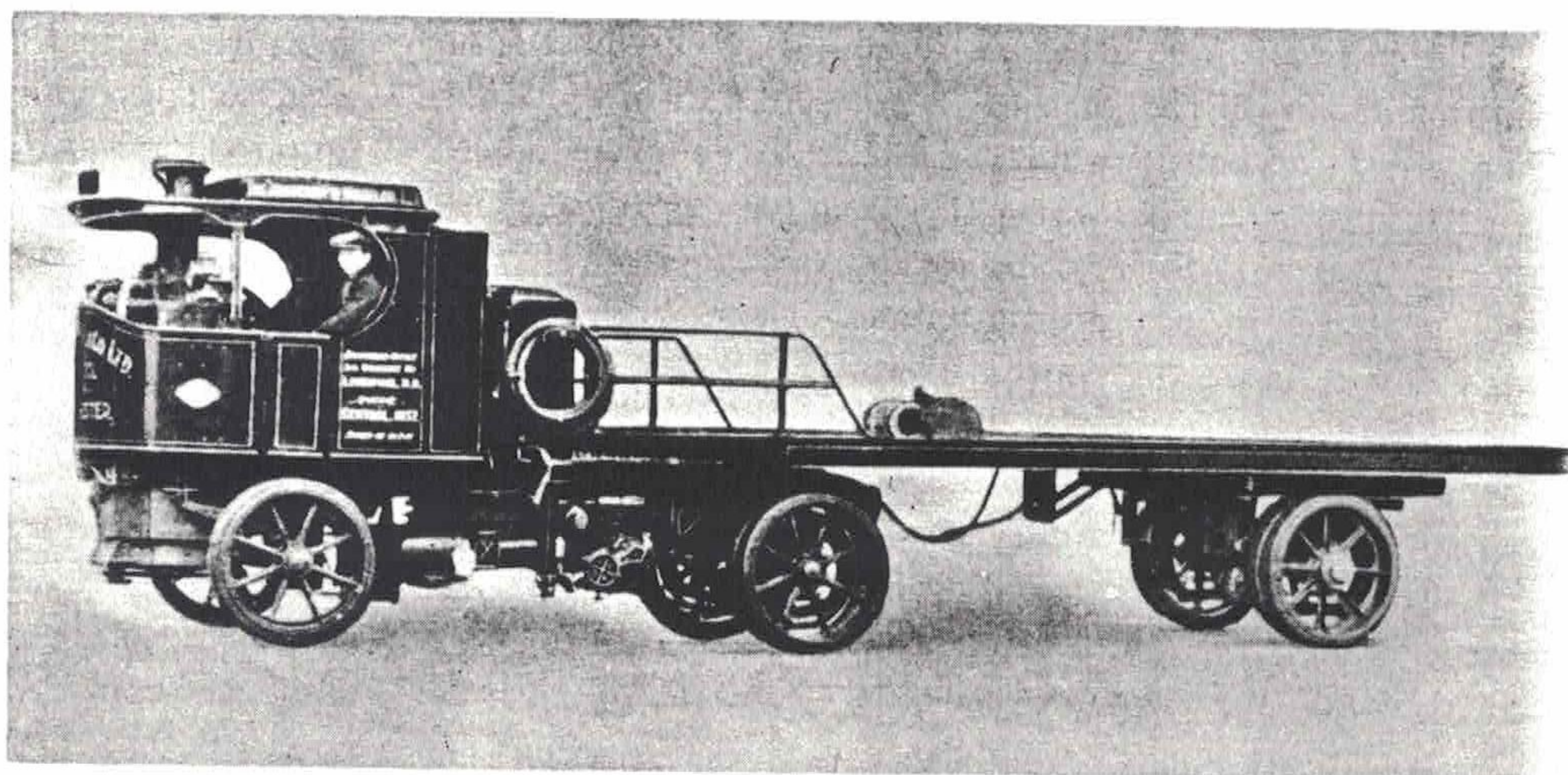


fore at certain periods in the stroke there was a direct bleed-off to exhaust on the back pressure side, for the live steam closed the end of the piston valve on the admission, leaving the small clearance open on the other side. A certain amount of cushioning took place with this arrangement for, when the piston covered the exhaust ports, the piston valve was rendered inoperative. A patent, No. 25,313 of 1909, was filed by one Robert Eltringham for a similar arrangement, but it is not clear whether Atkinson made the pistons under licence, acquired the patent, or actually infringed it.

The crossheads were made of cast-iron and were secured to the piston-rods by nuts which were fitted on to oversize threads, these rods being inserted from the front and having shoulders which took the pull from within the crossheads. The piston-rods were manufactured from 2½ per cent nickel steel. The crosshead pins, made from hardened drawn steel tube, were retained in the crosshead by set screws locked by split cotters. Marine type connecting rods were used and these were machined from circular section mild steel stampings and fitted with phosphur-bronze big-end bearings and bronze small-end bushes fitted with stop pins to prevent their rotation. The horsepower output of this engine was phenomenal for the period, producing 45 b.h.p. at 200 r.p.m. and the incredible figure of 75 b.h.p. at 300 r.p.m. In some cases the old bore measurement of 6¾ in. was used on some of the smaller tonnage vehicles fitted with the 'Uniflow' engine, and the horsepower was proportionately lower at 40 b.h.p. at 200 r.p.m.

During 1919 Edward Atkinson and J. Sadler filed a patent for 'the improvement of engines for steam motor vehicles' and produced a further type of engine having rotary sleeve valves. This unit was never installed in a waggon and after test was discarded, remaining at the works until 1930 when it was taken for scrap. To all intents and purposes the 'Uniflow' engine was therefore the terminal point in Atkinson prime mover development and as such proved itself to be adequate for a further decade.

The first post-1914 War design appeared in 1922, having taken a year in development; this was the 50-cwt. uniflow waggon, the smallest steam waggon constructed by any manufacturer after the war. The idea of the project was to produce a small powerful steamer which would outperform petrol vehicles of the same payload, be easy to control, and would be able to take advantage of any increase of the maximum speed limit then in force. In retrospect it seemed to be an odd decision on the part of the Atkinson management to make the 2½-ton waggon as by 1920 the steam waggon could really only hold its own, economically, in the over 5-tons class. However certain reasons for the venture seemed to point the way for smaller steam waggons: firstly, the financial climate of the industry in having a mild depression after the brief post-war boom (allied to the fact that the depression became more serious by 1923) seemed to indicate that larger production of smaller units would be more profitable. Secondly, a few years earlier a large customer had placed an order for sixteen 2½-ton waggons built on the same lines as the standard 6-tonner, and due to the move to the new works the plans had been shelved until 1921. That the decision was wrong was proved by the fact that only one of these lorries was made, being supplied to Messrs J. H. Martin of Preston. They used it for about six months but complained that its fuel consumption was excessive in view of its load-carrying capacity, and so returned it to the works where it worked out its days as the Works transport. Nevertheless *Motor Transport* seemed to be enthusiastic when they reviewed Atkinson's 'mini' in their 31 July issue of 1921, for they stated that, 'it affords yet another substantial evidence of the awakening in British steam vehicle production and the confidence with which makers are facing the future. As the first 2½-ton steamer to meet modern conditions, the new arrival is of no little importance, and its performance will be watched with the liveliest interest'. Perhaps they were right and Atkinson should have pressed ahead with small waggons made in



29. Articulated six-wheel waggon introduced in 1923.

large numbers and fired by oil fuel, having got the initiative so early in the twenties.

The design of the 50-cwt. model followed closely that of the larger types, though it possessed some novel introductions not previously seen in Atkinson's vehicles. The boiler was of the normal type already described but with a reduced number of tubes and a higher degree of superheat; a figure of 580 °F was given by the makers for this waggon using the triple coil superheater. The boiler was also fitted with a mechanical stoker of the horizontal auger screw variety. This equipment was contained in a trough just below the footplate and was open at the bunker end to allow fuel to fall by gravity into the path of the auger. Another opening at the firing shute was provided for the fuel to drop into the firegrate. The firing rate was determined by the speed of the auger and this was driven by a small steam engine controlled by the driver. The waggon had been designed for one-man operation throughout, especially on delivery and similar stop-start work, and to this end the fireman's wages would have been saved as well as providing a low platform height to obviate any need for a mate to help the driver. The engine of the lorry was of the normal 'Uniflow' type but having smaller cylinder dimensions of 6 in. bore and 7 in. stroke and producing 35 b.h.p. at 300 r.p.m. On test, an overhung flywheel was fitted to the engine but this gave a great deal of main bearing wear and was removed before the vehicle was supplied to Messrs Martin. It was reasoned that this flywheel would give a smoother running engine but in practice it did not amount to much. The only other difference from the larger types lay in the braking system which had both the hand and footbrake acting on a drum mounted on the differential instead of the separate drums in the rear wheels on the 6-tonner. Also the channel framing was of a different dimension, 5½ in. × 2½ in. rolled-steel. The performance of the 50-cwt. waggon was exceptionally good; it could exceed 30 m.p.h. on the flat, would climb a gradient of 1 in 8 fully loaded, and would travel 30 miles on one tankful of water (120 gals.). The tractive effort of the waggon was 108,600 lb./in.

With the introduction of the 'Uniflow' engine the 6-ton chassis was modified about this time, on the one hand to bring it up to date and on the other to provide efficient braking, for the new engine having a free exhaust could not be very effective as a brake in reverse. After investigating other manufacturers' braking systems, particularly that fitted to the Foden, they finally adopted a cam-operated twin-shoe system with a drum in each wheel; twin-brake rods were taken from the vertical lever arms to a cross-shaft which in turn was connected to the brake pedal by another rod. This brake was supplemented by an internal expanding drum on the back axle applied by a screw-down handbrake. (Fig. 26.)

Other experimental work was conducted during the 1921-22 period; firstly a patent filed by E. Atkinson and J. Sadler

on 10 June 1921 for 'improvements in steam gears for motor vehicles' proposed a reduction gear to be mounted on the crankshaft which could be easily added to existing waggons. One unit was made and tried out on a 6-ton waggon and it provided sufficient power for the waggon to surmount any gradient encountered on ordinary roads. Another unit was made and sold though due to oil leakage it was prone to seize and jam the engine main bearings. Secondly, an experiment was made in oil firing using the Kermode system, though this was not really successful because the small firebox of the Atkinson did not induce complete combustion and when the boilers were 'flushed-up' they tended to fill the works with thick black smoke which covered everything with a layer of soot! Also, on the road another fault showed up; when steam was up, a pressure-pump should have taken over to automatically regulate the fuel to the burner, but often this stage was never reached and tales of fitters operating foot-pumps mounted on the footplate for a couple of hours on test runs were quite common.

By early 1923 an articulated 6-wheeler had been introduced, possibly a result of this period of experiment: designed for a load of 12 tons, it used the normal 6-ton waggon as a tractor unit suitably modified to carry the semi-trailer. This modification consisted of a spherical universal joint placed over the rear axle of the unit combined with a special fitting bowl or socket attached to the semi-trailer. This trailer could be stepped in the middle to facilitate ease of loading or could be flat to take long rigid loads such as steel girders. An increased water and bunker capacity was added to this waggon in order to cope with the increased weight. (Fig. 29.)

