SECTION 9

LIFTING AND HAULAGE EQUIPMENT

LIST OF ITEMS

		Now AP 119A-1000-		
		Book	Sect	Item
1	Gantries, lifting, heavy	1E	1	1
2	Gantries, lifting, light	1E	1	2
5	Jacks, lifting 4 ton, pillar, hydraulic, Type A and B	1E	2	8
6	Jack, lifting, 5 ton, four-legged, hydraulic, Type A	1E	1	8
7	Jack, lifting, 25 ton, pillar, hydraulic ("Hydralite" Model 825)	1E	1	4
8	Sling, universal, for lifting cased engine change units	1E	3	1
9	Jack, lifting, 50 ton, four-legged, hydraulic	1E	1	5
10	Jack, lifting, 8 ton, pillar, hydraulic ("Servisales" Type C)	1E	1	6
11	Jack, lifting, 5 ton, four-legged, hydraulic, Type C	1E	1	7
12	Jack, lifting, 8 ton, lever, hydraulic, Type A	1E	2	9
13	Jack, lifting, 10 ton, four-legged, hydraulic, Type A	1E	1	9
14	Jack, lifting, 8 ton, pillar, hydraulic, Type B	1E	1	13
15	Crane, jib	1E	2	3
16	Jack, lifting, 8 ton, pillar, screw	1E	1	15
17	Chair, safety suspension	1E	3	15
18	Gantries, Colossus	1E	2	1
20	Jack, lifting, 20 ton, lever, hydraulic	1E	2	6
21	Jack, lifting, 20 ton, lever, hydraulic (Skyhi)	1E	2	10
22	Jack, lifting, 25 ton, four-legged, hydraulic	1E	1	10
23	Jack, lifting, 25 ton, pillar, hydraulic	1E	2	7
24	Wheels, transportation for jacks, 10, 15 and 25 ton, four-legged	1E	1	19
25	Trolley, salvage, tracjac	1C	2	3
27	Machine, weighing, 5 tons	1H	1	12
28	Jack, lifting, 5 ton, pillar, hydraulic	1E	1	14
29	Sling, chain, barrel	1E	3	6
31	Airdraulic power unit - model A5000 - Skyhi	1E	1	12
32	Sling, lifting, E.C.U. cases	1E	3	2
36	Grab, chain	1E	3	14
38	Sling, for lifting one Mk 12 compressed gas cylinder	1E	3	3
40	Jack, lifting, 10 ton, four-legged hydraulic, Type B	1E	1	11
42	Trolley, jack transporting, Mk 4	1E	1	21
43	Crane, jib, revolving	1E	2	2
45	Jack, lifting, 35 ton, wheel changing, hydraulic	1E	1	22
46	Jack, lifting, 35 ton, toe, hydraulic	1E	1	23
50	Slings, wire rope, two-legged	1E	3	9
51	Slings, wire rope, four-legged	1E	3	8

52	Slings, soft eye strop	1E	3	7
53	Slings, soft eye strop	1E	3	10
54	Slings, soft eye strop	1E	3	11
55	Slings, chain, four-legged	1E	3	13
56	Sling, chain, single leg	1E	3	16
57	Slings, mainplane, handling Types A and B	1E	3	12
68	Tackle, load securing	1E	3	17
69	Jack, lifting, 50 ton, tripod hydraulic	1E	1	18
70	Jack, lifting, 25 ton, four-legged hydraulic	1E	1	10
71	Jack, hydraulic tripod, 5 ton	1E	1	24

