size of trench. 8 b.h.p. petrol engine, or 10 h.p. diesel engine.



No. 1733

AVELING - BARFORD - LTD.

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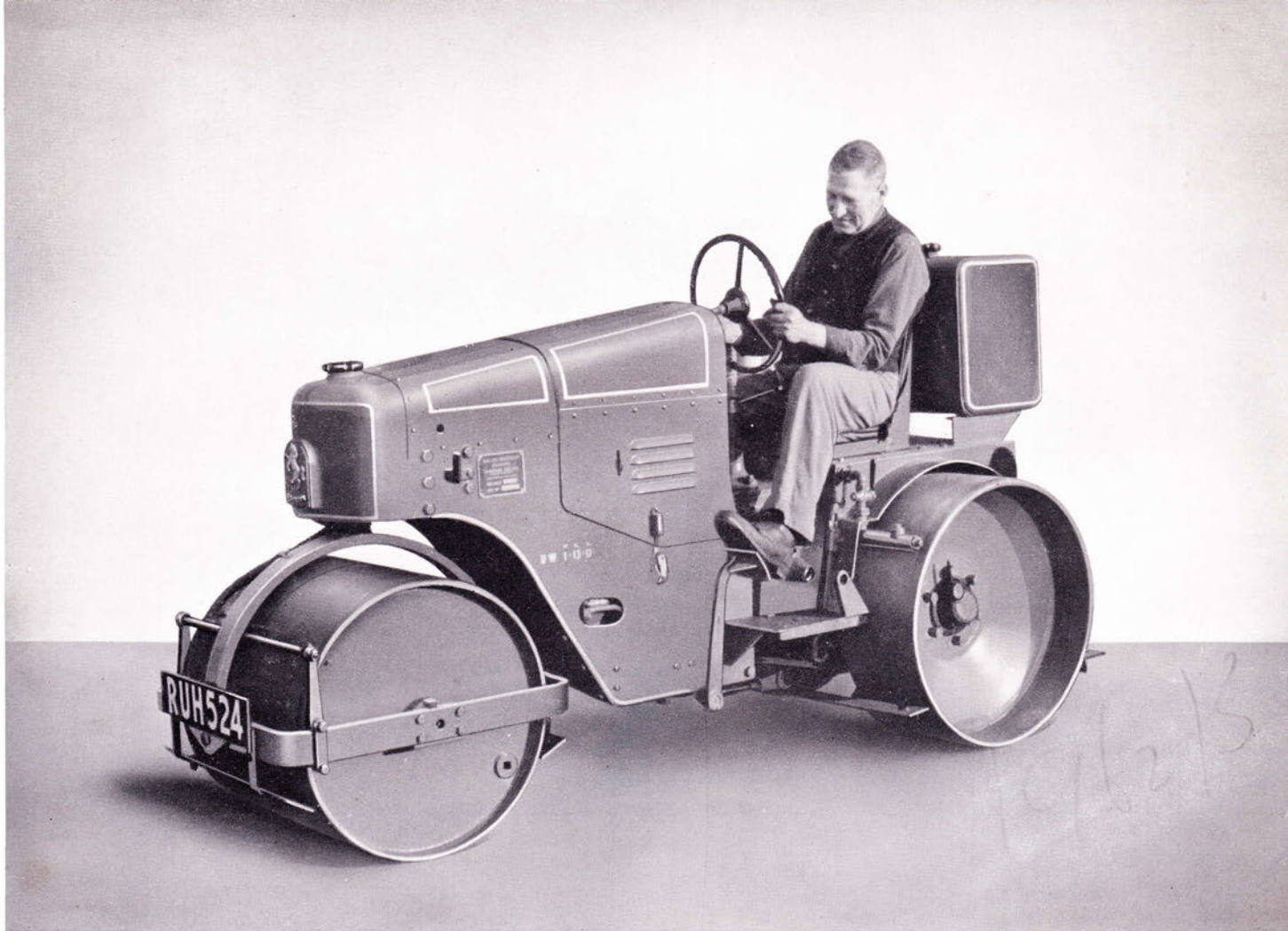
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ENGLAND