As the earlier attempts at providing gearing for the waggon did not have much commercial success, it was decided to design a completely new system incorporating a two-speed epicyclic gearbox which was located on an extension of the engine crankshaft. The epicyclic type of reduction gearing was chosen for a variety of reasons; firstly, the makers could adopt a thirteen-tooth sprocket as standard so that with thirty-three teeth on the chainwheel and 42 in road wheels, combined with the reduction of 2·8:1, a speed of 8 m.p.h. gave 200 r.p.m. and 12 m.p.h. gave 300 r.p.m. secondly the gear was foolproof as it could not clash and the driver had only one lever to operate and, finally, it provided a free engine position so that the driver could use his pump when stationary should the injector fail. A description of the gear follows: The crankshaft carried in the main bearing of the engine crankcase carried an arm made in halves, and bolted firmly to the crankshaft. The drive was transmitted by splines cut from the solid shaft, which engaged with corresponding grooves in the arm. Carried by the arm and arranged so as to revolve in gun-metal bushes are two planetary pinions. These pinions had teeth cut in their rims. The teeth engaged with teeth cut in the rim of a sunwheel carried by, and concentric with, the crankshaft. On the face

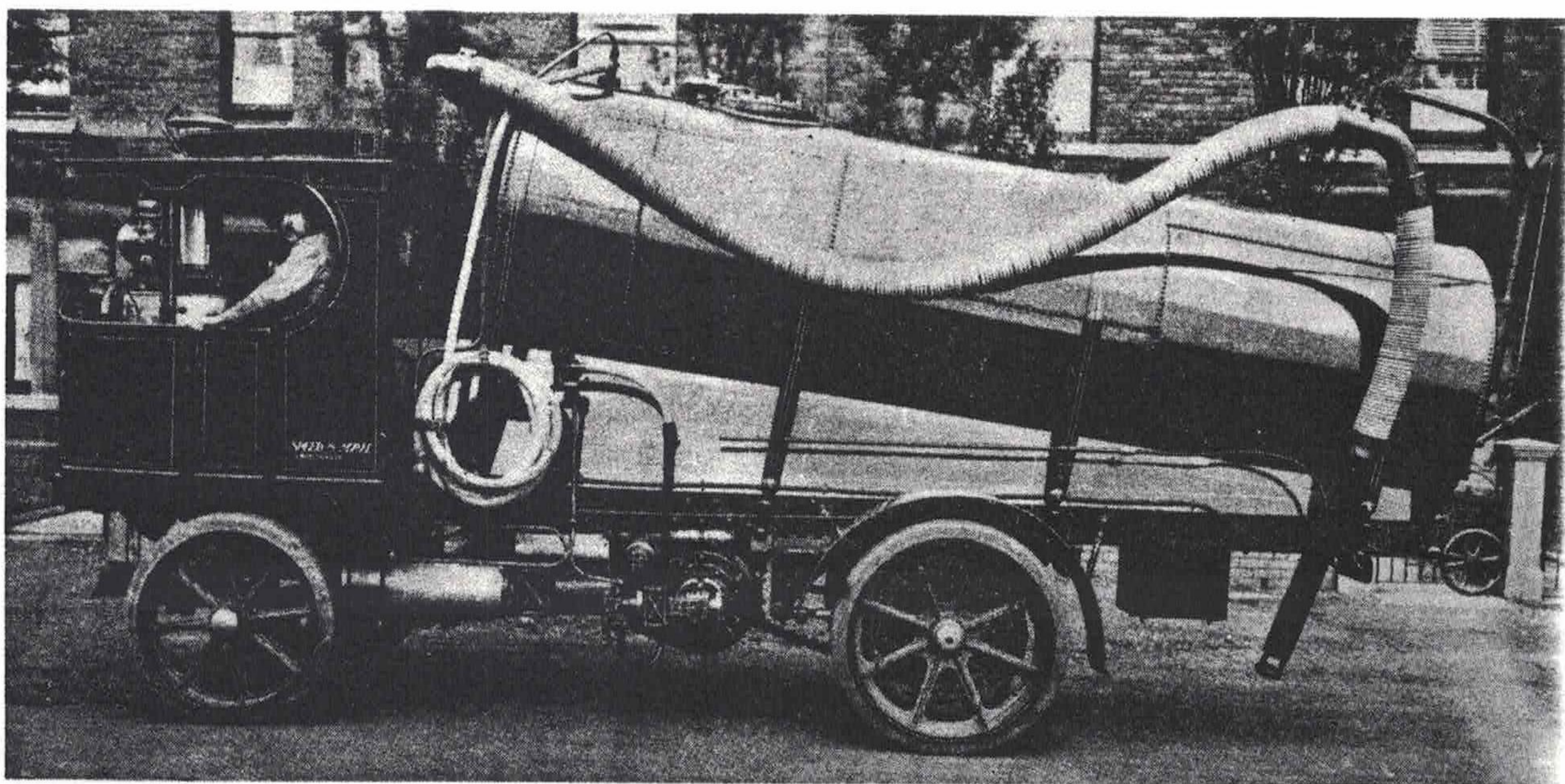
of the sunwheel, dog-teeth were cut. Carried by the sunwheel and attached to it by means of bolts was a brake drum, to which a dust cover was fitted.

Carried by, and concentric with, the crankshaft was a direct-drive clutch and a chain pinion. The former was driven by and free to slide upon, splines which were machined in the crankshaft. On the face of the clutch were formed dog-teeth which were suitably shaped so as to engage with the sunwheel dog-teeth when the clutch was moved forward by the arm. A helical steel spring was used to facilitate the engagement of the dog-teeth. The latter transmitted the drive from the engine to the hind axle. Teeth formed on this pinion engaged with teeth on the planetary system. A packing gland was provided to prevent the escape of oil. A brake band bearing on the drum and actuated by suitable linkages was also fitted. This band was anchored by a spring. The method of operation of the gear was as follows: to engage top gear, the direct-drive clutch was moved forward by its operating arm until the dog-teeth engaged. As the clutch was attached to the crankshaft by means of the splines, the sunwheel was driven at the same speed as the crankshaft and the driving sprocket, for the latter as it was directly coupled to the planetary pinions would revolve the whole gear at crankshaft speed. To engage the lower ratio, the clutch was disengaged through the arm and the brake band was tightened on to the drum, holding the sunwheel stationary. The arm then drove whilst the planetary pinions revolved about their own axes and rolled on the sunwheel, thereby driving the sprocket in the same direction as the crankshaft at a reduced speed. The free-engine position was selected by disengaging the clutch and releasing the brake band so that the gearing was free to revolve around the sprocket, allowing the crank to move whilst the sprocket remained stationary. This gearbox was the first application of an epicyclic

reduction gear to a steam waggon, and its ease of engagement was borne out by a road test conducted by the technical press in July 1924 over a route through the several hilly districts of Westmoreland and Cumberland. It included a climb up to Honister Hawse, 1,190 ft. above sea level where the waggon made an easy unhurried ascent at a speed of between 4 and 5 m.p.h. with a full load of 12 tons 16 cwt (gross). The brakes were also proved to be very efficient on the descent was also made loaded in order to evaluate the whole performance of the vehicle. The waggon, an 8-tonner, was supplied to Mr E. Bennett, Haulage Contractor of Ambleside.

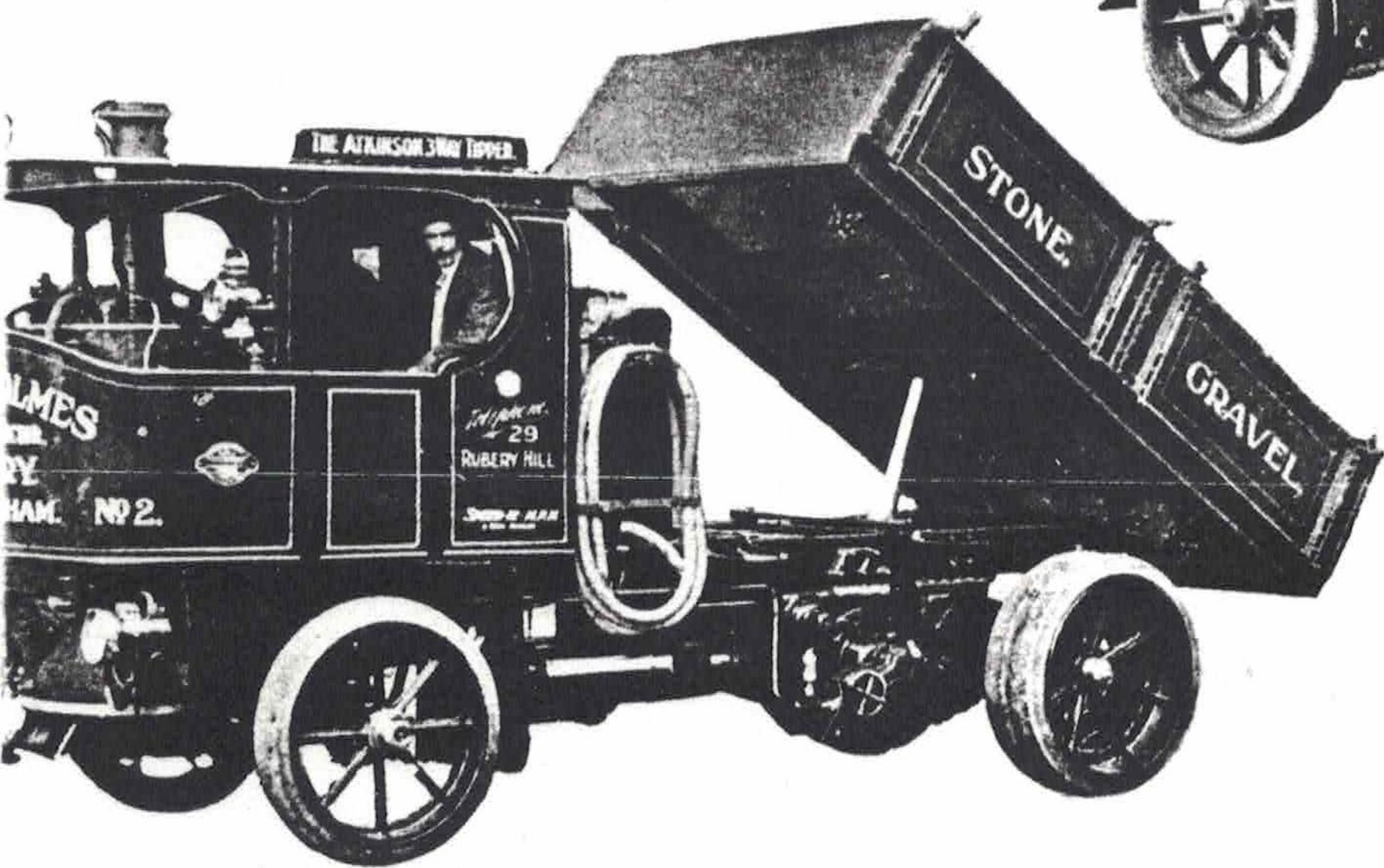
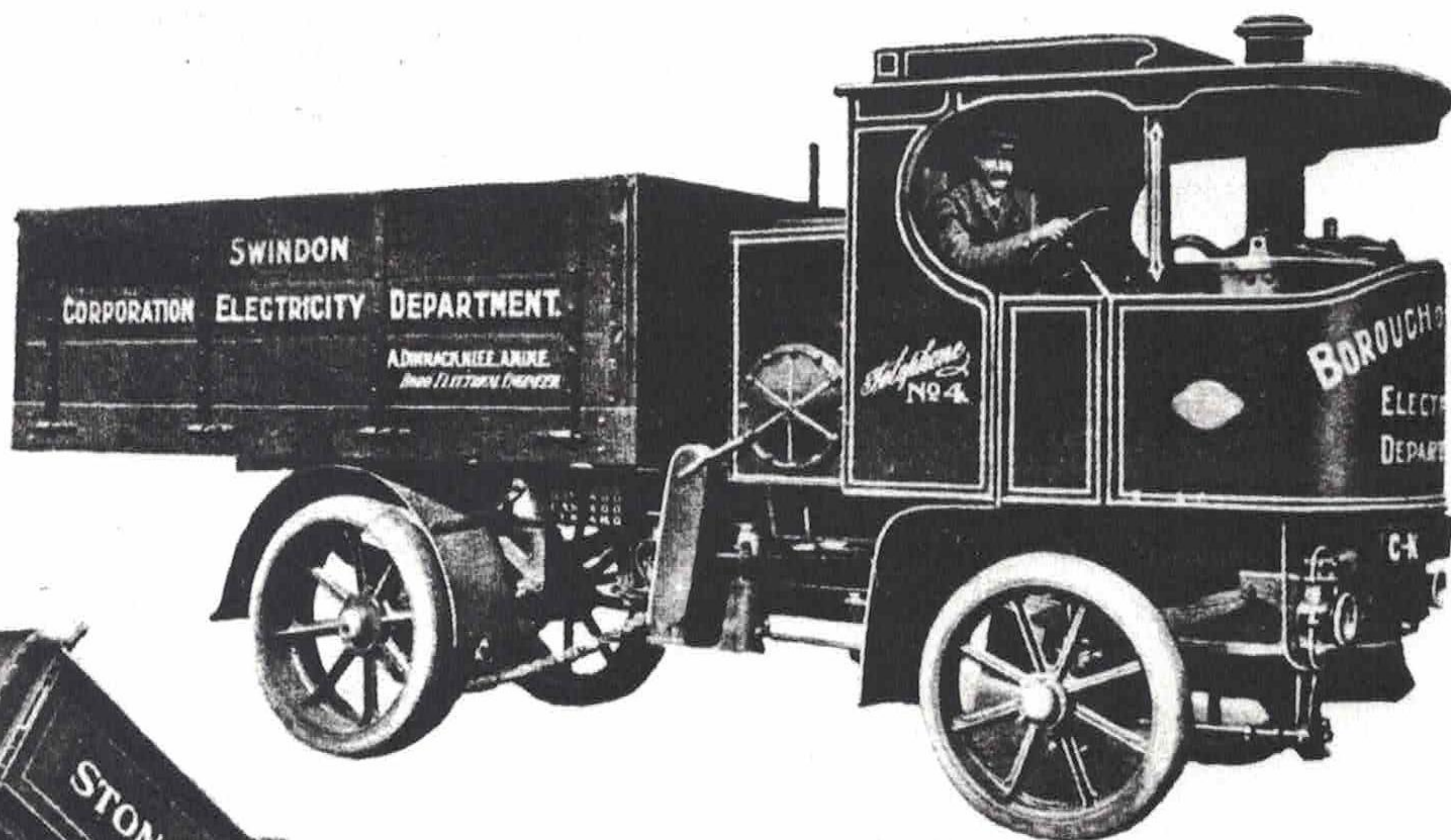
In April 1924 the final design of Atkinson steam waggon was introduced, the 8-tonner, and this with the standard 6-ton model remained unchanged until the end of production in 1929, with the exception of certain modified chassis entered at shows.