SECTION 9

LIFTING AND HAULAGE EQUIPMENT

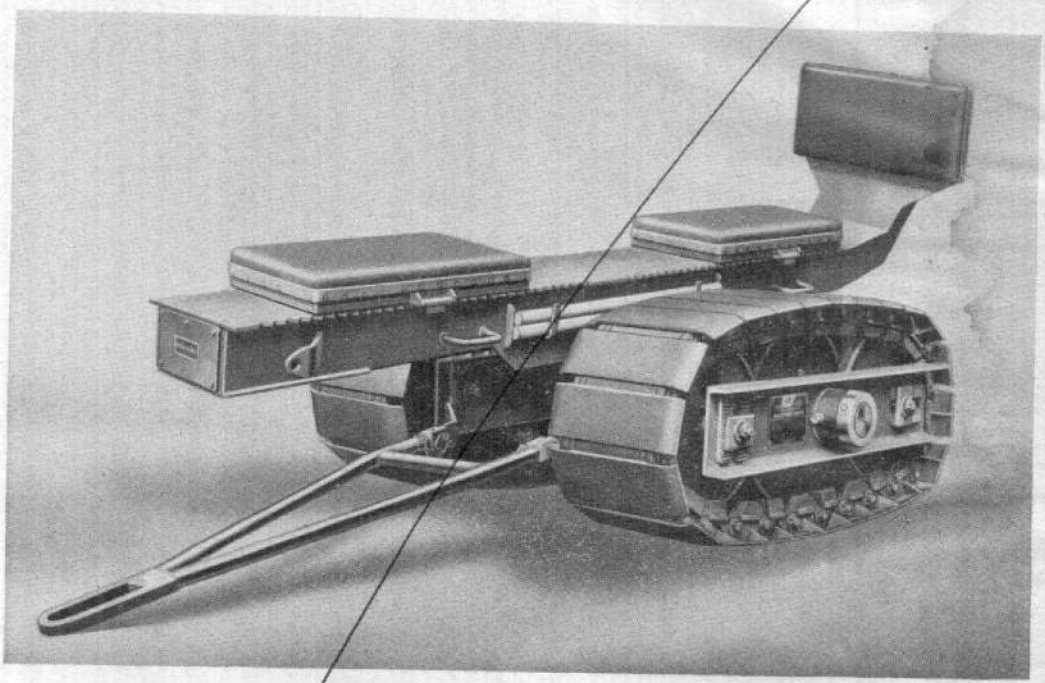
LIST OF ITEMS

		Now AP 119A-1000-		
		Book	Sect	Item
1	Gantries, lifting, heavy	1E	1	1
2	Gantries, lifting, light	1E	1	2
5	Jacks, lifting, 4 ton, pillar, hydraulic, Type A and B	1E	2	8
6	Jack, lifting, 5 ton, four-legged, hydraulic Type A	1E	1	8
7	Jack, lifting, 25 ton, pillar, hydraulic, ("Hydralite" Model 825)	1E	1	4
8	Sling, universal, for lifting cased engine change units	1E	3	1
9	Jack, lifting, 50 ton, four-legged, hydraulic	1E	1	5
10	Jack, lifting, 8 ton, pillar, hydraulic, ("Servisales" Type C)	1E	1	6
11	Jack, lifting, 5 ton, four-legged, hydraulic, Type C	1E	1	7
12	Jack, lifting, 8 ton, lever, hydraulic, Type A	1E	2	9
13	Jack, lifting, 10 ton, four-legged, hydraulic, Type A	1E	1	9
14	Jack, lifting, 8 ton, pillar, hydraulic, Type B	1E	1	13
15	Crane, jib	1E	2	3
16	Jack, lifting, 8 ton, pillar, screw	1E	1	15
17	Chair, safety suspension	1E	3	15
18	Gantries, Colossus	1E	2	1
20	Jack, lifting, 20 ton, lever, hydraulic	1E	2	6
21	Jack, lifting, 20 ton, lever, hydraulic (Skyhi)	1E	2	10
22	Jack, lifting, 25 ton, four-legged, hydraulic	1E	1	10
23	Jack, lifting, 25 ton, pillar, hydraulic	1E	2	7
24	Wheels, transportation for jacks, 10, 15 and 25 ton, four-legged	1E	1	19
25	Trolley, salvage, tracjac	1C	2	3
26	Shearlegs, Type A	1H	1	12
27	Machine, weighing, 5 tons	1E	1	14
28	Jack, lifting, 5 ton, pillar, hydraulic	1E	3	6
29	Sling, chain, barrel			
30	Trolley, transporting, Mk 2 - for jacks, 10 ton and 15 ton, bipod and four-legged			
31	Airdraulic power unit - model A5000 - Skyhi	1E	1	12
32	Sling, lifting, E.C.U. cases	1E	3	2
36	Grab, chain	1E	3	14
38	Sling, for lifting one Mk 12 compressed gas cylinder	1E	3	3

40	Jack, lifting, 10 ton, four-legged hydraulic, Type B	1E	1	11
41	Trolley, jack transporting, Mk 1			
42	Trolley, jack transporting, Mk 4	1E	2	2
43	Crane, jib, revolving			
45	Jack, lifting, 35 ton, wheel changing, hydraulic			
46	Jack, lifting, 35 ton, toe, hydraulic			
47	Jack, lifting, 15 ton, pillar, hydraulic			
48	Jack, lifting, 8 ton, pillar, hydraulic			
49	Trolley, jack, transporting	1E	3	9
50	Slings, wire rope, two-legged	1E	3	8
51	Slings, wire rope, four-legged	1E	3	7
52	Slings, soft eye strop	1E	3	10
53	Slings, soft eye strop	1E	3	11
54	Slings, soft eye strop	1E	3	13
55	Slings, chain, four-legged			
56	Sling, chain, single leg	1E	3	12
57	Slings, mainplane, handling Types A and B			
58	Machines, weighing, tensiometer (3, 5 and 10 tons)			
59	Sling, compressed gas transport cylinders			
61	Guy, lifting, derrick 105 ft. mast			
65	Hoist, engine changing, portable, Type C			
67	Jack lifting, 25 ton, "Hydralite"			
68	Tackle, load securing			
69	Jack, lifting, 50 ton, tripod hydraulic	1E	1	18
70	Jack, lifting, 25 ton, four-legged hydraulic	1E	1	10
71	Jack, hydraulic tripod, 5 ton			

