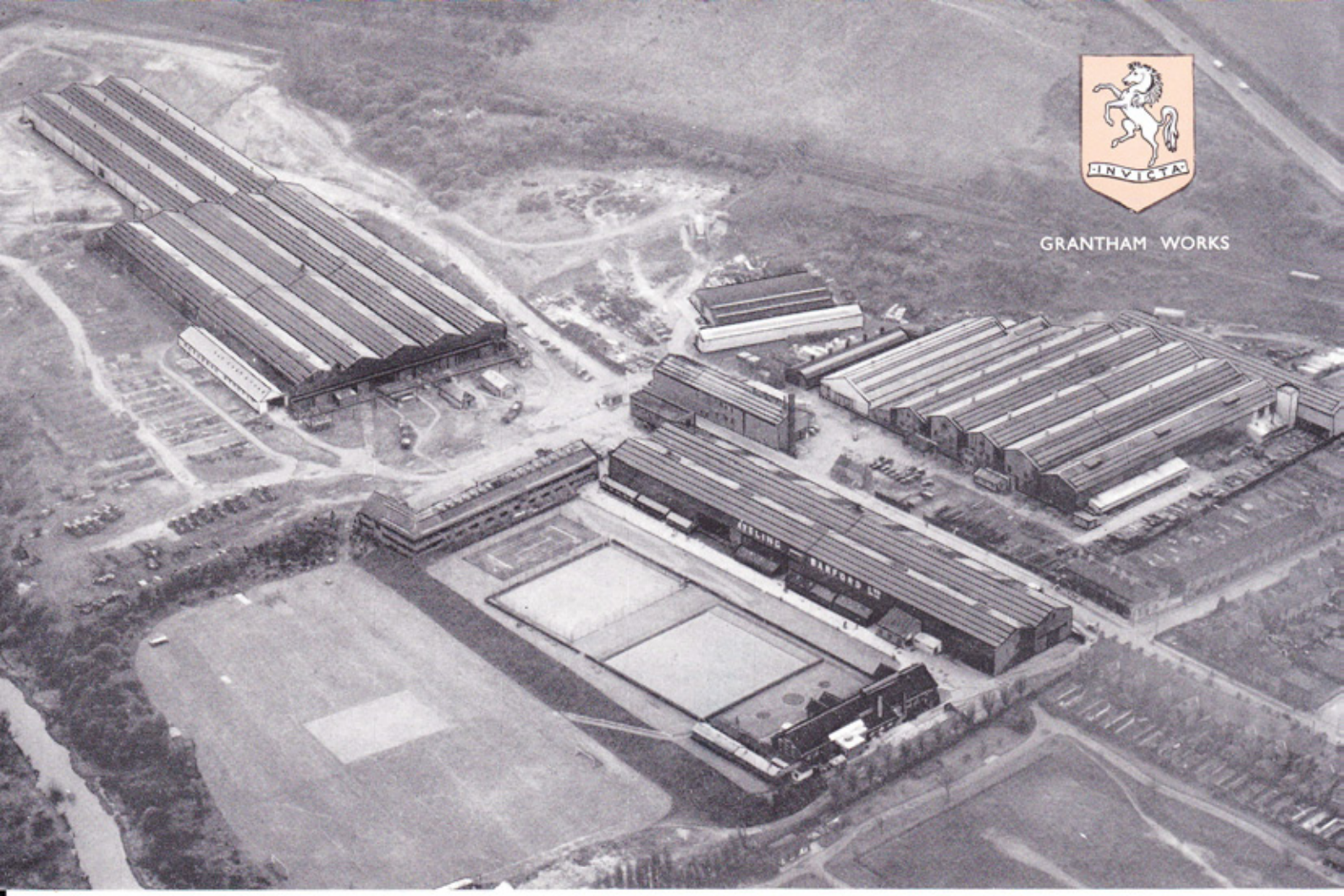


WHAT WE MAKE
AVELING - BARFORD LIMITED

GRANTHAM • ENGLAND



GRANTHAM WORKS



WHAT WE MAKE

ROAD ROLLERS

MOTOR GRADERS

DUMPERS

LOADING SHOVEL

CALFDOZER

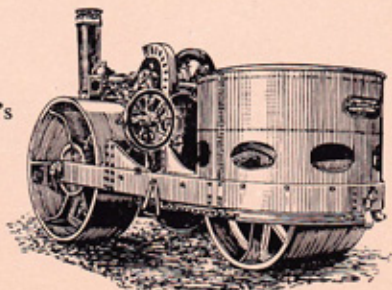
TRENCH CUTTING MACHINE

AVELING - BARFORD LTD.

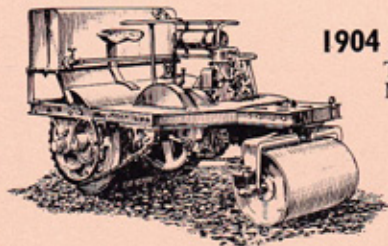
GRANTHAM AND NEWCASTLE · ENGLAND

London Office: MORRIS HOUSE, 1-5 JERMYN ST., S.W.1

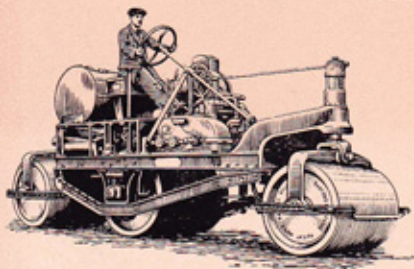
1867
The World's
first
Road
Roller



1904
The first
Motor Roller



1913
The first
Three-wheel
Tandem



Foreword

This Brochure, "What We Make", is published as an introduction to the extensive range of Road Making, Building, and Contractors' Machinery manufactured by Aveling-Barford, Ltd., at Grantham and Newcastle-upon-Tyne.

Descriptions given of the various machines are brief and are confined to the important features of design and function, but a separate publication for each item of plant is available and will be gladly sent on receipt of the tear-out form printed on the inside back cover.