The 8-ton version was virtually a stronger, slightly longer 6-tonner with a larger boiler and detail improvements. The boiler had nearly twice the water capacity of its predecessor – it worked at 230 p.s.i. – had a 50 per cent greater heating surface, and had the steam supply pipe dimension increased to 1½ in. whilst the blast pipe was increased to 2 in. A heavy section frame was fitted, this measuring 8 in. deep by 3 in. across the flanges. Other differences included an increase in bunker capacity to 15 cwt. and water capacity to 200 gal. and the manufacture of the back axle to the same design but of a more massive construction. Also at this time it was decided to replace the steam tipping gear with something more modern, and so accordingly a small de Laval turbine coupled to a hydraulic pump and driving a hydraulic ram on the body was substituted for the two-cylinder engine and mechanical gear. The turbine unit was made for Atkinson by the firm of Bromilow and Edwards, but it was not a success for the rotor, being cast in brass, was prone to over-

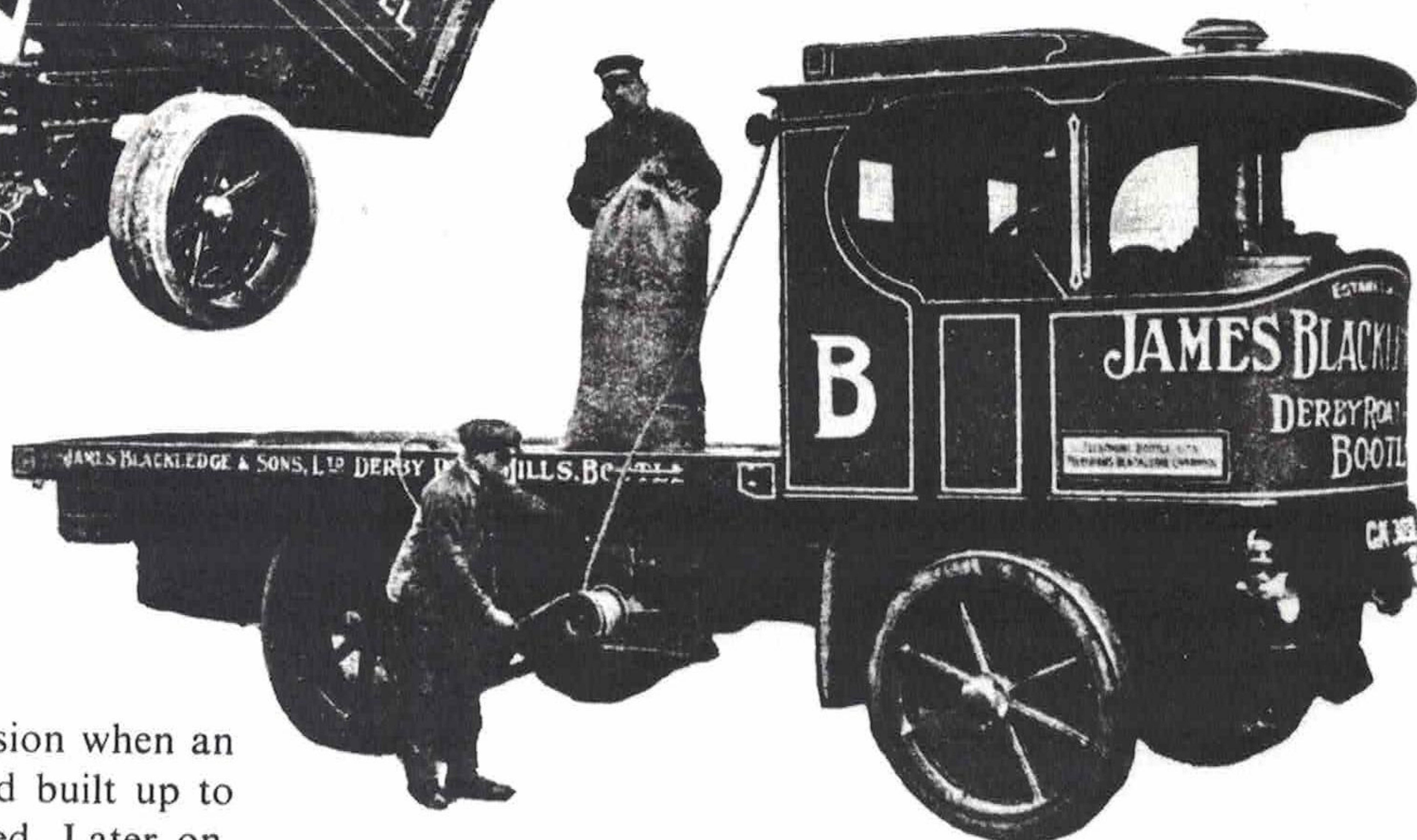


30.
Atkinson
gully
emptier.

31. Atkinson 'Standard' tipper.
Works number 56 was supplied
to Swindon Corporation.
(Courtesy Messrs. Atkinson).



32. Atkinson Uniflow six-ton tipper.
Works number 484 was supplied to
William Holmes of Rubery in 1925.



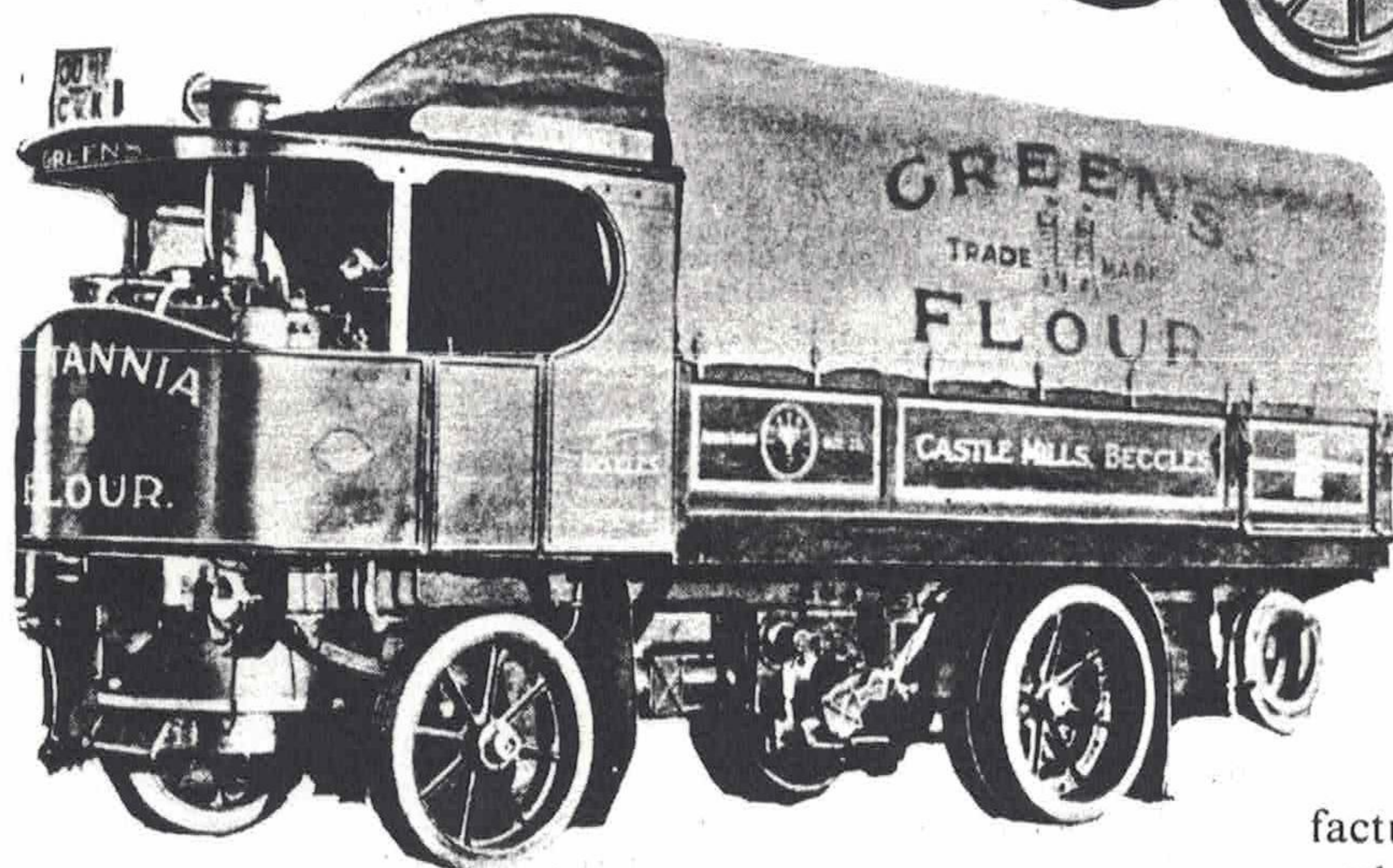
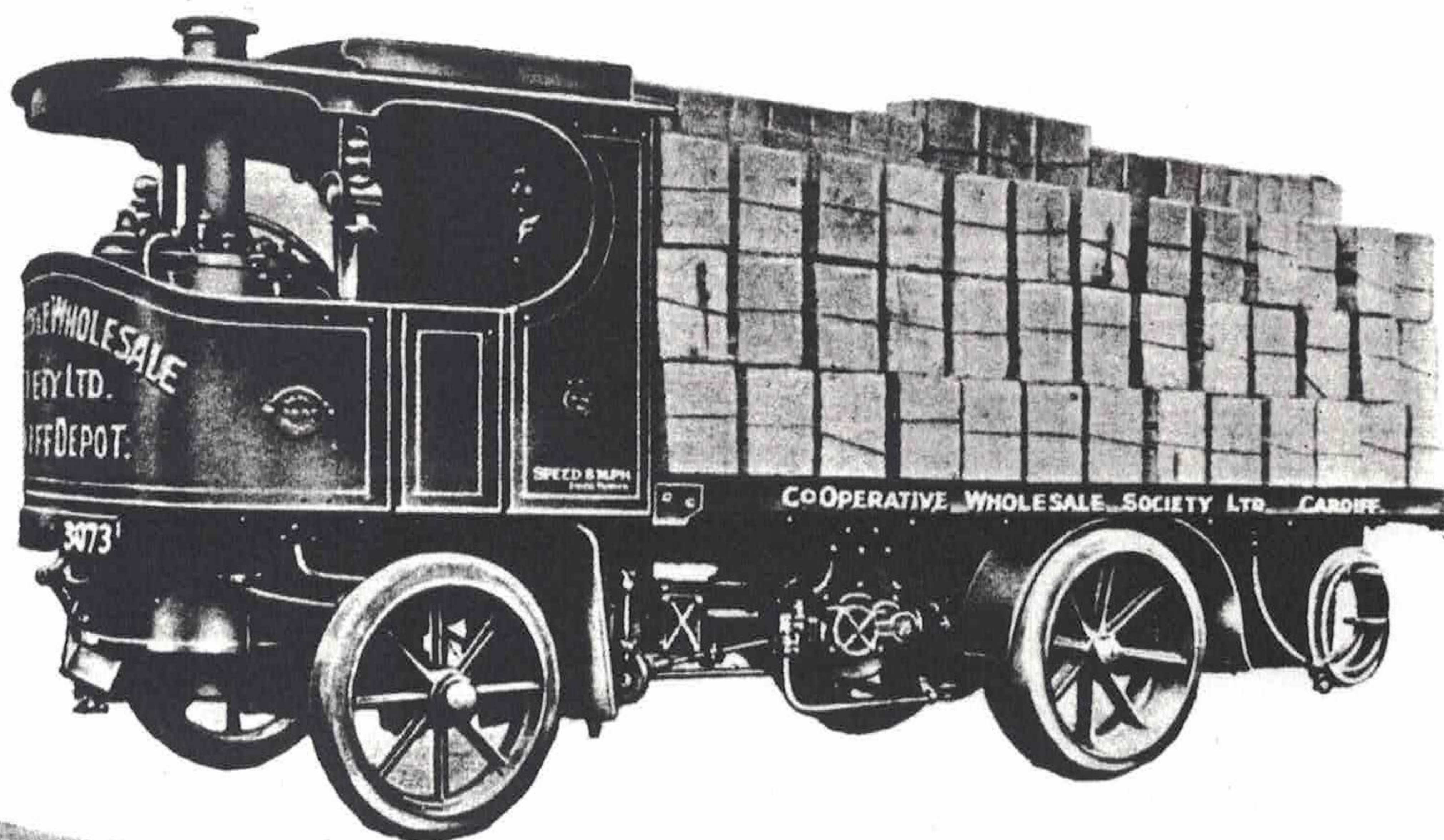
33. Atkinson 'Standard' six ton
platform waggon fitted with
winch. Works number 38 was
supplied to James Blackledge
of Bootle in November 1917.