ITEM 25

TROLLEY, SALVAGE, TRACJAC



A.P. Reference 4658A, Vol. 1 and Vol. 6, Sect. 4

Ref. No. 4Q/2332

Classification 1

Overall dimensions

Length 5 ft. 7 in. **Height** (lifting beam fully retracted) 2 ft. 3 in.

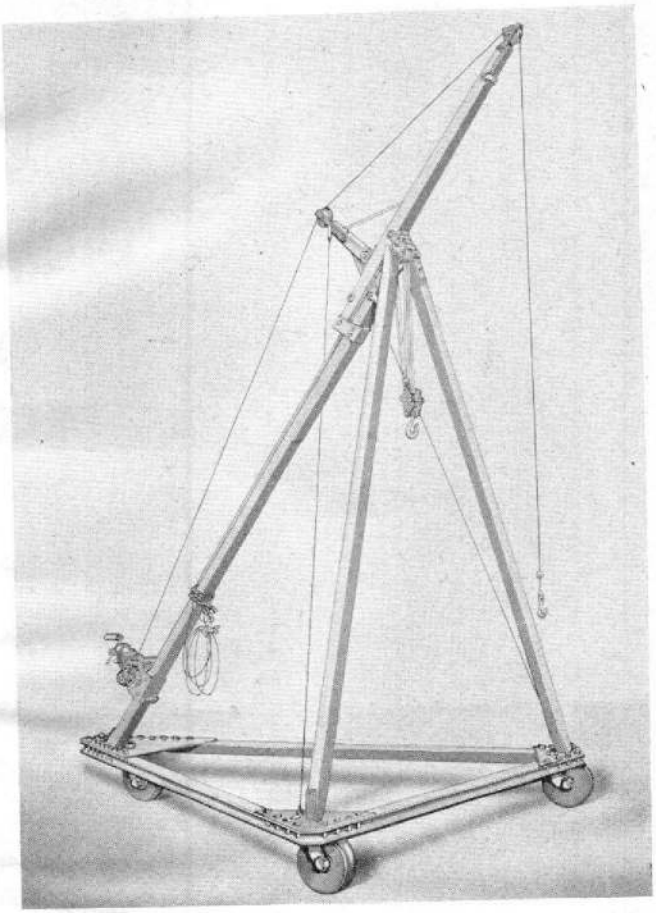
Width 5 ft. 6 in.

Weight 2 tons 8 cwt.

Brief description This is used in conjunction with a towing vehicle for the quick removal of crashed heavy aircraft, and consists of a lifting beam, jacking unit and two track units. The jacking unit, which consists of two double ram type hydraulic jacks, is mounted between the track units and supports the lifting beam. One tracjac is introduced under each mainplane of the crashed aircraft and the lifting beams raised until the aircraft is clear of the ground. The hydraulic lift is 3 ft. and the maximum normal working load is 15 tons. In an emergency a load of 18 tons could be safely handled, but the towing speed for this load must be restricted to two m.p.h.

ITEM 26

SHEARLEGS, TYPE A



A.P. Reference 2817A, Vol. 1, Sect. 7, Chap. 2

Ref. No. 4L/911 **Classification** 2

Overall dimensions (erected)

Height 21 ft. 6 in. **Width** 12 ft. 1½ in. **Length** 16 ft. 1½ in.

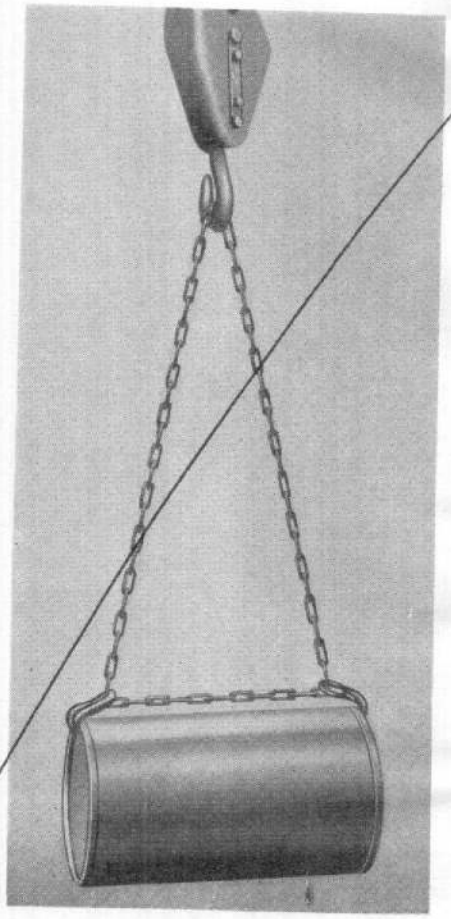
Weight 8 cwt.