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AVELING-BARFORD

ROAD ROLLERS

MODEL **GA** DIESEL

WEIGHT RANGE
3,620 lb to 4,390 lb

1642 kg to 1992 kg

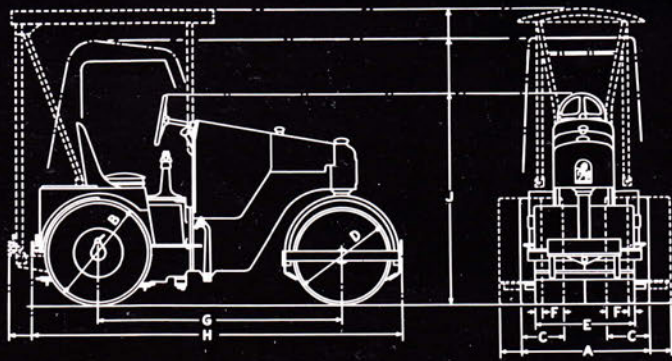


ORIGINATORS AND WORLD'S LARGEST MAKERS OF ROAD ROLLERS

No. 1784
(Rev.5.60)

DIMENSIONS

		GA 3'/4'		GA 5'/6'	
		ft. ins.	mm.	ft. ins.	mm.
A	Rolling Width ..	3' or 4'	915 or 1220	5' or 6'	1525 or 1830
B	Diameter of Rear Rolls ..	2 - 6	765	2 - 6	765
C	Width of Rear Rolls ..	1 - 0	305	2 - 0	610
D	Diameter of Front Roll ..	2 - 3	685	2 - 3	685
E	Width of Front Roll ..	2 - 4	710	2 - 4	710
F	Overlap of Rolls ..	2" or 8"	50 or 205	2" or 8"	50 or 205
G	Wheelbase ..	5 - 9	1755	5 - 9	1755
H	Length - Standard Machine ..	8 - 8	2640	8 - 8	2640
	Length with Awning ..	9 - 2½	2805	9 - 2½	2805
J	Height to Steering Wheel ..	4 - 10	1475	4 - 10	1475
	Height with Awning ..	6 - 10	2085	6 - 10	2085
	Height with Cab ..	6 - 2½	1892		
	Turning radius ..	10 - 3	3125	10 - 3	3125



WEIGHTS - in working order

Working order weights include weight of cooling water and proportion of fuel. Weight of driver not included. Weight of Awning and any other extra fittings is not included.

GA 3'-4'	Standard Machine - Ballasted ..	lb.	3980	kg.	1806
	Standard Machine - without Ballast ..	lb.	3620	kg.	1642
GA 5'-6'	Standard Machine - Ballasted ..	lb.	4390	kg.	1992
	Standard Machine - without Ballast ..	lb.	4030	kg.	1828

SPEEDS

Forward and Reverse

m.p.h.

2.18

4.46

km./hr.

3.5

7.18

CAPACITIES

Fuel Tank:

2½ Imp. galls.

3 U.S. galls.

11.4 Litres

Sprinkler Tank:

21 Imp. galls.

25.2 U.S. galls.

95 Litres

ENGINE - Diesel

Petter P.C.2

2 cylinder

8.4 b.h.p. at 2,300 r.p.m.

Bore 3 ins. (76.2 mm.)

Stroke 3 ins. (76.2 mm.)

Displacement per cylinder:

21.2 cu. ins. (348 c.c.)

Weights of Extras

	lb.	kg.
Cab ..	250	113
Awning and Curtains ..	200	88
Water Sprinkler Tank - Full ..	300	136
Water Sprinkler Tank - Empty ..	90	41