rev especially under light loads. On one occasion when an empty body was being raised, the rotor speed built up to about 50,000 r.p.m. and the unit disintegrated. Later on, Bromilow and Edwards Ltd were able to perfect this type of tipping gear and it was used on quite a number of makes of waggon. However, at the time, Atkinson decided it would be unwise to unleash the system on an unsuspecting public and after attempting to operate a ram using steam from the boiler instead of oil, they settled for the old twin-cylinder engine driving a hydraulic pump instead of the mechanical gear.

In October 1924, the technical press reported that Messrs Atkinson had a 38-seater steam bus under construction and produced an article entitled, 'The latest in Steam Bus design'. It is not known whether the bus was made or not, or whether it was the figment of someone's imagination, for although Messrs Sentinel had actually produced and demonstrated such a vehicle in that year, the age of the steam bus based on ordinary waggon designs had definitely departed by 1924. The description of the bus stated that it was a modification

of the standard 4-ton waggon with its wheelbase increased to 15 ft. from 10 ft., and having an overall length of 20 ft. 9 in. with an 8 ft. 1 in. overhang behind the back axle. The boiler was to have been of the large 8-ton type, working at a pressure of 235 p.s.i., whilst the engine, of the uniflow type, had a bore and stroke of 6½ in. and 10 in. The comfort of the passengers was to be taken into account for the boiler compartment was totally isolated from the rest of the vehicle, while the 'patent firing system' (presumably the mechanical stoker previously described) would prevent any nuisance from smoke or dust. The suspension was to be softer than that of the waggons and the wheels fitted with 'Super Cushion' tyres. The article also claimed that the bus could be sold for a cheaper price than an equivalent petrol vehicle and that it would be more economical in service. It would also be free from vibrations, jerks when starting on hills, and noises and rattles. However, many special purpose

34. Atkinson 'Standard' waggon supplied in December 1918 to Cardiff Co-op. This was Works number 99.



35. Atkinson waggon number 499. Uniflow type supplied to Greens, Castle Flour Mill of Beccles in 1925.

vehicles were built on the Atkinson chassis including about six gully emptiers and several tar-spraying machines, both of which were designed and manufactured at the Frenchwood works (Fig. 30).

Although by 1928 steam waggon production was in its terminal stage at Frenchwood, a new model was shown at the 1927 Commercial Motor Show, the 12-ton rigid 6-wheeler. This consisted of the normal 8-ton chassis elongated, and with a third trailing axle. No compensation device between the two rear axles was fitted to this waggon and it was therefore unsuitable for the rear bogie to have coupled drive. Several of these were sold and quite a few 4-wheelers were converted, Messrs Bibby having some actually supplied with double driving chains and axles; these latter habitually broke their driving chains between the axles and had to be reverted to trailing axle 6-wheelers. Later on when the company was struggling through the 1930-33 period some more were adapted, this time using a properly designed balance beam between the axles.

The last batch of waggons, Nos. 530-545, were supplied between 1928 and 1929 and these had full weather equipment including V-windcreens. The last one, No. 545, was 'exported' to Scotland. Approximately 540 waggons and tractors were produced during the fourteen years of manu-

facture, making Atkinson one of the major steam vehicle makers in the country. The appended list of steam waggon is incomplete as there are gaps in the register, but it does list most of the units produced by the company. The last Atkinsons on the road were owned by Messrs James Bibby and Sons Ltd, Liverpool, the last one surviving until 1952. As far as is known, no Atkinsons now exist although the author did hear of one allegedly languishing in a slate quarry in Wales about 1966. The present management of the company are very interested in acquiring a waggon if one does exist and they would be pleased to have any information leading to its discovery.

References to Atkinson Steam Waggons in other Literature

- | | |
|-------------------------|-------------------|
| <i>Motor Traction</i> | 25 October 1916 |
| <i>Motor Transport</i> | 31 July 1922 |
| | 30 April 1923 |
| | 28 April 1924 |
| <i>Commercial Motor</i> | 18 July 1922 |
| | 2 October 1923 |
| | 25 September 1923 |
- Atkinson* - A short history of Atkinson Vehicles Ltd, the company and its vehicles from 1907 to 1967. Published by the company. Atkinson catalogues
- The Development of the English Steam Waggon* by Ronald H. Clark (Goose & Son Publishers, 1963)

Specifications of the Atkinson 6-ton Standard Steam Waggon

Engine	1916 type. Twin-cylinder, double-acting duplex
Bore	6½ in.
Stroke	10 in.
B.H.P.	*70 at 300 r.p.m.
	1919 type. Twin-cylinder uniflow
Bore	7 in.
Stroke	10 in.
B.H.P.	*75 at 300 r.p.m.
Boiler	Vertical with cross water tubes
Grate area	3.0 sq. ft.
Heating surface	55 sq. ft.
No. of tubes	56
Tube size	1½ in. dia. × 10 s.w.g.
Working pressure	200 p.s.i.
Superheat	150°F.
Steam temperature ex boiler	540°F.
Transmission	Direct from engine crankshaft. (Epicyclic box optional from 1923 onwards.)
Speed	12 m.p.h.
Chain pitch	2½ in.
No. teeth driving	10
No. teeth driven	33
Engine cut-offs	1916 type: 50%, 70% forward, 75% reverse. 1919 type: 25%, 50% and 75% forward, 75% reverse
Wheels	Cast steel with cruciform spokes, solid rubbers
Tyre size front	970 × 160 mm. single
Tyre size rear	1070 × 160 mm. dual
Dimensions	
Length overall	20 ft. 6 in.
Width overall	7 ft. 1 in.
Height overall	9 ft. 2 in.
Wheelbase	10 ft. 6 in.
Track	5 ft. 5 in. front, 5 ft. to wheel centres rear
Platform length	15 ft.
Platform width	7 ft.
Platform height	3 ft. 9 in.
Platform area	100 sq. ft. (effective)
Weight dry	6 tons 4 cwt.
Weight c/w fuel water and oil	7 tons 10 cwt.
Weight all-up	13 tons 10 cwt.
Water capacity	170 gal.
Price	£1,170 c/w cab and body painted to customer's requirements
London Agents	Edwin Judd, Victoria Street, Westminster

* These figures are supplied by Messrs Atkinson, but the trade magazines of the period quoted 40 and 45 b.h.p. at 200 r.p.m. respectively.

Specifications of the 50-cwt. Atkinson 'Uniflow' Waggon Model 'A'

Model	A-type
Engine	Twin-cylinder, double acting, uniflow
Bore	6½ in.
Stroke	7 in.
B.H.P.	35 at 300 r.p.m.
Torque	45,601 lb. in.
Boiler	Vertical with cross water tubes
Grate area	3.0 sq. ft.
Heating surface	50 sq. ft.
No. of tubes	48
Tube size	1½ in. internal diameter
Working pressure	230 p.s.i.
Superheat	190°F.
Steam temperature ex boiler	580°F.
Transmission	Direct from engine crankshaft
Speed	15 m.p.h. (a claimed maximum of 35 m.p.h. was given by the makers on test)
No. teeth driving	16
No. teeth driven	32
Engine cut-offs	25%, 50% and 75% forward, 75% reverse
Wheels	Cast steel with cruciform spokes, solid rubber tyres
Dimensions	
Length overall	17 ft. 6 in.
Width overall	6 ft. 6 in.
Height overall	8 ft. 9 in.
Platform length	12 ft.
Platform width	6 ft. 6 in.
Platform area	78 sq. ft.
Payload	2½ tons
Water capacity	120 gal.

Specifications of the 1924 Atkinson 'Uniflow' Waggon Model 'D' and 'DT'

Engine	Twin-cylinder, double-acting uniflow	
Bore	7 in.	
Stroke	10 in.	
B.H.P.	*75 at 300 r.p.m.	
Boiler	Vertical with cross water tubes	
Grate area	3.3 sq. ft.	
Heating surface	60 sq. ft.	
No. of tubes	63	
Tube diameter	1½ in. internal	
Working pressure	230 p.s.i.	
Super heat	190°F.	
Steam temperature ex boiler	580°F.	
Transmission	†Epicyclic gearbox and final chain drive	
Speeds	8 m.p.h. at 200 r.p.m., 12 m.p.h. at 300 r.p.m.	
Epicyclic reduction	2.8:1	
No. teeth driving	13	
No. teeth driven	33	
Engine cut-offs	25%, 50% and 75% forward, 75% reverse	
Wheels	Cast steel with cruciform spokes, solid rubbers	
Tyre size front	970 × 160 mm. single	
Tyre size rear	1050 × 160 mm. dual	
Dimensions	Normal (D-type)	Tipper (DT-type)
Length overall	24 ft.	22 ft. 6 in.
Front track	5 ft. 5 in.	5 ft. 5 in.
Rear track	5 ft. 5 in. to centres of dual rear wheels	5 ft. 5 in. to centres of dual rear wheels
Platform length	18 ft.	15 ft.
Wheelbase	12 ft. 6 in.	12 ft. 6 in.
Tare weight	6 tons 10 cwt.	7 tons 5 cwt.
Payload	8 tons	8 tons
Fuel capacity	15 cwt.	15 cwt.
Water capacity	200 gal.	200 gal.
Price	£1,400 c/w cab and body painted to customer's requirements	
London Agents	Talbot & Loblely Ltd, Victoria Street, S.W.1	

* This figure was quoted as 45 at 200 r.p.m. in the technical press of the period, but the above figure was given by Messrs Atkinsons.