Brief description The Type A shearlegs consist of one main leg and two side legs. These are hinged at the top to form a tripod and are mounted upon a triangular base assembly. The main hoist and the extension hoist are operated by a small winch at the base of the main leg. The maximum capacity of the main hoist is 2½ tons and its maximum lift is 15 ft., the maximum capacity of the extension hoist is 1,000 lb. and its maximum lift is 21 ft. 6 in.

~~RESTRICTED~~

ITEM 29

SLING, CHAIN, BARREL



A.P. Reference

Stores Ref. 4L/2571

Classification 2

Drawing No. GM.6180/1

Overall dimensions

Length of endless chain 10 ft. 0 in.

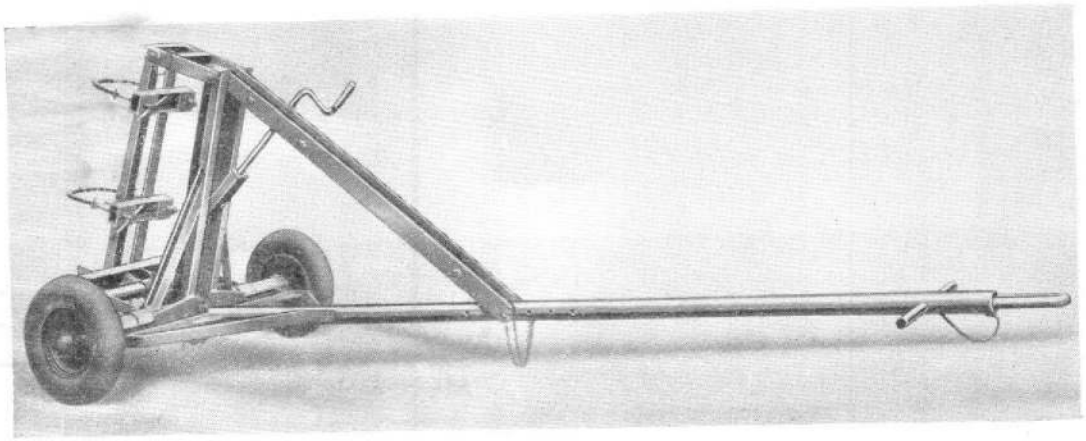
Weight 76 lb.

Brief description This sling is used for lifting barrels or drums. The maximum safe working load is 10 cwt.