DISTRIBUTOR

APPROXIMATE SHIPPING SPECIFICATION

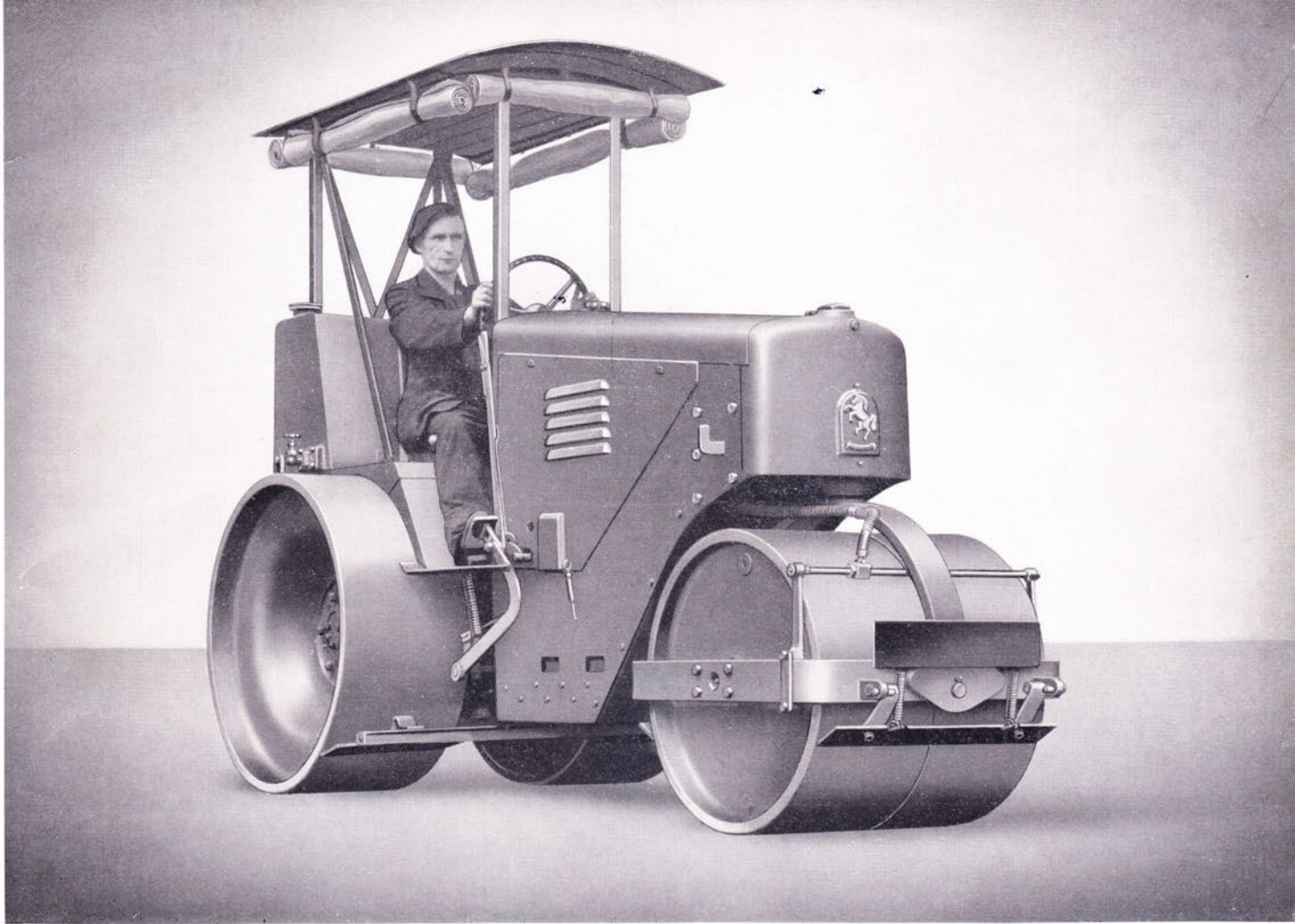
		GA 3'/4'				GA 5'/6'			
		Length		Width		Height		Weight	
PARTIAL PACKING		ft. in.	mm.	ft. in.	mm.	ft. in.	mm.	T C Q	kg.
Roller on wheels ..	..	8-10	2690	3-0	915	4-10	1475	1 13 0	1677
Awning in crate ..	..	4-10	1475	3-3	990	9	230	3 0	152
FULL PACKING		Length		Width		Height		Weight	
Roller on wheels, in Case ..	..	9-3	2820	3-2	965	5-1	1550	1 18 0	1931
Roller, less wheels, in Case ..	..	..	..	..	..	..	..	..	..
One Rear Roll ..	..	..	..	..	..	..	..	..	..
One Rear Roll ..	..	..	..	..	..	..	..	..	..
Awning (add to weight of main case) ..	..	..	..	..	..	..	..	1 3	88

Dimensions, weights, illustrations and other particulars shown on this leaflet are not binding in detail and the right to modify is reserved.