† The epicyclic box was an extra and was not supplied on many units.

Specifications of other Atkinson Steam Waggons not Previously Included

Atkinson Model 'B'	4-ton payload with boiler dimensions as for model 'D', and engine dimensions the same as the 'Standard' type, although it was 'Uniflow'. Tipper, Model 'BT' 3½-ton payload
Wheelbase	10 ft.
Front track	5 ft. 5 in.
Rear track	5 ft. to centres of dual wheels
Body length	14 ft. (10 ft. on tipper, Model 'TB')
Ground clearance	7 in. (only the 'D' models had the increased measurement of 7½ in.)
Turning circle	46 ft. (all models)
Unladen weight	'BT' 5 tons 18 cwt., 'B' 5 tons 10 cwt.
Atkinson Model 'C'	6-ton payload with boiler and engine dimensions as for model 'D'. Tipper, Model 'CT' 5-ton payload
Wheelbase	10 ft. 6 in.
Body length	15 ft. (12 ft. 6 in. on tipper, model 'CT')
Unladen weight	'CT' 6 tons 5 cwt., 'C' 5 tons 15 cwt.

List of Undertype Steam Waggons Manufactured by Atkinson & Co. and Atkinson-Walker Waggons Ltd.

Abbreviations used in this list:

- W followed by a number, indicates number of wheels.
- A as a suffix, indicates 'articulated'.
- T indicates 'tractor'.
- Con indicates 'converted'.
- TS indicates 'tar-sprayer'.
- GE indicates 'gulley-emptier'.

Makers Redg.		Date	Type	Owners	Makers Redg.		Date	Type	Owners
No.	No.				No.	No.			
					23	CK 3016	4/17 2/31	5-ton tipper	Jno. Crossley & Sons Ltd, Halifax The Service Garage, Brighouse, Yorks.
							12/31	con. TS	W. J. Glossop Ltd, Hipperholme, Yorks. (123) (scrapped /35)
					24	CK 3017	5/17	6-ton	Hy. Tate & Sons Ltd (scrapped /34)
					25	CK 3018	5/17	6-ton	Jas. Bibby & Sons Ltd (29) (/31, con. W6)
					26	CK 3019	6/17	6-ton	R. Rathbone & Sons, Atherton, Lancs.
							/26		Karrier Motors Ltd (and scrapped)
					27	CK 3020	6/17 1/18 3/19	5-ton tipper	J. H. Martin, Deepdale, Preston Hulton Colliery Co. Ltd Jas. Bibby & Sons Ltd (7) (/31 con. W8, /34 con. T4, scrapped /49)
					28	CK 3022	7/17	6-ton	Forth, Blackett & Wilson Ltd, Newcastle-upon-Tyne
							7/20		Patterson, Zochonis & Co. Ltd, Liverpool (scrapped by Auto- wrex, Seaforth /28)
					29	CK 3023	7/17	6-ton	Buchanan's Flour Mills Ltd, Birkenhead
							/21		T. A. Cole Trading as Edmond- son & Wyatt, Manchester
					30	CK 3024	7/17	6-ton	Earles & King Ltd, Liverpool
							/27		Tower Motor Co. (scrapped)
					31	CK 3025	8/17	6-ton	Wm. Taylor & Sons, Liverpool
							7/19		R. Silcock & Sons Ltd, Liverpool
							/29		Wm. Taylor & Sons
					32	CK 3026	8/17	6-ton	Jno. Dickinson Co. (Bolton) Ltd
					33	CK 3027	9/17	5-ton tipper	Preston Gas Co. (scrapped by 3/34)
					34	CK 3028	9/17	6-ton	Robt. Young Co., Glasgow
							9/22		Alex Smart, Leith
							/26		Oakham Colliery Ltd, Staffs.
					35	CK 3029	10/17	6-ton	The Bedlington Coal Co. Ltd, Northumberland
					36	CK 3030	10/17	6-ton	Hy. Tate & Sons Ltd (scrapped /34)
					37	CK 3031	10/17	6-ton	Jas. Davies, Coppull, Lancs.
							4/18		Webster's (Wigan) Ltd
							3/24	con. W6A	Jas. Bibby & Sons Ltd (10) (/31, con. W8, /34 con. T4, scrapped /47)
					38	CK 3033	11/17	6-ton	Jas. Blackledge & Sons Ltd, Bootle
					39	CK 3032	11/17	5-ton tipper	Andrew Knowles & Sons Ltd, Pendlebury, Lancs. (1) (scrapped)
					40	CK 3035	12/17	6-ton	C. C. Morton & Co. Ltd, Liverpool
					41	CK 3034	12/17	6-ton	Jas. Foley, Liverpool
							7/19		R. Silcock & Sons, Liverpool (12)
							/29		Wm. Taylor & Sons, Liverpool
					45	CK 3036	17/17	6-ton	Wm. Chambers & Sons, Motherwell
							by 4/22		Kings & Co. Ltd, Glasgow
							9/24		E. Carrol, Inverness
					43	CK 3038	2/18	5-ton tipper	Jas. Howard, Littleborough, Lancs. (scrapped by 1/29)
					44	CK 3039	2/18	6-ton	Buchanan's Flour Mills Ltd, Birkenhead
							3/21		T. A. Cole trading as Edmondson & Wyatt, Manchester
							/30		Scrapped by J. Starkey at Cornbrook
					45	CK 3040	2/18	5-ton tipper	R. W. Roulston & Sons Ltd, Liverpool
							12/19		Wm. Gallagher & Son, Liverpool
							/23		Abel Ballast & Lighterage Co. Ltd, Liverpool
							3/27		The Tower Motor Co. (for scrap)

Makers Regd.					Makers Regd.				
No.	No.	Date	Type	Owners	No.	No.	Date	Type	Owners
46	CK 3041	3/18	6-ton	The Southern Cotton Oil Co. (G.B.) Ltd, Trafford Park, Manchester	87	CK 3061	9/18	6-ton	Pye, Oswell & Co. Ltd, Stratford London
		3/24		Sutton & Sons, Moss-side, Manchester			4/28		Alpertons Lorry & Spare Parts Depot (Speechleys), Middlesbrough (scrapped /29-31)
		4/26		The R. & N. Barker Transport Co. Ltd, Manchester	88	CK 3062	9/18	6-ton	Wm. Taylor & Sons, Liverpool
47	CK 3042	3/18	6-ton	Robt Young & Co., Glasgow	89	CK 3063	10/18	6-ton	Wm. A. Pritchard, Crank, Salford Helens (1/23, Crisp & Co. Manchester)
		/22		Alex Smart, Leith			5/23		A. Crossley & Sons, Swales Moor Halifax
		5/24		J. & G. Campbell, Oxton, Berwickshire (scrapped)	90	CK 3064	10/18	6-ton	J. R. Etheridge & Son, Radcliffe Lancs.
48	CK 3046	5/18	6-ton	Buchanan's Flour Mills Ltd, Birkenhead			10/19		David Rollo & Sons, Liverpool
		3/21		T. A. Cole trading as Edmondson & Wyatt, Manchester			/28		Grayson, Rollo & Clover Dock Ltd, Liverpool
49	CK 3043	3/18	6-ton	The African Oil Mills Co. Ltd (later C.W.S.W.), Liverpool	91	CK 3065	10/18	6-ton	Chas. Hinns, Liverpool
		7/31		Dennis Bros. (in part exchange)			4/23		Walton & Co., Liverpool
		by 1/32		Wm. Taylor & Sons, Liverpool			1/24		Jno. Dawber, Liverpool
50	CK 3044	3/18	6-ton	W. & R. Jacob & Co. Ltd, Liverpool			2/24		The Nelson Preserving Co. Ltd, Aintree, Liverpool
		/27		Thos Allen Ltd, (34) Wapping London (sold for scrap /33)	92	CK 3067	11/18	6-ton	Durber Bros., Littleborough, Lancs.
51	CK 3045	4/18	5-ton tipper	Swindon Corpn. (Electricity Dept.) (scrapped by 1/35)			10/19		Jno. Callow & Co., Anfield Liverpool
	CK 3047	4/18	6-ton	Stanley Haulage Co., Liverpool			by 12/22		The British Margarine Co. Ltd, Castlenock, Dublin
		7/24		Francis W. Palin, Liverpool	93	CK 3066	11/18	4-ton	Atkinson's East Cheshire Transport Co, Bollington
		/25		Garlick, Burrell & Edwards Ltd, Bootle			12/19		W. Robson, Edinburgh
		/26		R. & N. Barker Transport Co. Ltd, Manchester	94	CK 3068	11/18	6-ton	McNeal Sawmill Co., Harperley Co. Durham
54	CK 3048	5/18	5-ton tipper	Jas. Bibby & Sons Ltd (6)			by 1/23		Gladdon Coal Co. Ltd, Tow Law Co. Durham
55	CK 3049	5/19	5-ton tipper	Joshua Henshaw & Sons, Liverpool (for sale /31)			/26		Hird Bros., Crook, Co. Durham
56	CK 3051	6/18	5-ton tipper	Swindon Corpn. (Electricity Dept.) (scrapped by 1/35)	95	CK 3069	12/18	5-ton tipper	Worcester Corpn. (Electricity Dept.) (scrapped by 11/36)
77	CK 3050	6/18	6-ton	Bow. McLachlan & Co. Ltd, Paisley (sold /32)	96	CK 3070	12/18	6-ton	The Merchants Warehousing Co. Ltd, Dublin
78	CK 3052	6/18	6-ton	C. C. Morton & Co. Ltd, Liverpool	97	CK 3071	12/18	6-ton	The Merchants Warehousing Co. Ltd, Dublin
79	CK 3053	6/18	6-ton	R. Rathbone & Sons, Atherton, Lancs.	98	CK 3072	12/18	6-ton	Strafford Donning, Liverpool
		5/24		Green & Eastham (later Eastham Co.), Preston			7/25		Jno. Dawber, Liverpool
		10/25		Exors of J. W. D. Pratt, Oldbury, Worcs.			/26		Leonard Stubbs & Co. Ltd, Runcorn, Cheshire (scrapped /27)
80	CK 3054	7/18	5-ton	Wm. Robson, Beaverhall, Edinburgh	99	CK 3073	12/18	6-ton	Co-op Wholesale Society Ltd, Cardiff (sold for scrap /28-29)
		by /21		Wm. Cumming, Paisley	100	CK 3074	1/19	6-ton	Co-op Wholesale Society Ltd, Manchester
81	CK 3055	7/18	6-ton	Wm. Gossage & Sons Ltd, Widnes (1/26 Robey's)			by 1/27		J. H. Peck & Sons, Ardwick Manchester
				The R. & N. Barker Transport Co. Ltd, Manchester (scrapped)			6/28		Frank Toplis, Darley Dale, Derbyshire
82	CK 3056	7/18	6-ton	Russell Turnbull & Co., Bazaar, Glasgow	101	CK 3075	1/19	6-ton	T. & W. McGregor, Glasgow
		by 12/22		Alex Wallace, Bonnybridge, Stirling	102	CK 3076	1/19	6-ton	J. C. Sword, Airdrie, Lanark
83	CK 3057	8/18		Robt. Young & Co., Glasgow					Todd Bros. Co. Ltd (later A. & R. Todd Ltd), Edinburgh (10/31)
		9/22		Alex Smart, Leith					M. Popechin, Granton (for scrap)
		by 3/26		Apex Steel Co. Ltd, Neepsend, Sheffield	103	CK 3078	2/19	6-ton	Rowland Owen & Sons, Wallasey
		10/33		C. E. Stamp trading as King Cole Co., Darnall, Sheffield	104	CK 3077	2/19	6-ton	Walter Scott & Co., Rockferry Cheshire
84	CK 3058	8/18	6-ton	Jas. Gardner & Sons Ltd			10/20		The Mersey Wharfage Co. Ltd, Birkenhead, Liverpool
		12/22		Jno. M. Young, Craigton Garage, Glasgow			/27		Liverpool Warehousing Co. (scrapped by 1/33)
		4/25		Haddon, Muir Co., Millerston, Lanark	105	CK 3082	2/19	6-ton	Earles & King Ltd, Liverpool
85	CK 3059	8/18	4-ton	Assoc. Portland Cement Manufacturers Ltd (2) (scrapped by /29)			5/27		Tower Motor Co., Liverpool (scrapped by 11/28)
86	CK 3060	9/18	6-ton	Wm. Robson, Beaverhall, Edinburgh	106	CK 3081	2/19	6-ton	The Southern Cotton Oil Co. (G.B.) Ltd, Manchester - later at Keadby, Lincs. (scrapped /28-30)
		by /21		Wm. Cumming, Paisley					