ITEM 30

TROLLEY, TRANSPORTING, Mk. 2

for Jacks, 10 ton and 15 ton, bipod and four-legged



A.P. Reference 2817A, Vol. 1, and Vol. 6, Part 1, Sect. 5, Chap. 7

Stores Ref. 4Q/2525 **Classification 2**

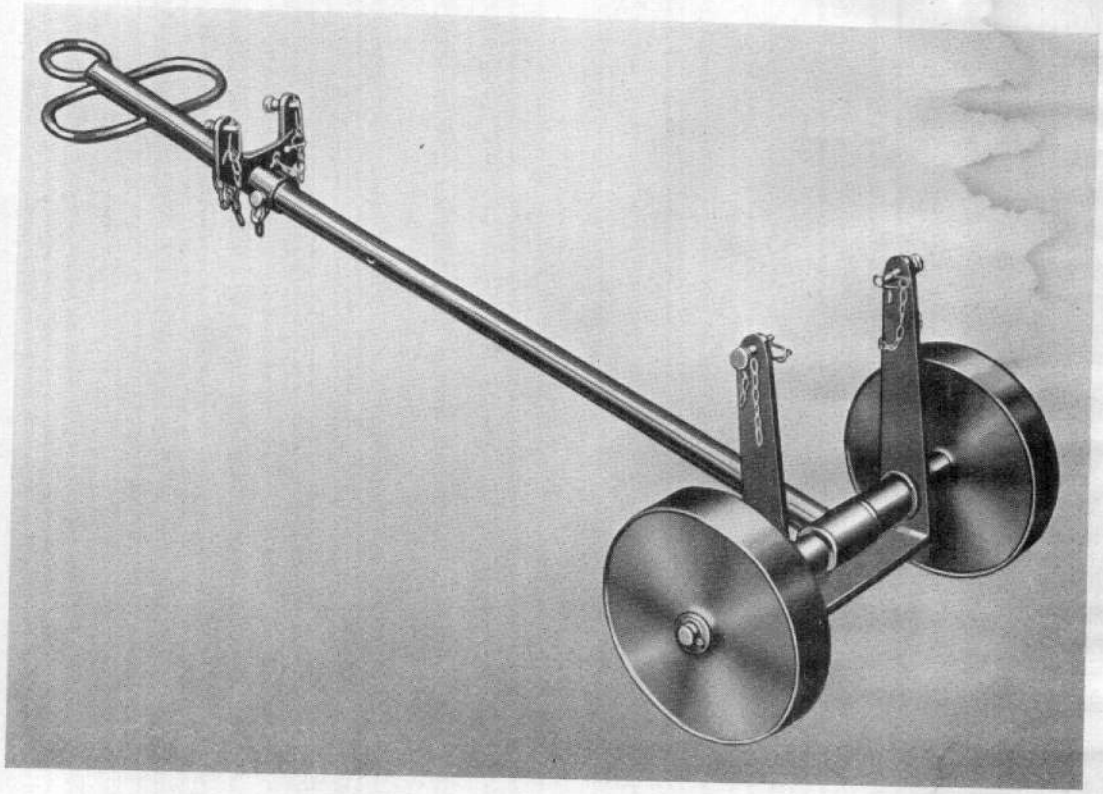
Overall dimensions
Length 10 ft. 7¼ in. **Width** 4 ft. 1½ in. **Height** 3 ft. 7 in.

Weight (without harness) 2 cwt. 2 qr. 12 lb.

Brief description The Mk. 2 trolley is used in conjunction with a towing vehicle to convey 10 ton and 15 ton bipod, and four-legged jacks to aircraft dispersal points. The following accessories are applicable: Harness, Type A (*Stores Ref. 4Q/2526*) for tripod jacks, and Type B (*Stores Ref. 4Q/2537*) for bipod or four-legged jacks.

ITEM 41

TROLLEY, JACK TRANSPORTING, Mk. 1



A.P. Reference 2817A, Vol. 1, Sect. 5, Chap. 4

Ref. No. 4Q/2288

Classification 3

Overall dimensions

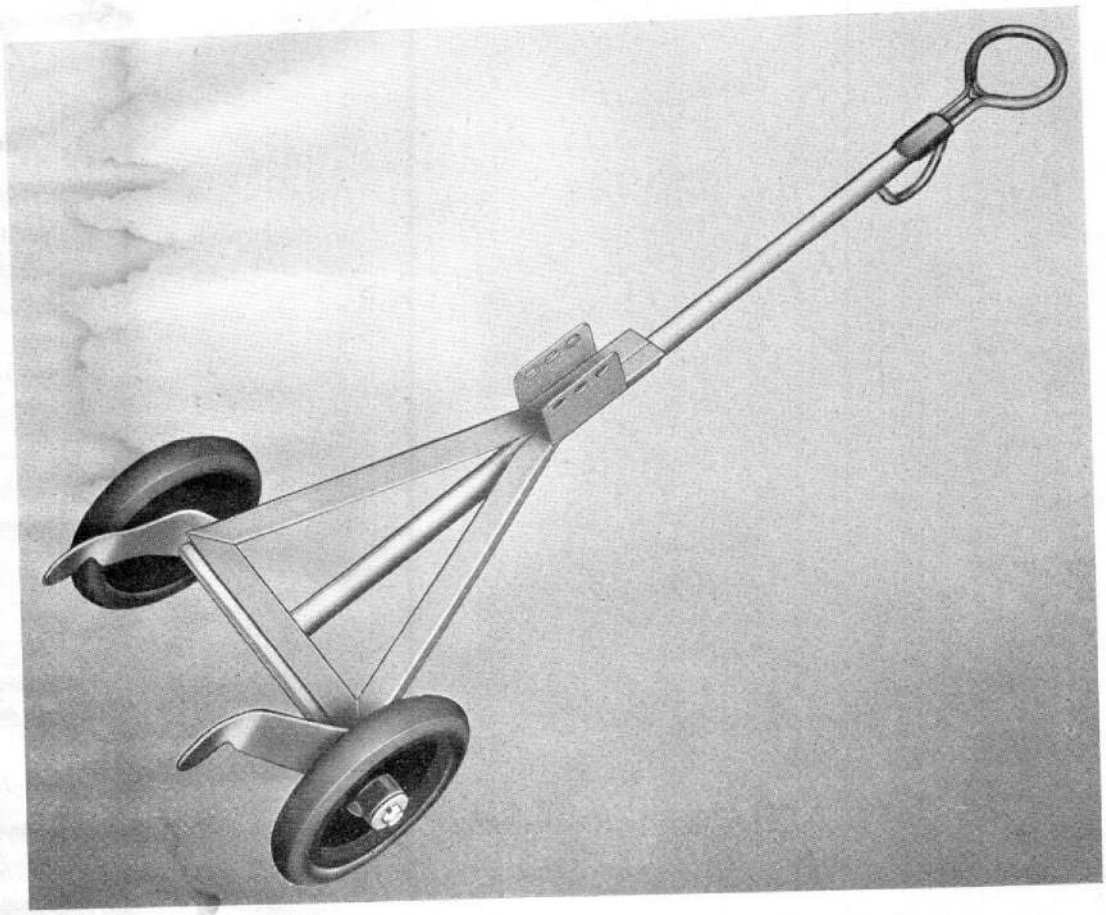
Length 6 ft. 0 in. **Width** 2 ft. 0 in. **Height** 1 ft. 1 in.