AVELING - BARFORD LIMITED **GRANTHAM ENGLAND**

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AVELING-BARFORD

ROAD ROLLERS

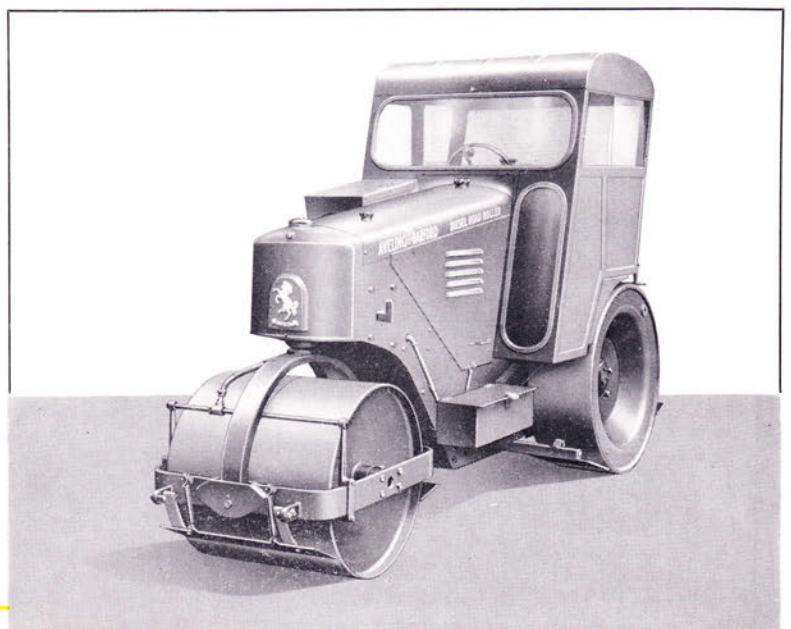
MODELS

GFX AND GFW

WEIGHT RANGE

4,900 lb to 7,730 lb

2222 kg to 3506 kg



ORIGINATORS AND WORLD'S LARGEST MAKERS OF ROAD ROLLERS

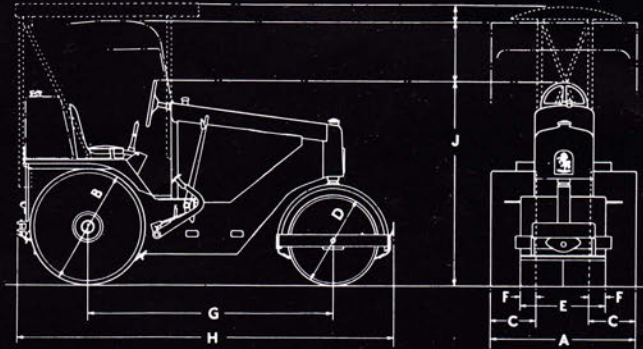
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(Rev. 4.60)

DIMENSIONS

GFX

GFW

		ft.	ins.	mm.	ft.	ins.	mm.
A	Rolling Width	3	10	1165	4	4	1320
B	Diameter of Rear Rolls	3	1½	950	3	1½	950
C	Width of Rear Rolls	1	1	330	1	5	430
D	Diameter of Front Roll	2	4¾	730	2	5¾	755
E	Width of Front Roll	2	4	710	2	4	710
F	Overlap of Rolls		5	125		5	125
G	Wheelbase	6	7½	2020	6	7½	2020
H	Length	10	6½	3215	10	6½	3215
J	Height to Steering Wheel	5	5½	1665	5	5½	1665
	Height with Cab	6	10	2085	6	10	2085
	Height with Awning	7	6	2285	7	6	2285
	Turning Circle Diameter	22	9	6935	22	9	6935



WEIGHTS - in working order†

Working order weights include weight of cooling water and proportion of fuel. Weight of driver not included. Weight of Awning or Cab and any other extra fittings is not included.