Makers No.	Regd. No.	Date	Type	Owners	Makers No.	Regd. No.	Date	Type	Owners
107	CK 3083	2/19	6-ton	Co-op Wholesale Society Ltd, London	126	CK 3111	7/19	5-ton tipper	Melville, Dundas & Whitson, Glasgow
108	CK 3084	11/27 3/19	6-ton	Hy. Watson, Stepney, London Co-op Wholesale Society Ltd, Bristol	127	CK 3112	/28 7/19	6-ton	R. Laidlaw & Sons Ltd, Glasgow Donald Munn, Harthill, Lanark
		10/25		Geo. Bees & Son, Bishopston, Bristol			/26		Co-op Wholesale Society Ltd, London
		/28		Jos. Fish & Sons Ltd, Bristol			12/26		E. R. Cole Ltd
		/31		E. Bristol Collieries Ltd (scrapped /32-4)			9/27		A. W. Gross, Betchworth, Surrey
109	CK 3085	3/19	6-ton	Reading Industrial Co-op Society Ltd	128	CK 3116	7/19	6-ton	Wm. Starford, Castle Eden, Co. Durham (scrapped /29-30)
		/26		Wm. T. Hiller, Bethnal Green, London	129	CK 3117	7/19	6-ton	Massey's Burnley Brewery Ltd (sold for scrap /29)
		10/26		Thos. R. Leigh, Stratford, London (scrapped /29)	130	CK 3118	7/19	6-ton	Preston & District Farmers Trading Society Ltd
110	CK 3086	4/19	6-ton	Banbury Industrial Co-op Society Ltd, Oxon.	131	CK 3119	7/19	6-ton	C.W.S. Ltd, London
		9/28		P. Chilvers, Twyford, Oxon.					Wm. Simms Ltd, Stepney, London (scrapped /29)
111	CK 3080	3/19	6-ton	H. G. Drew, Ringwood, Hants.	132	CK 3120	8/19	6-ton	C. C. Morton & Co. Ltd, Liverpool
		by 1/21		Albt. J. Woods, Poole, Dorset			6/20		APCM Ltd
		/23		W. L. Ballam, Upton, Poole (scrapped /28)			12/31		Cement Marketing Co. (6)
112	CK 3091	4/19	6-ton	Wm. Aitken, Stockbridge, W. Lothian	133	CK 3122	8/19	6-ton	W. & J. Glossop Ltd, Hipperholme (scrapped)
		2/20		Malville, Dundas & Whitson, Glasgow	134	CK 3124	8/19	6-ton	Wm. Taylor & Sons, Liverpool
		6/26		R. Laidlaw & Son Ltd, Glasgow (scrapped)			11/27		C.W.S. Ltd
113	CK 3094	5/19	5-ton tipper	Hy. Tate & Sons Ltd, Liverpool (scrapped /33-4)	135	CK 3125	8/19	6-ton	Henry Watkin, Stepney, London (scrapped /28)
114	CK 3093	4/19	6-ton	C. C. Morton & Co. Ltd, LiverM	136	CK 3123	8/19	6-ton	Hy. Tate & Sons Ltd, Liverpool (scrapped /33-34)
114	CK 3093	4/19	6-ton	C. C. Morton & Co. Ltd, Liverpool	137	CK 3126	8/19	6-ton	Jas. Bibby & Sons Ltd (36) (/31 con. W6, sold for scrap 45/49)
115	CK 3092	4/19	4-ton	Jas. M. Davidson, Glasgow			10/19		Jas. Crook & Sons, Preston
		4/20		A. & J. Clarke, Glasgow	138	CK 3127	8/19	6-ton	Jas. Healey & Sons Ltd, Garston, Liverpool
116	CK 3095	5/19	6-ton	Langley & Wootton, Coventry	139	CK 3128	9/19	6-ton	A. M. Ralli & Son, Liverpool
		12/19		Daniel F. Scanes, London E.1			11/19		Thompson's Motor Co., Dublin
		7/22		Door to Door Motor Transport Services Ltd, London			by 1/27		Dock Milling Co. Ltd, Dublin
		4/24		C. Walker, London, E.16	140	CK 3129	9/19	6-ton	A. Power & Co., Dublin
		8/25		Chas. Morgan, Wilmington, Kent					The Merchants Warehousing Co., Dublin
		/25		Speechley's Motors, Alperton			8/29		Morrison & Co., Wavertree, Lancs.
				C. W. Beckett, Hampton Wick, Middlesex (sold for scrap /34)	141	CK 3130	9/19	6-ton	Wm. Taylor & Sons, Liverpool (scrapped by 12/31)
117	CK 3096	5/19	6-ton	Peter Crerar, Crieff, Perthshire			5/22		T. & W. McGregor, Glasgow
		6/19		Peter McAinsh, Crieff					Wm. Sinclair & Co., E. Kilbride, Lanark
		/24		Young Bros., Riddore, Lanark			2/23		J. F. Lamonley, Uddington, Lanark
118	CK 3097	5/19	4-ton	Whittle Springs Brewery Co. Ltd, nr. Chorley, Lancs.	142	CK 3134	1/25 9/19	5-ton tipper	E. O. W. Hankins, Preston
		6/28		Moor Pit (Chorley) Ltd			1/32		Pant-y-Garw Stone Quarries Ltd, Trefw, Caernarvonshire
		4/30		Wm. Berry, Chorley, Lancs. (sold for scrap by 10/30)					Gwydyr Granite Quarries Ltd and Pengwern & Gwydyr Quarry
119	CK 3101	5/19	5-ton tipper	Jas. Bibby & Sons Ltd (34) (by 1/25 con. W6, /33 con. T4, scrapped by 6/48)	143	CK 3135	9/19	6-ton	C. C. Morton & Co. Ltd, Liverpool
120	CK 3105	5/19	6-ton	C. C. Morton & Co. Ltd, Liverpool	144	CK 3138	9/19	4-ton	Nuttall & Co. Ltd (6), Blackburn (/33 Brown & Sons, Preston for scrap)
121	CK 3107	6/19	5-ton tipper	Jas. Bibby & Sons Ltd (35) (/24 con. W6, /31 con. W8, /34 con. T4, sold for scrap by 6/49)	145	CK 3137	9/19	6-ton	The Southern Cotton Oil Co. (G.B.) Ltd
122	CK 3106	6/19	6-ton	Thompson's Motor Car Co., Dublin			3/31		H. & I. Quick Ltd, Old Trafford (6/31 H. Kenyon for scrap)
123	CK 3108	9/19 6/19	4-ton	Ross & Ross, Newry, Co. Down	146	CK 3138	9/19	6-ton	E. Hughes & Co., Bootle
				Bow, Machlachlan & Co. Ltd, Paisley			5/26		Thos. R. Phillips, Poolstock, Wigan
124	CK 3109	7/19	6-ton	Co-op Wholesale Society Ltd, London			by 10/26		King & Berry, Wigan
		/26		E. R. Cole Ltd, London			3/27		Orrell Colliery Co. Ltd, nr. Wigan (scrapped)
		/27		Albert W. Gross, Betchworth, Surrey	147	CK 3139	10/19	6-ton	Wm. Sinclair Ltd, Glasgow
125	CK 3110	7/11 12/23	6-ton	Jas. B. Fraser & Co. Ltd, Glasgow			5/23		Saddler & Co., Leith (/26 to J. Gibson & Son for scrap)
				Jos. W. Taylor, Tardy Gate, Preston					