Aveling-Barford, Ltd., are the originators and World's largest makers of Rollers; they built the first machine in 1867 and ever since have been

responsible for every major development in Road Roller design.

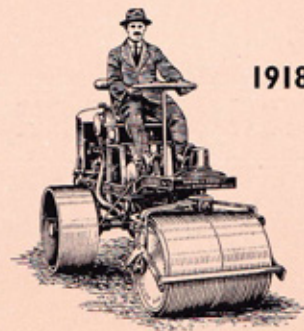
In the sphere of heavy haulage and transport vehicle manufacture their experience extends well over 100 years.

Our factories, the most modern of their kind in the World, are specially equipped and organised for quantity production of Rollers and other Construction Equipment; an invitation is extended to those contemplating the purchase of road or contracting machinery to pay a visit to them and see our products in the making.

AVELING - BARFORD LTD

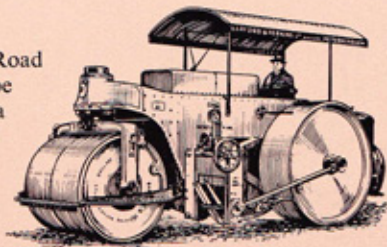
1918

The first
Footpath Roller



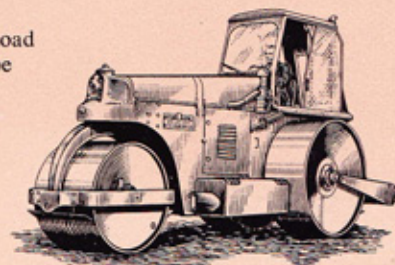
1927

The first Road
Roller to be
driven by a
high-speed
diesel
engine

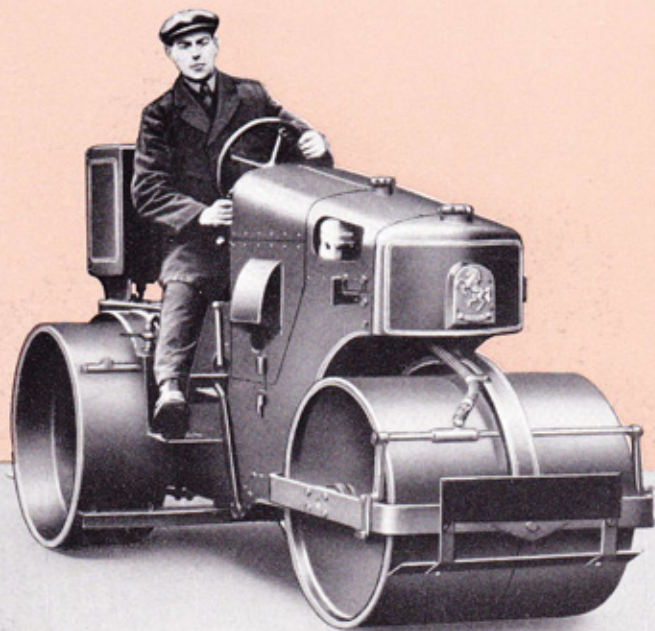


1946

The first Road
Roller to be
fitted with
Pressure
Balancing
Device



FOOTPATH ROLLER PETROL



THREE - WHEEL

Smallest of the range, this petrol-engined roller, although primarily designed for footpath construction is an extremely useful and efficient machine for all kinds of light rolling. It has all the features that ensure good performance, reliability and economy of operation, including:—two speeds forward and two reverse, quick-reverse clutch, large diameter mild steel rolls, grouped controls and easy steering.

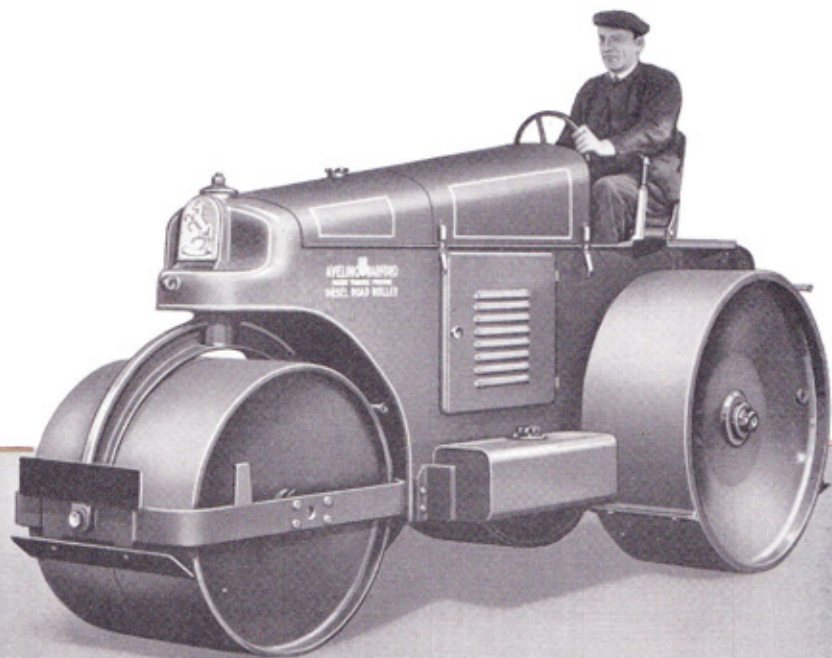
The clean design of this machine, with both sides clear of overhanging parts, makes it possible to roll close up to obstructions on either side.

ROLLERS

These rollers, in working order weights up to 5½ tons, can be used on all forms of light road work, including rolling grit or chippings after tar spraying. They can be supplied with either diesel or petrol power units. All have two speeds both forward and reverse and quick-reverse clutches. Rolls are of the water ballast type and of all steel construction. Component parts are machined to close limits in jigs, thus ensuring complete interchangeability and simplifying the replacement of wearing parts.