SPEEDS

Forward
and
Reverse

CAPACITIES

ENGINE - Diesel

Petter AV2
2 cylinder

11 b.h.p. at 1500 r.p.m.
Bore 3.15 ins. (80 mm.)
Stroke 4.33 ins. (110 mm.)
Displacement per cylinder:
33.8 cu. ins. (554 c.c.)

G
F
X

		lb.	kg.	m.p.h.	km./hr.	Fuel Tank: 6 Imp. galls. 7.2 U.S. galls. 27 Litres
Standard Machine - Ballasted	..	5580	2531	2.0	3.20	
Standard Machine without Ballast	..	4900	2222	4.12	6.60	Sprinkler Tank: 30 Imp. galls. 36 U.S. galls. 136 Litres

G
F
W

		lb.	kg.	m.p.h.	km./hr.	Fuel Tank: 6 Imp. galls. 7.2 U.S. galls. 27 Litres
Standard Machine - Ballasted	..	7730	3506	2.0	3.20	
Standard Machine without Ballast	..	7220	3275	4.12	6.60	Sprinkler Tank: 30 Imp. galls. 36 U.S. galls. 136 Litres

Weights of Extras

	lb.	kg.
Awning and Curtains	162	73.5
Cab	238	108
Water Sprinkler Tank - Full	440	199
Water Sprinkler Tank - Empty	140	64
Electrical Equipment	166	75

DISTRIBUTOR

APPROXIMATE SHIPPING SPECIFICATION

GFX

GFW

	Length		Width		Height		Weight			Length		Width		Height		Weight							
PARTIAL PACKING	ft.	in.	mm.	ft.	in.	mm.	ft.	in.	mm.	T	C	Q	kg.	ft.	in.	mm.	ft.	in.	mm.	T	C	Q	kg.
Roller on wheels (standard) ..	..	10-9	3275	3-10	1165	5-6	1675	2	5	0			2286	10-9	3275	4-4	1320	5-6	1675	3	5	0	3302
FULL PACKING																							
Chassis Case incl. Front Roll Assembly	10-8	3250	3-6	1065	5-1	1550	2	2	0			2134	10-8	3250	3-6	1065	5-1	1550	2	6	0	2337	
Rear Rolls ; two ; each ..	..	3-1½	950		1-1	330		5	0			254	3-1½	950			1-5	430		14	0	711	
		dia.												dia.									
Extras																							
Awning Case (short sea voyage) ..	5-3	1600	3-3	990	8	205		2	0			101	5-3	1600	3-3	990	8	205		2	0		101
Water Sprinkler Tank ; Electrical Equipment											Add weight of Extra to weight of Chassis Case.												

Add weight of Extra to weight of Chassis Case.