Makers Regd.					Makers Regd.				
No.	No.	Date	Type	Owners	No	No.	Date	Type	Owners
148	CK 3147	10/19	5-ton tipper	Hy. Tate & Sons Ltd, Liverpool (scrapped /34)	177	CK 3213	3/20 1/27	6-ton	C.W.S. Ltd C. J. Randall, Plaistow, London (scrapped 12/28)
149	CK 3146	10/19	6-ton	Bow, Machlachlan & Co. Ltd, Paisley	178	CK 3216	3/20	6-ton tipper	Sun Paper Mill Co. Ltd, Feniscowles, Lancs. (sold for scrap)
150	CK 3142	10/19	5-ton tipper	Jas. Bibby & Sons Ltd (38) (by 7/24 con. W6, /33 con. T4, sold for scrap by 9/49)	179	CK 3217	3/20 5/21	6-ton	J. & E. Harding, Liverpool The Strand Haulage Co. Ltd, Liverpool
151	CK 3140	10/19 by 3/32	6-ton	Jas. Heap & Sons, Liverpool			/29		Wm. Dawber, Liverpool (not licensed to run)
152	CK 3143	10/19	6-ton	Rowland Owen & Sons, Wallasey	180	CK 3215	3/20	6-ton	Jos. B. Buthrie, Port Dundas, Glasgow
153	CK 3148	10/19 4/30	6-ton	T. C. Greensmith & Sons Ltd, Burton-on-Trent	181	CK 3226	3/20 4/26	6-ton	Archibald Alexander, Glasgow Frank Hodgson (The Service Transport), Morecambe, Lancs.
154	CK 3149	10/19 6/20 7/29	6-ton	Cowan & Co., Glasgow Wm. N. Kilpatrick, Glasgow APCM Ltd Cement Marketing Co. Ltd (7) Wm. Woodbridge Ltd, Fulham, London			6/27		Chas. D. R. Stott, Morecambe Jno. R. Taylor, Caton, Lancs. Kinder Bros., Blackburn (not licensed to run)
155	CK 3150	11/19	6-ton	Jas. Bibby & Sons Ltd (39) (/31 W6)			1/31		Jas. Bibby & Sons Ltd (45) (/31 W8, 3/34 W4, sold for scrap)
156	CK 3153	11/19 3/24 by 1/27	6-ton	Wm. Brown & Nephews Ltd, Wigan Dickenson Bros., Bradford Sheffield Forge & Rolling Mills Co. Ltd (scrapped)	182	CK 3228	4/20	6-ton	A. Ritchie Ltd, Glasgow D. & W. Henderson Ltd, Partick, Glasgow
157	CK 3151	11/19	6-ton	Hy. Tate & Sons Ltd, Liverpool (scrapped /34)			5/24		Town & Country Motor Garage Ltd, Aberdeen
158	CK 3158	11/19 by 1/27	6-ton	C.W.S. Ltd, London T. & J. Lodge & Sons Ltd, Woodham Mortimer	183	CK 3227	3/20 4/20	6-ton	Jno. King, Aberdeen (scrapped /27-8)
159	CK 3154	11/19	6-ton	A. & J. Clarke, Glasgow	184	CK 3230	3/20	4-ton	Nuttall & Co. (Blackburn) Ltd (8) (/33 to Brown & Sons for scrap)
160	CK 3155		6-ton	W. M. Gossage & Sons Ltd, Widnes (scrapped /29-31 /29-31)	185	CK 3229	3/20 5/26	6-ton	A.P.C.M. Ltd (18) The R. & N. Barker Transport Co. Ltd, Manchester (scrapped 12/30 by N. Adshead, Gatley)
161	CK 3156	3/20	6-ton	A. M. Ralli & Son, Liverpool	186	CK 3208	3/20	6-ton	Cowan & Co., Glasgow
162	CK 3165	12/19	6-ton	Danl. Thwaites & Co. Ltd, Blackburn (scrapped)	187	CK 3231	4/20	6-ton	Jas Bibby & Sons Ltd (41) (/31 con. W6, scrapped by 10/35)
163	CK 3166	1/20	6-ton	C. C. Morton & Co. Ltd, Liverpool	188	CK 3209	4/20	5-ton tipper	Logan & Sons & Co. Ltd, Paisley
164	CK 3169	1/20	6-ton	C.W.S. Ltd, London	189	CK 3233	4/20	4-ton	The Consort Carrying Co. (Marshall Bros.), Higher Broughton, Manchester (sold for scrap 6/30)
165	CK 3170	2/20 12/28 1/29	6-ton	David W. Henderson & Co., Patrick, Glasgow Frank Thompson, Partick (not licensed to run) Hugh Rankin, Glasgow (not licensed to run)	190	CK 3238	4/20 1/29 2/29 /29	5-ton tipper	P. & E. Abbott, London, E.14 Allen E. Rumsey, Limehouse, London
166	CK 3167	2/20	6-ton	Jas. Bibby & Sons Ltd (40) (/34-5 con. T4, sold for scrap)	191	CK 3234	4/20	6-ton	Chas. Walmsley & Co. Ltd, Bury (scrapped /34)
167	CK 3168	2/20	6-ton	Hy. Tate & Sons Ltd, Liverpool (scrapped /34)	192	CK 3232	4/20	6-ton	Jos. Nall & Co. Ltd (14), L. & Y. Goods Yard, Church (/34 to Bolton)
168	CK 3201	2/20 by 1/21 12/30	6-ton	APCM Ltd Cement Marketing Co. Ltd (8) W. & J. Glossop Ltd, Hipperholme	193	CK 3218	3/20 3/33	6-ton	Walkers Ltd, Litherland, Lancs. J. Clare, Liverpool (scrapped)
169	CK 3202	2/20 by 1/28 11/28	6-ton	C.W.S. Ltd, London Joyce & Weeks, London F. C. Giddins & Co.	194	CK 3235	4/20 12/25	6-ton	Eccles Provident Ind. Co-op Society Ltd, Lancs. Irlam Brick Co. Ltd, Rixton, Lancs.
170	CK 3203	2/20 by 1/21	6-ton	A.P.C.M. Ltd Cement Marketing Co. Ltd (9) (scrapped /31)			4/27		The Consort Carrying Co., High Broughton, Manchester
171	CK 3204	2/20 6/26	6-ton	Lancs. Haulage Co., Liverpool Ben Whitehouse, Prescott, Lancs. (scrapped by 5/31)	195	CK 3236	1/30 4/20 7/21 8/22 1/25	6-ton	J. Starrey, Salford (scrapped) J. Murray & Son, Preston Jas. H. Martin, Preston F. Ward, Harrogate Wm. Billington, Preston (scrapped by 17/29)
172	CK 3205	3/20 3/27	6-ton	C.W.S. Ltd, London Hy. Watson, Stepney, London			10/21 7/29		A.P.C.M. Ltd (20) Cement Marketing Co. Ltd (11) Wm. Woodbridge Ltd, Fulham, London
173	CK 3206	3/20 9/26	6-ton	C.W.S. Ltd, London A. E. Prior, Limehouse, London	196	CK 3249	4/20	6-ton	Jas. Bibby & Sons Ltd (23) (/31 con. W6, /37 con. W6P, sold for scrap by 5/52), believed to be last one to exist
174	CK 3707	3/10 9/26	6-ton	C.W.S. Ltd, London A. E. Prior, Limehouse	197	CK 3237	4/20	6-ton	
175	CK 3214	3/20 4/25	6-ton	Port Glasgow United Co-op Society Ltd Edwards & Co., Stockport (scrapped 7/25 after a fire)					
176	CK 3210	4/20	6-ton	A.P.C.M. Ltd					

Makers Regd.					Makers Regd.				
No.	No.	Date	Type	Owners	No	No	Date	Type	Owners
198	CK 3252	5/20	6-ton	The Cappelquin Bacon Factory Ltd, Co. Waterford (scrapped 7/36)	220	CK 3288	7/20	6-ton	A.P.C.M. Ltd (22)
199	CK 3250	5/20	5-ton tipper	Jno. Harrison, Levenshulme, Lancs.			by 1/30		Cement Marketing Co. Ltd (22)
		2/23		Bredbury Colliery Co. Ltd (Jno. Hamilton), Cheshire					Apex Steel Co. Ltd, Neepaend, Sheffield
200	CK 3251	5/20	6-ton	A.P.C.M. Ltd (21)	221	CK 3297	7/20	6-ton	C. E. Stamp (Trading as King, Cole & Co.), Sheffield
		3/22		Cement Marketing Co. Ltd			10/21		A.P.C.M. Ltd (23)
		/25		Smith, Duce & Son, Samlesbury, Preston (scrapped /32 by R. Bamber)			by 7/29		C.M.C. Ltd
201	CK 3253	5/20	6-ton	C.W.S. Ltd, Acton, London	222	CK 3289	7/20	5-ton tipper	Wm. Woodbridge Ltd, Fulham, London
		/24		C.W.S. Ltd, Reading					Preston Gas Co. (scrapped by 3/34)
		7/28		Robt. B. Needham, Reading (scrapped /28-9)	223	CK 3308	7/20	6-ton	Hazell, Watson & Viney Ltd, Aylesbury, Bucks. (for sale /22)
202	CK 3254	5/20	6-ton	C.W.S. Ltd, London			by 1/27		F. J. Sulston & Sons, Aylesbury
		11/27		Henry Watson, Stepney, London	224	CK 3290	7/20	5-ton tipper	Murdoch, Mackenzie Ltd, Motherwell (scrapped /27)
203	CK 3259	5/20	6-ton	Thos. Allen Ltd (21), Wapping, London	225	CK 3310	7/20	5-ton tipper	The Nelson Briquetting Co. Ltd, Rutherglen, Glasgow
		/33		The Great Carmo (R. Stott), Shirley, Surrey	226	CK 3309	7/20	4-ton	Hartley's (Ulverston) Ltd, Lancs.
		11/34		Thos. Allen Ltd (sold for scrap to Cobhain & Robinson, Hadleigh, Essex)	227	CK 3314	7/20	6-ton	A.P.C.M. Ltd (24)
204	CK 3257	5/20	6-ton	Cement Marketing Co. Ltd (10)			10/21		C.M.C. Ltd (21)
		12/30		W. & J. Glossop Ltd, Hipperholme (115) (scrapped /35-9)	228	CK 3312	7/20	6-ton	Preston Gas Co. (scrapped by 3/34)
205	CK 3256	5/20	6-ton	Cement Marketing Co. Ltd	229	CK 3315	5/20	5-ton tipper	Hy. Vile Ltd, London
206	CK 3255	5/20	5-ton tipper	Stones & McNeal, Oswaldtwistle, Lancs.	230	CK 3313	7/20	6-ton	The Nelson Briquetting Co. Ltd, Rutherglen
		4/25		Kinder Bros., Blackburn	231	CK 3316	8/20	5-ton tipper	C. C. Morton & Co. Ltd, Liverpool (/25 con. W6)
		10/26		Jno. Greenaway, Chipping Sodbury, Gloucestershire	232	CK 3317	8/20	5-ton tipper	The Nelson Briquetting Co. Ltd, Rutherglen
		1/29		E. Bristol Collieries Ltd (scrapped /30)			9/24		Sir Wm. P. Hartley, Colne, Lancs.
207	CK 3278	6/20	6-ton	Transmot Ltd, Walton, Liverpool	233	CK 3332	8/20	6-ton	The Midland Pottery Co. Ltd, Melling, Lancs. (scrapped /33 by Maden & McKee)
		9/24		Thos. Lawrenson, Bootle (scrapped /27-32)					The Alton Court Brewery Co. Ltd, Ross-on-Wye (scrapped /32-3)
208	CK 3758	5/20	5-ton tipper	Clover Hill Haulage Co., Nelson (scrapped 12/26)	234	CK 3318	8/20	5-ton tipper	Thos. Hull, Billinge, Lancs. (11/25, Garrett)
209	CK 3260	5/20	6-ton	Wm. Dodd Ltd, Liverpool			2/27		Roe Bros. & Co. Ltd, Sheffield (scrapped)
		3/25		Liverpool Cartage Co. Ltd	235	CK 3333	8/20	6-ton	Co-op Wholesale Society Ltd, Cardiff
		3/30		Robt. Smith & Sons, Birkenhead			6/29		J. E. Anderton, Cardiff (for scrap)
210	CK 3277	6/20	5-ton tipper	Thos. Croft & Son, Preston	236	CK 3337	10/20	6-ton	Todd Bros. (later A. & R. Todd Ltd), Edinburgh
		10/24		Isaac Spencer & Son, Preston			1/34		Malcolm Brechin, Granton, Midlothian
		3/31		Ffestiniog Granite Quarry Ltd, Merioneth, Groby Granite Co.	238	CK 3435	10/21	5-ton tipper	Preston Corpn. (Water Dept.) (/27 to Cleansing Dept. (3) - scrapped /33)
211	CK 3261	6/20	6-ton	Seed Bros., Seaforth, Liverpool	240	CK 3373	11/2	5-ton tipper	Preston Corpn. (1) (scrapped /31-3)
		8/20		Brown, Duncan & Co., Bootle	242	CK 3335	9/20	6-ton	Cement Manufacturing Co. Ltd (13)
212	CK 3279	6/20	5-ton tipper	Martin Earle & Co. Ltd, Wickham, Kent	243	CK 3389	1/21	5-ton tipper	Preston Corpn. (2) (scrapped /31-3)
		/25		British Portland Cement Manufacturers Ltd	249	TB 5080	5/21		T. Carter & Sons Ltd, Walton-le-Dale, Lancs.
		9/27		Cement Marketing Co. Ltd	250	CK 3336	10/20	6-ton	C.W.S. Ltd, London
213	CK 3282	6/20	6-ton	Donald Munn, Harthill, Lanark					Arthur E. Prior, Limehouse, London
		4/25		Jas. B. Fraser & Co. Ltd, Glasgow	251	CK 3342	11/20	6-ton	The Southern Cotton Oil Co. Ltd, Trafford Park
				Adam Parr & Sons, Lostock Hall, Lancs.	254	CK 3339	11/20	6-ton	Rivet, Bolt & Nut Co. Ltd, Castbridge, Lanark
214	CK 3280	6/20	5-ton tipper	The Nelson Briquetting Co. Ltd, Rutherglen, Glasgow	255	CK 3340	11/20	6-ton	Jno. A. Ley & Sons, Walton-le-Dale, Lancs.
215	CK 3281	6/20	6-ton	Thos. Allen Ltd, Wapping, London (22) (scrapped /33)			/31		Jas. Bibby & Sons Ltd (21) (con. T4, /31 - scrapped)
216	CK 3285	6/20	4-ton	McFarlane, Paton & Co. Ltd, Baillieston, Lanark					
		4/26		Donald Munn, Harthill, Lanark					
217	CK 3283	6/20	5-ton tipper	The Nelson Briquetting Co. Ltd, Rutherglen, Glasgow					
		9/41		Allen Gray, Braidwood (dealer)					
218	CK 3286	6/20	6-ton	C. C. Morton & Co. Ltd, Liverpool					
219	CK 3284	6/20	5-ton tipper	Clover Haulage Co., Nelson (scrapped /28)					