LIGHT ROLLERS

DIESEL OR PETROL



THREE-WHEEL

The weight range of these machines is from 6 to 16 tons and they are suitable for all forms of road work including scarifying. Of superb design and construction and of outstanding performance, they possess the finest combination of features ever built into a road roller. Outstanding amongst these is the patent Pressure Balancing Device. Consisting of a movable weight contained within the main chassis members, it permits equal pressure on all rolls or maximum loading on rear rolls to be obtained. Thus one machine is capable of doing a perfect job of



Chesterfield provides a picturesque setting for this heavy diesel roller on a resurfacing job.

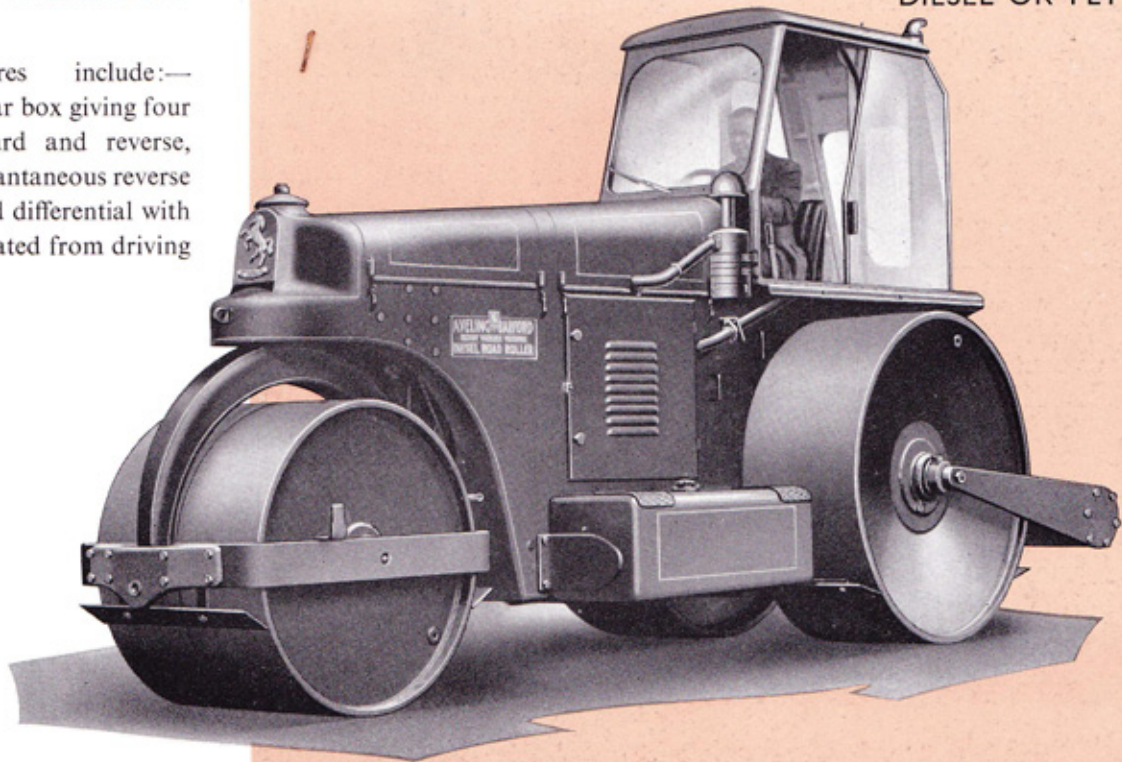
ROLLERS

surface finishing or foundation consolidation.

Other features include:—
Totally enclosed gear box giving four speeds both forward and reverse, dual gear drive, instantaneous reverse clutch, and enclosed differential with locking device operated from driving seat.