Weight 49 lb.

Brief description This trolley is used for transporting the 5 ton four-legged jack (Ref. No. 4Q/2232). Lugs on the bottom of the jack are secured by pins to a two-arm swinging attachment on the axle of the trolley, and the top of the jack is carried by an attachment plate on the handle. The diameter of the wheels is 12 in. and the track 1 ft. 7 in.

ITEM 42

TROLLEY, TRANSPORTING, Mk. 4



A.P. Reference 2817A, Vol. 1, Part 1, Sect. 5, Chap. 16

Classification 3

Ref. No. 4Q/2659

Overall dimensions

Length 5 ft. 7½ in. **Width** 1 ft. 11¼ in. **Height** 1 ft 3 in.

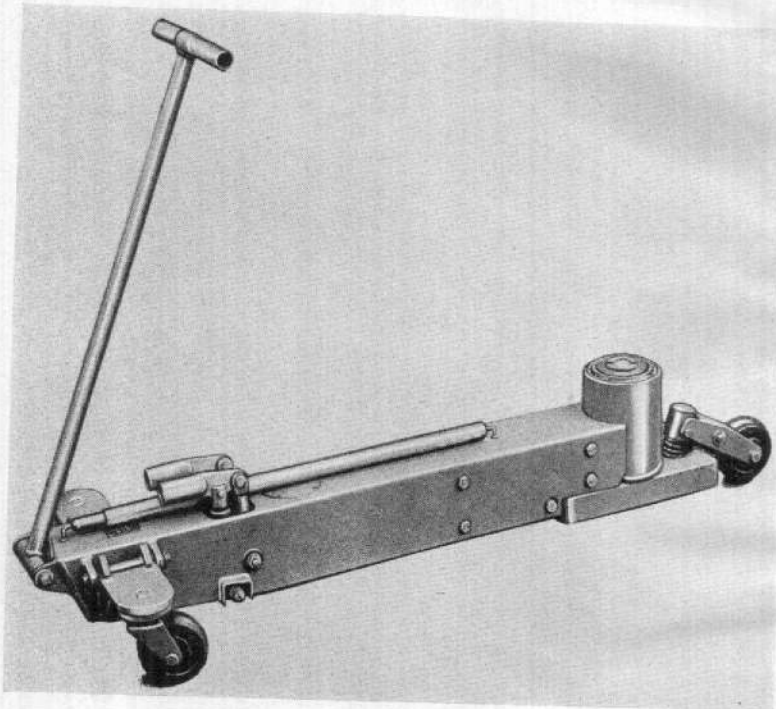
Weight 60 lb.

Brief description This trolley is used for transporting the 10 ton, four-legged, hydraulic jack, Type B (illustrated in ITEM 40). The trolley consists of a welded triangular frame and a tubular steel tow-bar supported by solid rubber-tyred wheels.

~~RESTRICTED~~

ITEM 45

JACK, LIFTING 35 TON, WHEEL CHANGING, HYDRAULIC SKYHI MODEL S3501



A.P. Reference 119K–0108–16A

Ref. No. 4Q/3284

Classification 2

Dimensions

Overall length 5 ft. 3 in.

Overall width 23½ in.