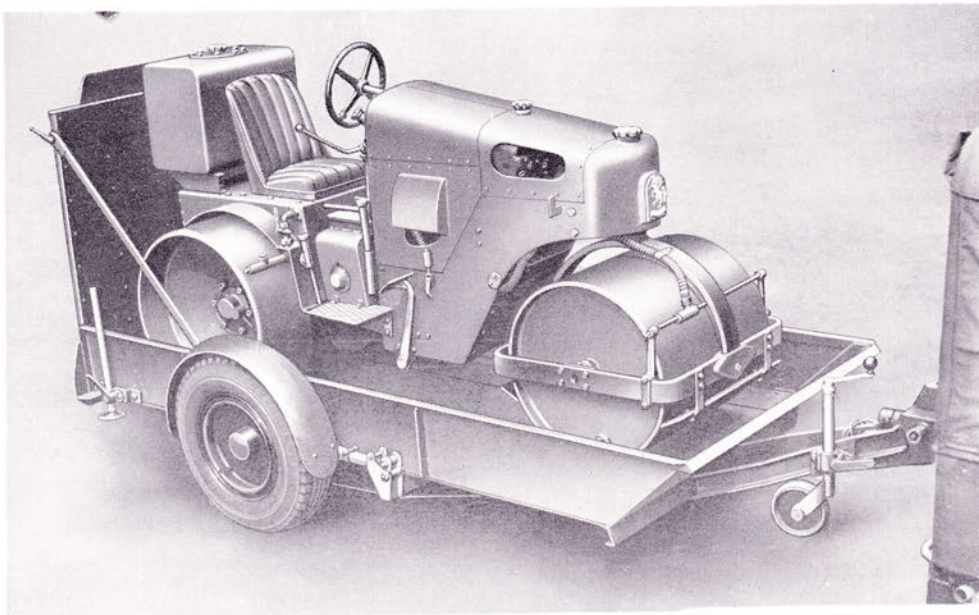
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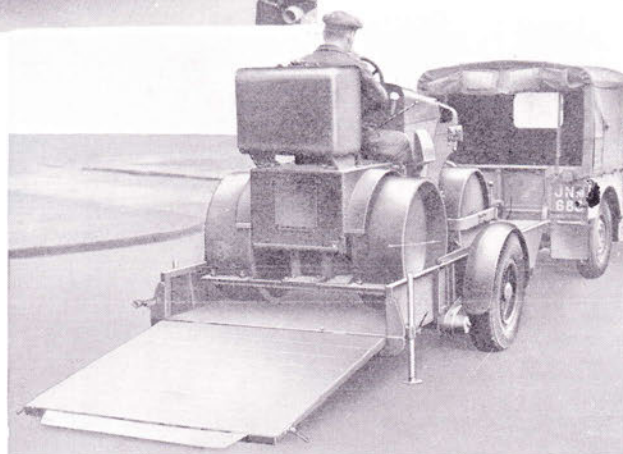


LOW-LOADING TRAILER FOR Aveling-Barford LIGHT ROLLERS

With this new low-loading trailer specially designed for transporting Aveling-Barford Footpath Rollers, travelling time between working sites or from depot to job is reduced to a fraction of that normally taken.

With its independently spring mounted wheels and automatic over-run brake unit, the loaded trailer can be towed with safety at speeds of up to 30 m.p.h. (45 km/hr).

Loading and unloading is simple; the backboard when lowered forms a ramp of low incline which is easily climbed by the roller under its own power. Adjustable jacks support the rear of the body during these operations.



A screw-operated retractable jockey wheel at the forward end of the trailer facilitates man-handling and also aligns the coupling for attachment to the towing vehicle.

BRIEF SPECIFICATION

Dimensions. Length (backboard raised) 12ft. 10ins. (391cm).
Width (over tyres) 5ft 9ins. (175cm).
Width of Body 4ft. 4ins. (132cm).
Height (to top of backboard) 5ft. 0ins. (152cm).
Height (to top of body) 2ft. 0ins. (61cm).

Body. Constructed of heavy gauge mild steel sheet welded to angle section stiffening members. Floor, which is renewable, is of 1½" thick timber supported by five steelcross members. Principal frame cross member is a 3" diameter steel tube on which are pivoted the independent wheel assemblies.

Backboard. Steel frame, timber-filled with steel toe-plate.

Suspension. Quarter elliptic silico-manganese steel road springs, fitted to pivoting crank arms which suspend each wheel independently.

Hubs. M.C.I. hubs with taper roller bearings, mounted on steel spindles.

Brakes. Internal expanding type, 12" diameter, operated by flexible cable. Hand parking-brake connected to the automatic over-run brake unit.

Wheels. Heavy truck type, 4.33 x 15; five stud fixing.

Tyres. 27 x 16 high pressure.

Wings. Dome section carried on robust brackets.

Accessories Retractable screw-operated front jockey wheel; rear corner jacks; number plate; tail lamp; and electrical connections.

Finish. Body and wings, green. Wheels black.

Coupling. Quick release pin type giving a universal movement. Height of centre of cross members on towing vehicle should be 1ft. 8ins. to 2ft. 1in. (50 cm to 63 cm).

Weight. 10 cwt—1120 lb. (500 kgs.).

AVELING-BARFORD LIMITED GRANTHAM & NEWCASTLE

HEAD OFFICE: GRANTHAM Telephone: GRANTHAM 1091-9 Telegrams: TELEX, INVICTA, GRANTHAM