HEAVY ROLLERS

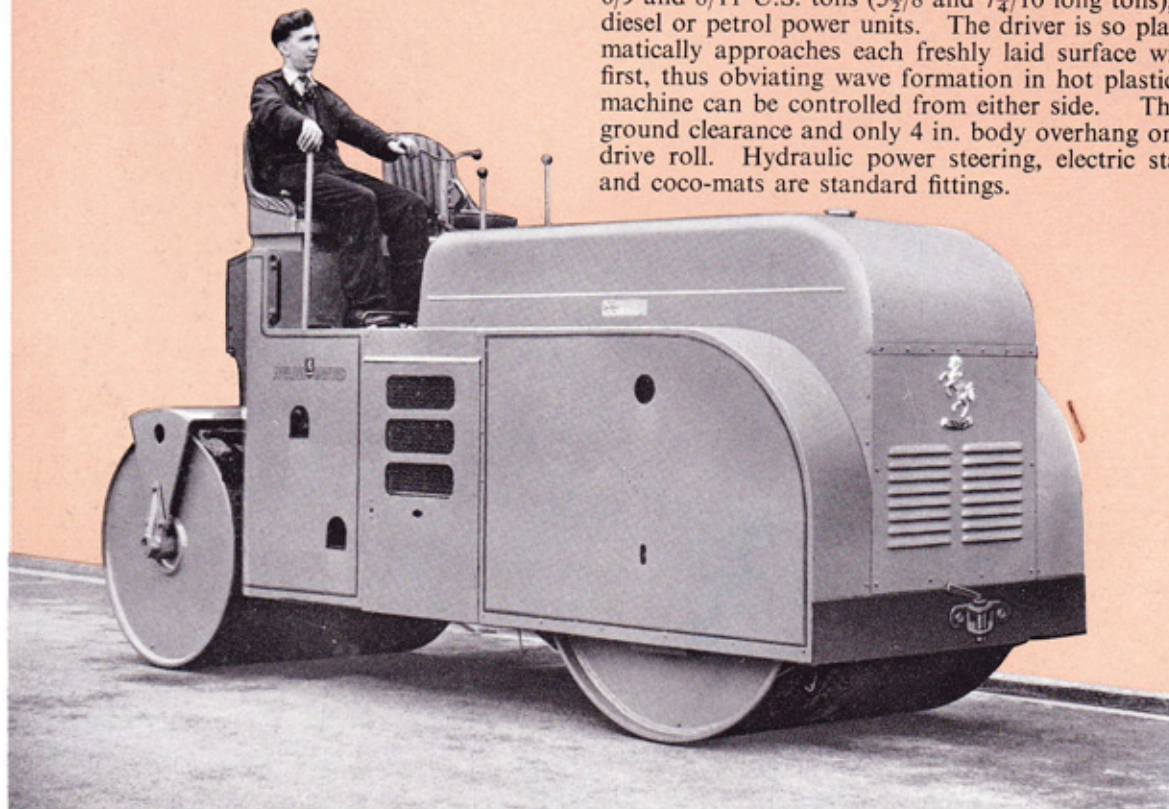
DIESEL OR PETROL



TANDEM ROLLERS

DIESEL OR PETROL

These type "TR" Tandem Rollers are available in two models 6/9 and 8/11 U.S. tons ($5\frac{1}{8}$ and $7\frac{1}{4}$ long tons), with a choice of diesel or petrol power units. The driver is so placed that he automatically approaches each freshly laid surface with the drive roll first, thus obviating wave formation in hot plastic materials. The machine can be controlled from either side. There is a generous ground clearance and only 4 in. body overhang on each side of the drive roll. Hydraulic power steering, electric starting, sprinklers and coco-mats are standard fittings.

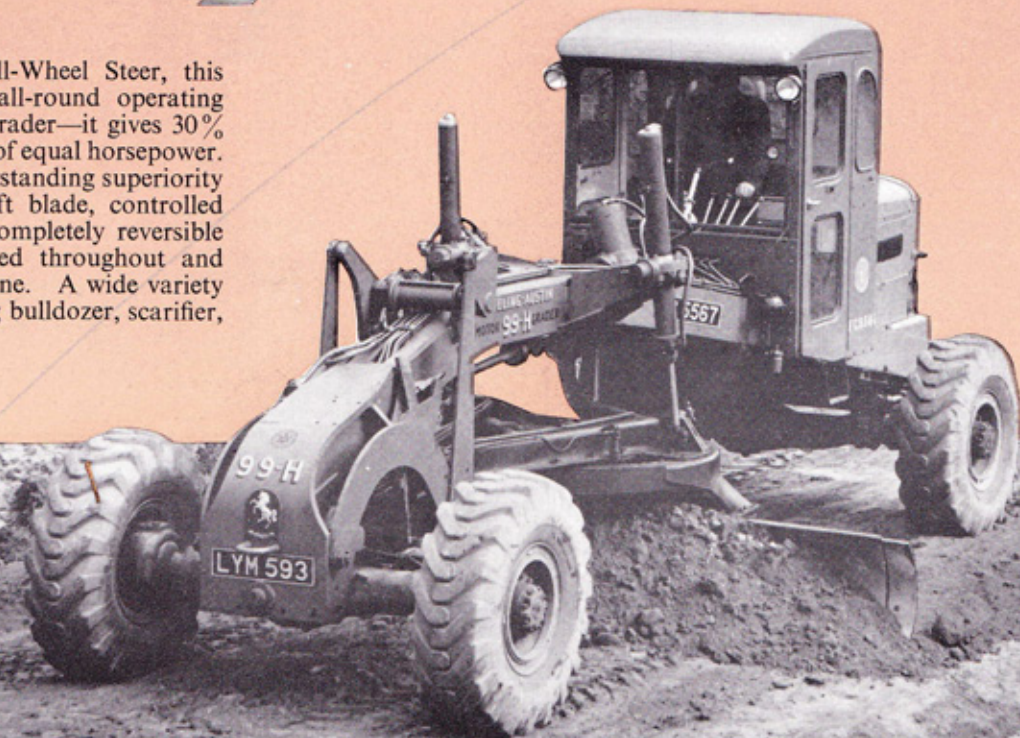


NOT APPLICABLE FOR U.S.A.

99-H MOTOR GRADER

gives 30% MORE OUTPUT

With All-Wheel Drive and All-Wheel Steer, this heavy-duty motor grader has an all-round operating efficiency unequalled by any other grader—it gives 30% more output than a tandem machine of equal horsepower. Other features contributing to its outstanding superiority include, precision sideshift, high lift blade, controlled traction, extreme blade reach and completely reversible blade. It is hydraulically controlled throughout and powered by a 100 B.H.P. diesel engine. A wide variety of attachments is available including bulldozer, scarifier, loader and snow plough.



MAINTENANCE GRADER

This light maintenance grader is powered by a 42 B.H.P. diesel engine and carries a 9 ft. blade. It will handle at low cost, many of the small grading jobs on which hitherto, larger machines have had to be uneconomically employed. The working weight of the machine is 8,000 lbs. Built to withstand continuously, the punishing shocks inherent in grader usage, its design incorporates a special "A" frame mounting which transmits the thrust direct from the power axle to the blade. Hydraulic controls give quick, easy response to finger tip touch. A six-foot bulldozer blade or five-tine scarifier are two of the extra attachments available.

**PUTS LOW-COST GRADING
WITHIN
EVERYONE'S REACH**





HALF - YARD DUMPER

Wide wheel base gives good stability over rough ground.

Adverse site conditions cause no delays.

Alternative hopper position for piece loads.

Interchangeable larger capacity body for light materials.

This is a true dumper scaled down for small site needs. With its 1,350 lb. payload and good speed it will equal the work of several barrowmen. The half yard Dumper is seldom baulked in mud or on severe gradients—full traction being assured by the use of positive gear and chain drive through a differential to the large diameter rear wheels, over which the load is carried. One lever starts, stops and reverses the machine and there are no gears to change. A special deep body is available for carrying light materials such as coal, coke, machine shop swarf, etc.