Makers No.	Regd. No.	Date	Type	Owners	Makers No.	Regd. No.	Date	Type	Owners
256	CK 3341	11/20 5/23	6-ton	Atkinson's Allen, Knight & Co. Ltd, Huddersfield W. J. Glossop Ltd (127) (carrying No. 458)	296	KB 8994	/21	6-ton	The African Oil Mills Co. Ltd (C.W.S. Ltd), (2), Liverpool
257	CK 3343	11/20	6-ton	The Southern Cotton Oil Co. Ltd, Trafford Park (scrapped by 3/30)	297	KU 504	1/22	4-ton	J. Hand, Selly Oak, Birmingham
258	CK 3374	12/20	6-ton	Jos. B. Guthrie, Port Dundac, Glasgow	306	WY 3567		4-ton	J. W. Firth Ltd, Bradford
		1/21		Greenock Central Co-op Society Ltd	307	TB 9428	4/22	con. TS	W. J. Glossop Ltd (101)
		9/27		Jno. McDonald (Contractors) Ltd, Rutherglen, Glasgow	308	BN 5815		6-ton	Apex Steel Co. Ltd, Sheffield
259	CK 3375	12/20	6-ton	Jas. Bibby & Sons Ltd (26) (/31, con. T4, sold for scrap)	309	BN 5843		6-ton	Jos. Nall & Co. Ltd (22), Bolton
260	CK 3376	12/20	6-ton	Jas. Bibby & Sons Ltd (13) (/25 con. W4, scrapped by 6/47)	311				Jos. Nall & Co. Ltd (23), Bolton
261	CK 3377	12/20	6-ton	Thos. Allen Ltd (25), Wapping, London (scrapped)	312	CK 3473	7/22 4/29		The Tyersal Combing Co. Ltd Laisterdyke, Yorks.
262	CK 3378	12/20 by 12/34	5-ton tipper	Southwark Corpn. (11) Speechley's Motors, Longford, Middlesex	314	TB 9819	5/22		Robinson & Abbott, Preston
263	CK 3379	12/20	6-ton	Jas. Bibby & Sons Ltd (11) (/25 con. T4, sold for scrap)	315	MB 808	11/22		Apex Steel Co. Ltd, Neepsen Sheffield (scrapped)
264	CK 3380	17/20	6-ton	Jas. Bibby & Sons Ltd (16) (/31 con. W6, /34, con. T4, sold for scrap)	317	TC 1403			Morecambe U.D.C.
265	CK 3381	12/20	6-ton	Jas. Bibby & Sons Ltd (15) (/28 con. W6, /33 con. T4, sold for scrap)	319		/29		Bredbury Colliery Co. Ltd (Jno Hamilton), Woodley, Stockpo
266	CK 3382	12/20	6-ton	Jas. Bibby & Sons Ltd (19) (/34 con. T4, scrapped)	320	CK 3477	8/22	2½-ton tip.	Saml. L. Williamson & Son Ltd New Mills, Cheshire (scrapped)
267	CK 3395	2/21	Experimental waggon	Atkinson's (scrapped /21)	321				Oliver Hart, Coppull, Lancs.
268	XB 9739	5/21		Thos. Allen Ltd, London	322	DL 2922		5-ton tipper	Limmer & Trinidad Lake Aspha Co. Ltd (15)
269	CK 3405	3/21 3/21 /27		Atkinson's Cement Marketing Co. Ltd Sheffield Forge & Rolling Mills Co. Ltd (scrapped)	340	TC 1938	1/23		Jas. H. Martin, Deepdale, Presto Limmer & Trinidad Lake Aspha Co. Ltd (26)
270	XD 8143	5/21		Thos. Allen Ltd (26), Wapping (scrapped)	371	TC 3057	1/23		Sandown U.D.C.
271	TB 5083	5/21		T. Carter & Sons, Walton-le-Dale	374	CK 3495	2/23	5-ton tipper	R. Holding & Co., Whitestak Preston (scrapped)
273	XF 5751	6/21 2/34	GE	Southwark Corpn. (12), London A. L. Beadle, Mitcham, Surrey (for scrap)	381	TC 2378	2/23		Oliver Hart, Coppull, Lancs.
276	XD 8704	7/21 12/34	GE	Southwark Corpn. (13), London Speechley's Motors, Alperton & Longford, Middlesex	382	TC 2401	2/23	5-ton tipper	Preston R.D.C. Lancs. C.C.
277	KE 4780				387	TC 5039	3/23		Calder Eng. Co. Ltd, Coli Lancs.
279	TB 6138	7/21 by 10/26		T. Carter & Sons Ltd, Walton-le- Dale, Lancs.	402	CK 3511	6/23 3/24 by 2/27	con. TS	Shephard & Hough Ltd, Stirchle Birmingham
280		/21	5-ton	T. C. Greensmith & Sons Ltd, Burton-on-Trent	408	CK 3596	7/24	5-ton tipper	W. J. Glossop Ltd (113)
283	MA 7953	9/21		S. L. Williamson & Son Ltd, New Mills, Cheshire	407	TC 6169	1/24		W. & J. Glossop Ltd
284	CK 3427	9/21	5-ton	H. & G. Curwen Ltd, Preston M. W. Gilbert, Blackburn Wm. Knowles, Blackburn Sanderson & Woods, Blackburn J. Blake & Co. Ltd, Manchester (sold for scrap 11/29)	410	EK 3392	/23		Atkinson's
285	RT 908	/25	5-ton tipper	Wm. Dunnett & Son, Wood- bridge, Suffolk W. Moore & Sons, Benhall, Suffolk	411	ND 2365	/23-4		Jas. H. Martin, Deepdale, Presto Jno. Rearden, Liverpool (scrapped /29)
286	XH 7671	11/21		Thos. Allen Ltd (28), Wapping (scrapped)	420	TC 6339	1/24		W. J. Glossop Ltd
288	MA 8360	12/21	5-ton tipper	S. L. Williamson & Son Ltd, New Mills, Cheshire (24/28, scrapped by 10/34)	423	WT 3134	/24 by 6/20	con. TS	Thos. Croft & Sons Ltd, Presto Oliver Hart, Coppull, Lancs.
294	NU 7603		con. T4S	W. J. Glossop Ltd (121), Hipper- holme, Yorks.	424	TC 5690	11/23		Wm. Brown & Nephews Lt Wigan
					426	TC 6180	1/24		Jas. Bibby & Sons Ltd (5)
					430	TC 6296	1/24		C. T. Faulkner & Co. Lt Manchester
					434	EC 5314	4/24		Ben Whitehouse, Prescot, Lan
					436	CK 3572	5/24		W. J. Glossop Ltd (103)
					437	CK 3557	5/24 7/24		R. Rathbone & Sons, Atherto Lancs.
					422	WT 4685	by 6/20	TS	Budge Motors, Leyland
					443	WT 4686	by 6/28		W. J. Glossop Ltd (scrapped)
					453	HS 3458	/24		Ernest Kerfoot, Preston
					456	CK 3597	7/24	6-ton	Atkinson's
							/26 /27 /28		Adam Parr & Sons, Lostock H Lancs.
									W. J. Glossop Ltd (105)
									W. J. Glossop Ltd
									Jas. Bibby & Sons Ltd (20) (c T4)
									North of England Haulage C Ltd, Bradford
									Thos. Smith & Son (York) Ltd
									Hy. Leatham & Sons Ltd, Lec
									Dismantlers Ltd, Leeds
									A. L. Whitehead, Beeston, Lec

Makers Regd.					Makers Regd.				
No.	No	Date	Type	Owners	No.	No.	Date	Type	Owners
457	CK 3598	7/24	6-ton	Atkinson's North of England Haulage Ltd Thos. Smith & Son (York) Co. Hy. Leatham & Sons Ltd Cleveland Flour Mills Ltd, Thornaby-on-Tees Thos. Smith & Son (York) Ltd (not licensed for road) W. J. Glossop Ltd (127)	513	CK 3763	9/26	/Tipper	Atkinson's
		by 10/27 /28			513	CK 3763	9/26 /30	/Tipper	Atkinson's M. Halligan & Sons, Birkenhead
458	later CK 3341				519	CK 3772	10/26		Atkinson's
459	XU 7839	9/24	6-ton	Hy. Vile, Smithfield, London (12/34, H. Bailey, Plumstead - scrapped)	521	YE 8499	3/27		Cement Marketing Co. Ltd (22)
464	TC 9506	10/24	/Tipper	Oliver Hart, Coppull, Lancs. (scrapped /35-6)	520	YE 8500	3/27	con. TS	W. & J. Glossop Ltd (119)
465							3/27		Cement Marketing Co. Ltd (21)
468	GB 7165	/24					3/33		T. E. Cunliffe, Handsworth, Birmingham
467	GB 7208	by 6/28 /24	TS	W. J. Glossop Ltd (107) Amralli & Son, Liverpool Geo. Davies & Son Ltd (8), Liverpool (scrapped /35)	521	UT 1555	7/27		Glenfield Haulage Co., Glenfield, Leics.
473	GB 7582	2/25			522	CK 4177	7/29	/Tipper	Atkinson's
479	XX 5302	by 6/28 3/25 12/34	con. TS	W. J. Glossop Ltd (108) Southwark Corpn., London (1) Speechley's Motors, Longford, Middlesex (/40 D. Bowie, Staines, Middlesex)			11/29		C. H. Yates, Kettlebrook, Warks.
480	TU 729	12/25		E. B. Ward, Stockton Heath, Warrington			1/32		Dakin Bros., Lichfield (scrapped)
481	GB 7957	/32 /25		W. & J. Glossop Ltd (117) Shanks & McEwan Ltd, Motherwell	523	CK 3964	2/28	W6	Atkinson's
482	CK 3679	6/25 9/26		Edw. Hankins, Preston Shephard & Hough Ltd, Stirchley, Birmingham (scrapped)			5/28		Holroyd, McCarthur & Co. Ltd (6), Aintree, Liverpool (con. T4 by /36)
483	TD 1363	4/25	6-ton tipper	Walton-le-Dale U.D.C., Lancs.	524	TU 4931	3/27		Leonard Stubbs & Co. Ltd, Runcorn
484	NP 6869	7/25	6-ton tipper	Wm. Holmes, Rubery, Worcs. (2)	528	TE 1868	9/22		Kinder Bros., Blackburn
490	YK 4969	6/25		Cement Marketing Co. Ltd (5) (/33 H. Sturtivant & Son, Beddington, Surrey, scrapped)					
491	YK 7937	7/25 by 2/35		Cement Marketing Co. Ltd (40) (1/34, scrapped by J. Dowley, Astley, Salop)					
495	YL 5656	10/25 /30		Cement Marketing Co. Ltd W. & J. Glossop Ltd (111)					
496	PW 6000	/25		Dewing & Kersley Ltd, Faken- ham, Norfolk					
497	PW 6221	/31 /33 /25	con. TS	W. Puce & Son, Trowse, Norfolk W. & J. Glossop Ltd (112)					
498	CJ 8502	/32 12/25	con. TS	Dewing & Kersley Ltd, Fakenham					
499	RT 1262	/25	6-ton	W. & J. Glossop Ltd (116) Bryant & Langford (Malvern) Ltd (Olympia Show)					
500	DX 5022	/25		Walter Green & Sons Ltd, Beaches, Suffolk					
501	YM 2103	12/25		Hy. Rayner, Ipswich					
502	YM 3257	1/26		Cement Marketing Co. Ltd (18) (10/33, C. Evans & Son for scrap)					
500	TU 729	11-12/25		Cement Marketing Co. Ltd (4) E. B. Ward, Stockton Heath, Cheshire					
506	RF 1585		con. TS	W. & J. Glossop Ltd (114)					
508	YN 6983	3/26 5/31	6-ton	Cement Marketing Co. Ltd (49) Jno. S. Franks, Northolt, Middlesex					
509	YP 2509	7/27		Cement Marketing Co. Ltd (3)					
510	KL 3820	/25		Cement Marketing Co. Ltd (33) W. & J. Glossop Ltd (129)					
511	OP 964		con. T4S	Shephard & Hough Ltd, Stirchley, Birmingham (scrapped)					
512	OP 963								