Closed height 11 in. (unloaded) 10 in. (loaded)

Maximum height 27 in. (including screw extension)

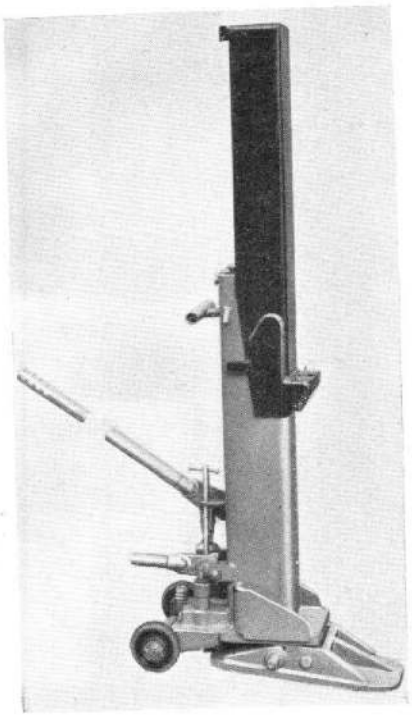
Maximum ram lift 11 in. Ram screw extension 6 in.

Weight 260 lb.

Brief description This jack comprises a horizontal, square box-sectioned body, mounted on three sprung wheels, which incorporates a hydraulic telescopic ram; a screwed extension is fitted to the upper ram to increase the operating height. A high pressure pump is provided for heavy loads up to 35 ton and a low pressure pump giving a quicker lift is provided for light loads. The pumps are independently manually operated. A steering handle, hinged at its lower end, is provided for manoeuvring the jack into position. The jack is designed for raising the bogie, and changing wheels on VC10 aircraft.

ITEM 46

JACK, LIFTING 35 TON, TOE, HYDRAULIC SKYHI MODEL F3503



A.P. Reference 119K–0107–16A

Classification 2

Ref. No. 4Q/3285

Dimensions

Overall height

Ram extended 66 in. Ram retracted 42 in.

Toe height

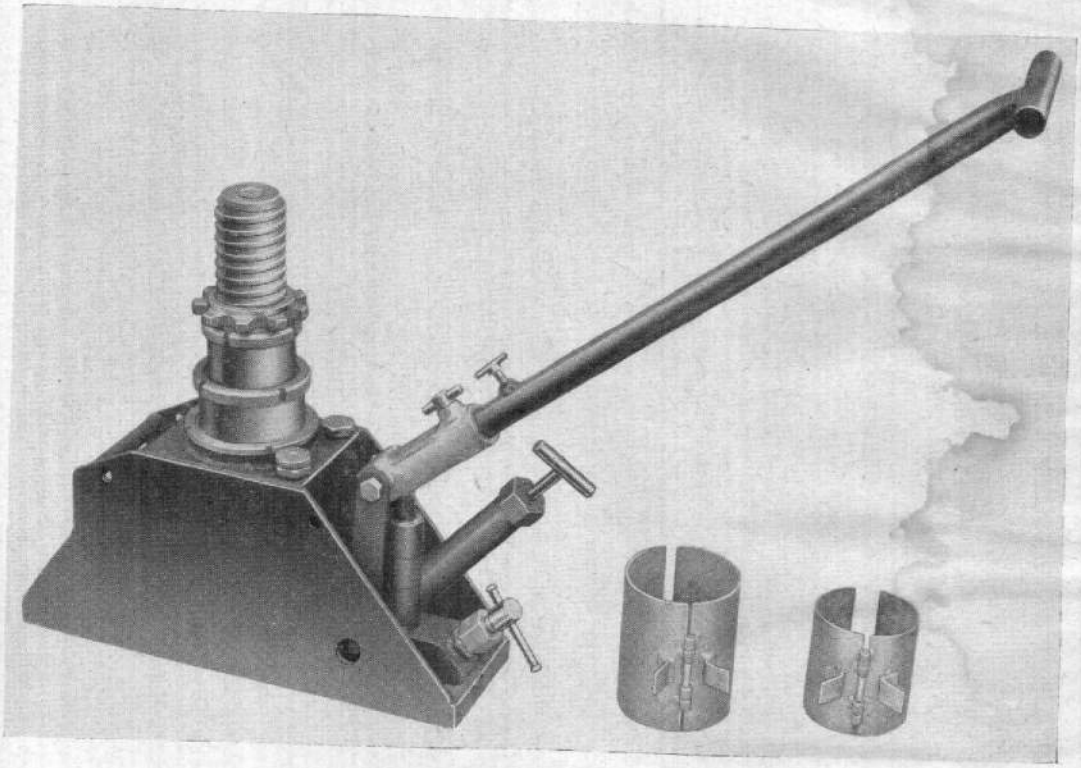
Ram extended 32½ in. Ram retracted 8½ in.

Weight 427 lb.