DUMPTRUCK

SHUTTLE SERVICE WITH ONE MACHINE



LOADING POINT

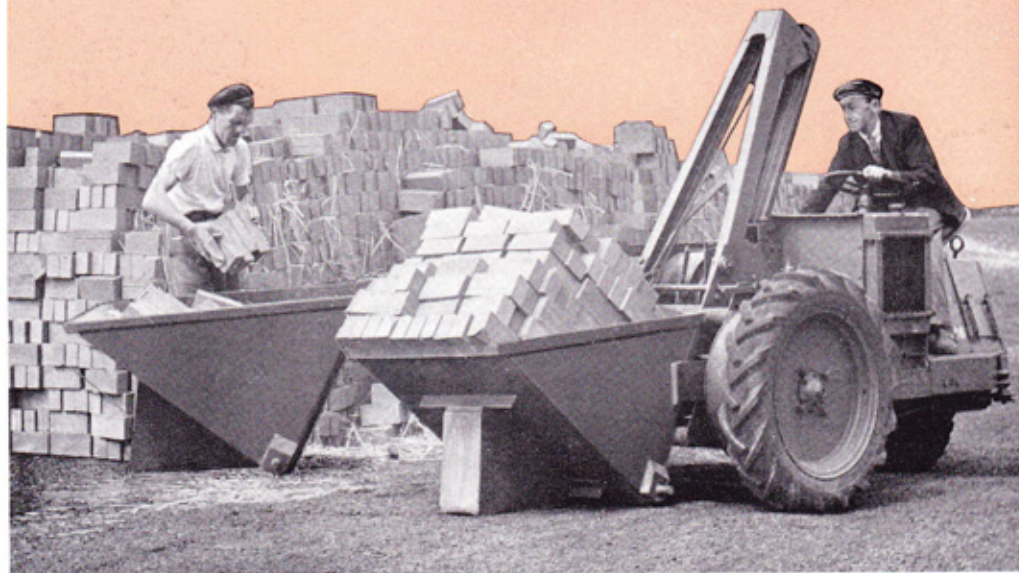
Empty hopper set down
loaded one picked up.



DISCHARGE POINT

Loaded hopper set down
empty one picked up.

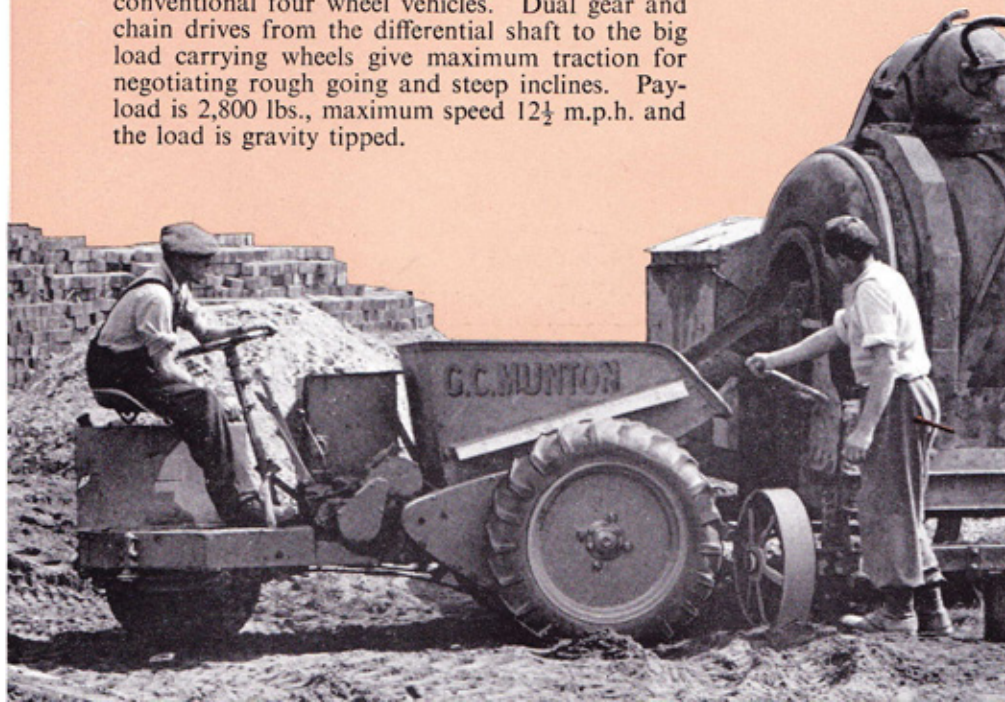
Consisting of a parent vehicle and detachable hoppers, the Dumptruck enables a continuous supply service of hand loaded material to be maintained by the use of a single machine. For example, whilst a loaded hopper is being transported, two others—one at the discharge point and one at the stock pile—are being emptied and filled respectively. The capacity of the hoppers is $\frac{5}{8}$ cu. yd. or 1,800 lb. of earth. The load can also be tipped in normal dumper manner and the Dumptruck has a top speed of $12\frac{1}{2}$ m.p.h.



This machine is built for the economical moving of bulk material over short distances on building sites, small contracts, in factories or small quarries. Of three-wheel design with rear-wheel steering, its small turning radius enables it to operate where space limitations prohibit the use of conventional four wheel vehicles. Dual gear and chain drives from the differential shaft to the big load carrying wheels give maximum traction for negotiating rough going and steep inclines. Payload is 2,800 lbs., maximum speed $12\frac{1}{2}$ m.p.h. and the load is gravity tipped.

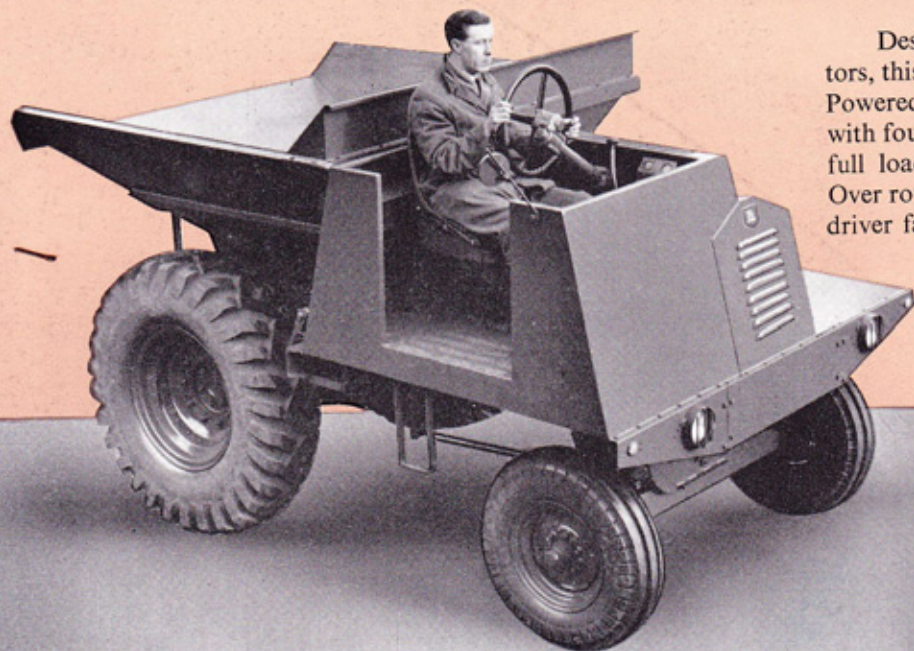
ONE YARD DUMPER

**TAKES A VARIETY OF LOADS
OVER UNMADE ROADS**



3 CUBIC YARD SHUTTLE DUMPER

DIESEL OR PETROL



Designed to match the output of the smaller excavators, this dumper is built primarily for off-road operation. Powered by either diesel or petrol engine of 42 B.H.P., with four forward speeds and two reverse, it will carry its full load up any gradient where the wheels can grip. Over rough ground its stability inspires confidence, whilst driver fatigue is lessened by ease of control, easy riding and good visibility. The system of two-way steering and control eliminates reverse driving hazards—the driver can always face the direction of travel. It permits easy working in narrow gully cuts or tunnels and speeds the get-away from the excavator when space is restricted. Whilst gravity tipping can be employed, positive ejection of the load is assured by a patent device utilizing the torque reaction of the brakes. This device also permits controlled tipping.

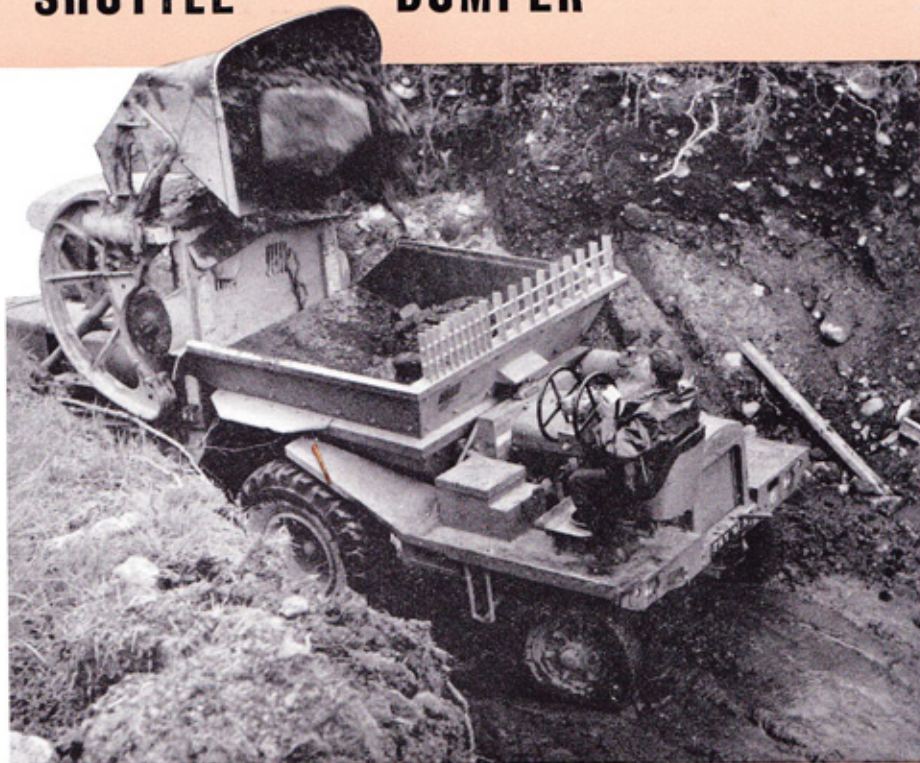
CHOOSE A DUMPER TO SUIT YOUR SITE FROM BRITAIN'S WIDEST

4 $\frac{1}{2}$ CUBIC YARD DIESEL SHUTTLE DUMPER

For working with medium-size excavators on short and medium hauls over rough ground, this dumper is without equal. Its many features all make for low-cost hauling in mine and quarry, on public works and contracts.

Patent two-way steering, allowing the driver always to face the direction of travel, together with four speeds both forward and reverse give really fast cycle times. The 54 B.H.P. diesel engine provides ample power for all conditions of operation. Differential lock, operated from driving seat gives added traction where needed. Power-assisted tipping gear, exclusive to Aveling-Barford dumpers, ensures positive discharge of the load even when tipping uphill.

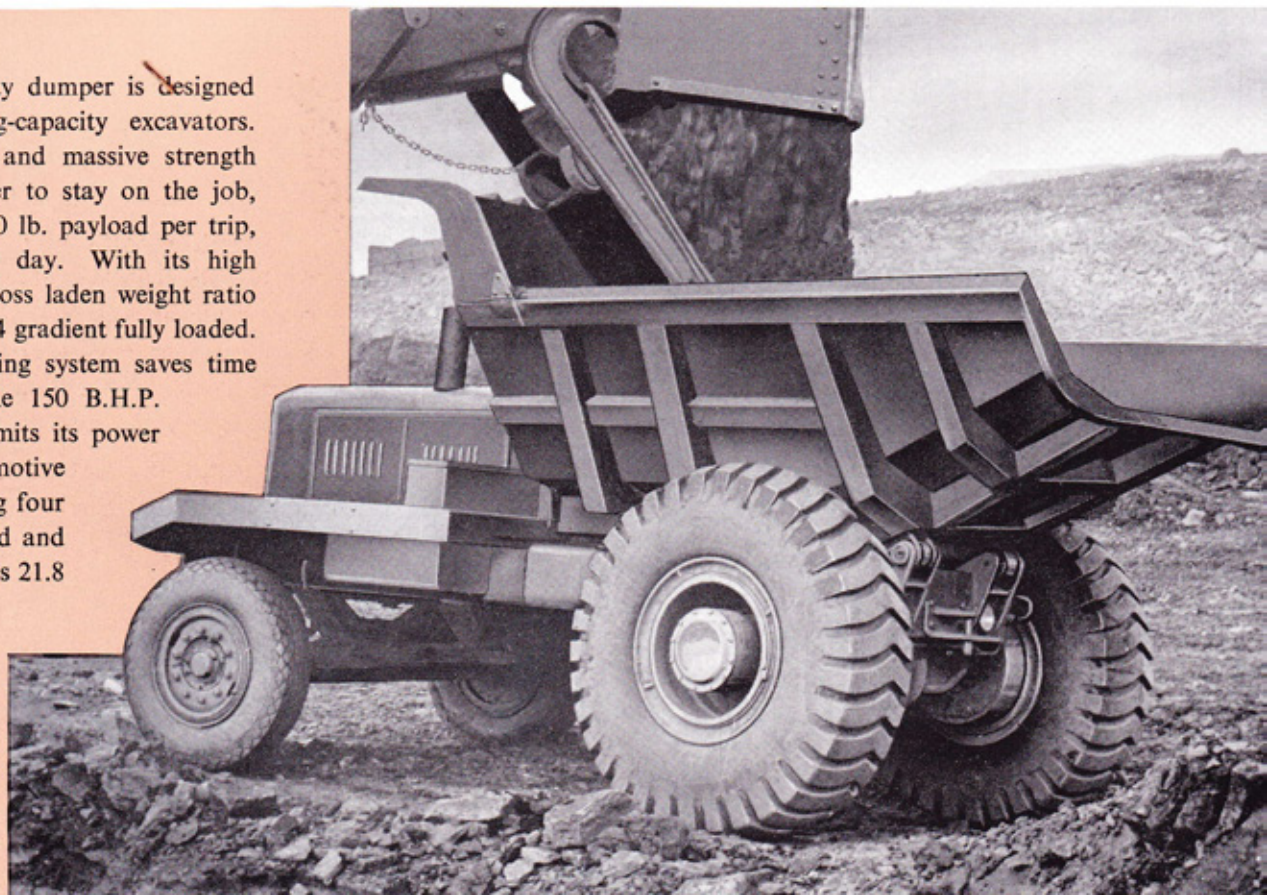
Rock-carrying and other special bodies are available if desired.



RANGE — 1 $\frac{1}{2}$ CU. YD. TO 7 $\frac{1}{2}$ CU. YD. CAPACITY

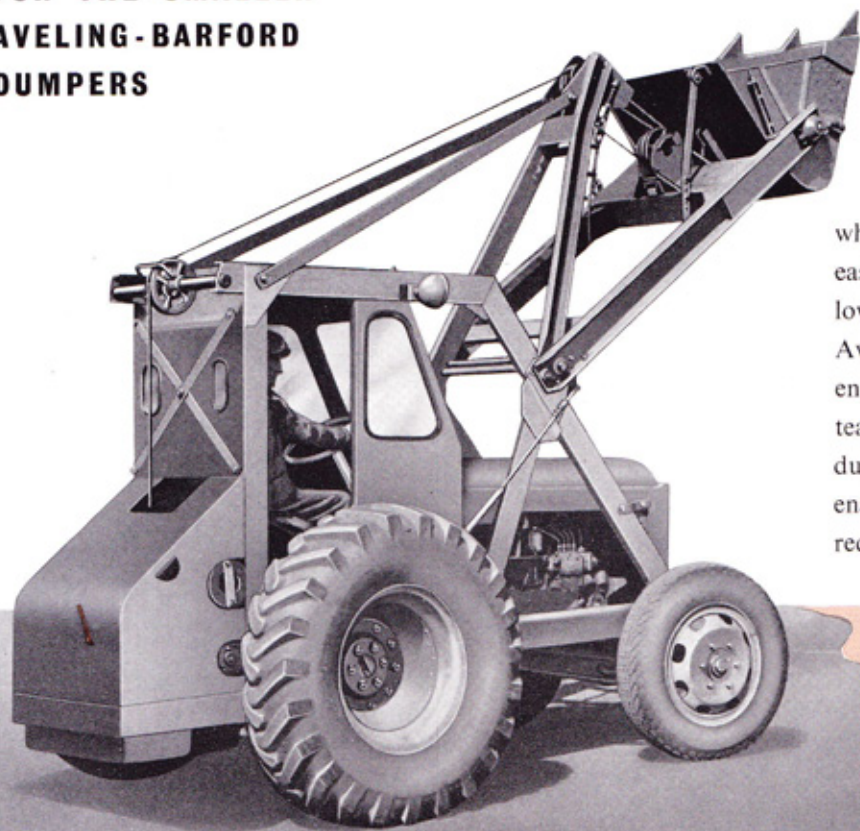
7 $\frac{1}{2}$ CUBIC YARD DIESEL SHUTTLE DUMPER

This heavy-duty dumper is designed to work with big-capacity excavators. Rugged simplicity and massive strength enables this dumper to stay on the job, delivering its 20,000 lb. payload per trip, all day and every day. With its high engine power to gross laden weight ratio it will climb a 1 in 4 gradient fully loaded. The two-way steering system saves time on every trip. The 150 B.H.P. diesel engine transmits its power through an automotive type gear box giving four speeds both forward and reverse. Top speed is 21.8 m.p.h.



**THE IDEAL TEAM-MATE
FOR THE SMALLER
AVELING-BARFORD
DUMPERS**

FRONT END LOADER



A simple, rugged cable-operated loading shovel with a $\frac{1}{2}$ cu. yd. bucket, it gives fast loading at low cost on building sites, in mines or quarries, or anywhere where bulk materials have to be moved. It is easily manoeuvrable in confined spaces and its low centre of gravity ensures good stability. Available with four-cylinder petrol or diesel engine of 42 B.H.P., the loader is the ideal team-mate for the smaller Aveling-Barford dumpers. The operator enjoys perfect visibility enabling him to dump the load just where required.



CALFDOZER

This small full-track earth moving unit has earned the title of "the little machine with the big push". Powered by a 9 b.h.p. engine, it is fitted with a 4 ft. 6 in. wide blade which can be swung to left or right for angle-dozing. A two-tine ripper is interchangeable with the blade. Site clearing, levelling, stock pile trimming and backfilling are amongst its more common tasks. Many Calfdozers are used at ports throughout the World for the trimming of cargoes such as coal, iron ore, sugar, etc., in the holds of ships.

**IN SHIPS' HOLDS
TOO-CALFDOZERS
CAN SAVE TIME
AND MONEY**

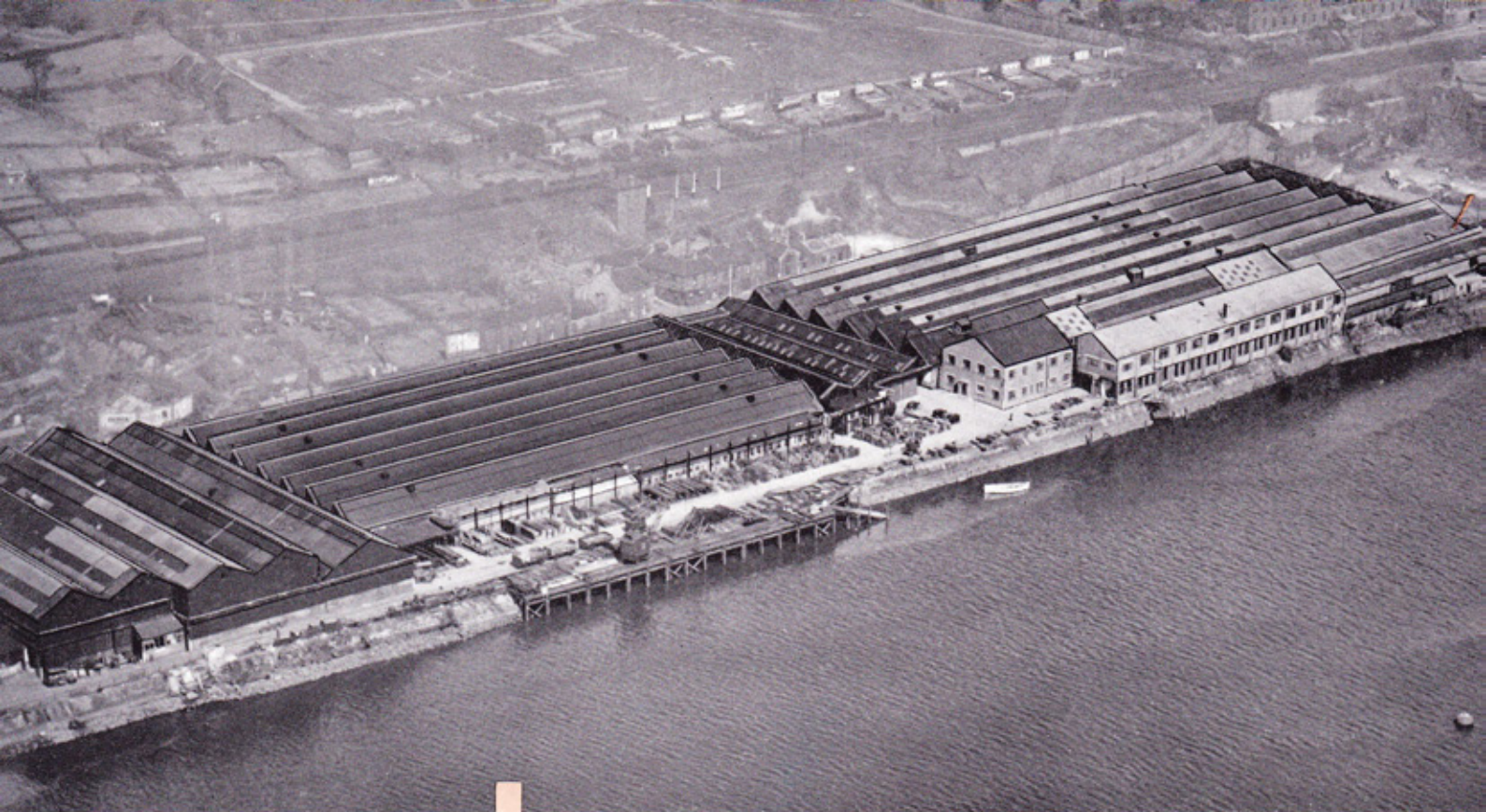


TRENCH CUTTING MACHINE

Designed to mechanise the cutting of trenches for laying essential services, this machine will cut flat-bottomed trenches, either 11 in. or 18 in. wide, to a depth of 4 ft. and over. In operation it is self-hauled. A winch on the machine winds in a wire rope attached to an earth anchor ahead of the machine, thus giving it a positive forward motion. A wide range of cutting speeds is available to suit ground conditions. The rear wheels are adjustable to enable a vertical trench to be cut on sloping ground. Mounted on pneumatic-tyred wheels it can be towed from job to job.

The machine is powered by an 8 h.p. engine either petrol or diesel.





NEWCASTLE WORKS

AVELING-BARFORD LIMITED

GRANTHAM and NEWCASTLE

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Telegrams: "Telex, Invicta," Grantham



AVELING-BARFORD LTD.

INVICTA WORKS
GRANTHAM, England

I am interested in the plant as marked "X" and would like you to send me further particulars.

FOOTPATH ROLLER

LIGHT ROLLERS

HEAVY ROLLERS

TANDEM ROLLERS

99-H MOTOR GRADER

MAINTENANCE GRADER

HALF YARD DUMPER

DUMPTRUCK

ONE YARD DUMPER

3 CU. YD. DUMPER

4½ CU. YD. DUMPER

7½ CU. YD. DUMPER

FRONT END LOADER

CALFDOZER

TRENCH CUTTING MACHINE

Name

Address