Brief description This jack is used for raising the bogies of VC10 aircraft when two or more wheels, on the same bogie, have deflated tyres. Early types of this jack are manually operated but later types are provided with both manual and mechanical means of operation; mechanical operation is achieved by using an Airdraulic unit A 10000 (Ref. No. 4Q/2041980). High and low pressure pumps are provided for manual operation by a detachable handle which is stowed, when not in use, in a socket on the base of the jack. Basically the jack comprises a square section body containing a ram and cylinder, with a channel and toe assembly which is raised by the ram. A jack handle integral with the body, and two cushion tyred wheels fitted to the base plate are provided to facilitate handling.

ITEM 47

JACK, LIFTING, 15 TON, PILLAR, HYDRAULIC



A.P. Reference 2817A, Vol. 1 and Vol. 6, Part 1, Sect. 3, Chap. 10

Stores Ref. 4Q/2657

Classification 2

Overall dimensions

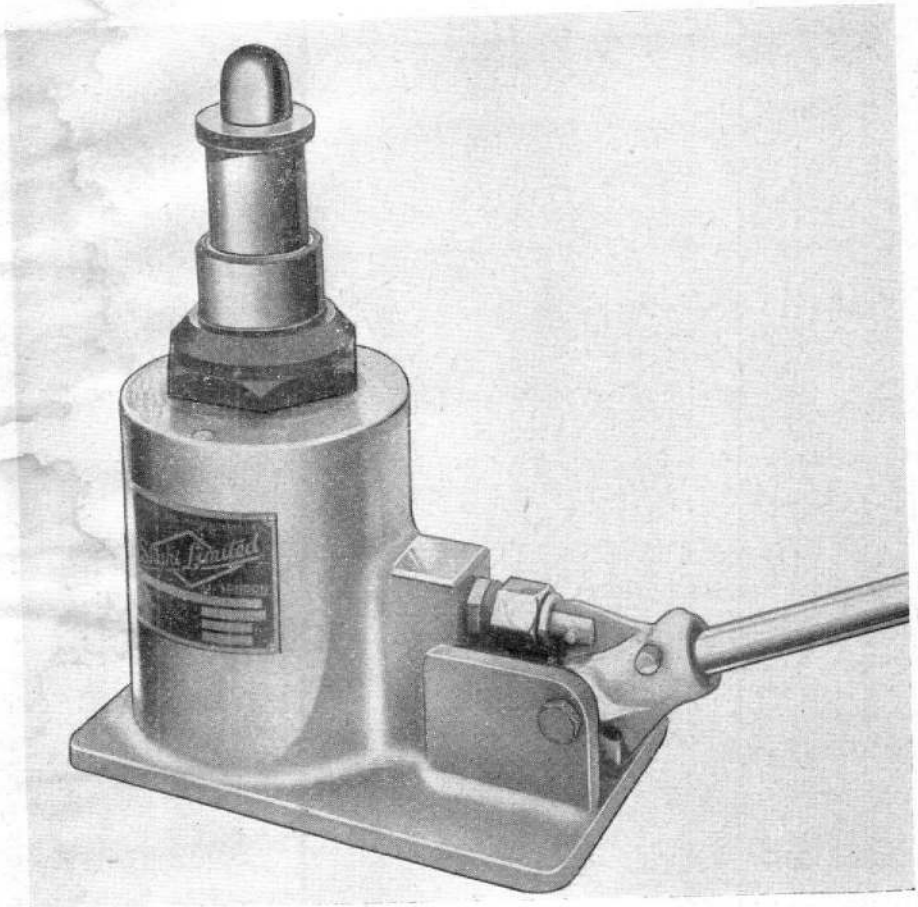
Length 2 ft. 0¼ in. **Width** 6 in. **Height (closed)** 1 ft. 0¼ in.

Weight 100 lb.

Brief description This jack is used for main wheel changing on heavy aircraft. It is of the triple ram type and has a hydraulic lift of 1 ft. 3 in. An air pump is fitted to the jack, for use in low temperatures, to apply a pressure in the fluid chamber to assist the flow of the fluid. The jack is fitted with an operating handle and is provided with split sleeves for safety-locking the rams when they are extended and supporting a load. A jack transporting trolley (*Stores Ref.* 4Q/2666) is used to facilitate the movement and manoeuvring of the jack and also to carry the handle and split sleeves.

ITEM 48

JACK, LIFTING, 8 TON, PILLAR, HYDRAULIC



A.P. Reference 2817A, Vol. 1 and Vol. 6, Part 1, Sect. 3, Chap. 11

Stores Ref. 4Q/2667

Classification 2

Overall dimensions
Length 11 in. **Width** 5 in. **Height (closed)** 8 in.

Weight 34½ lb.

Brief description This jack is of the double ram type and is hydraulically operated by two single-acting force pumps which are operated alternately by the movement of the pump handle. It is used for main wheel changing and other general purpose jacking during aircraft servicing. The jack has a hydraulic lift of 10 in.

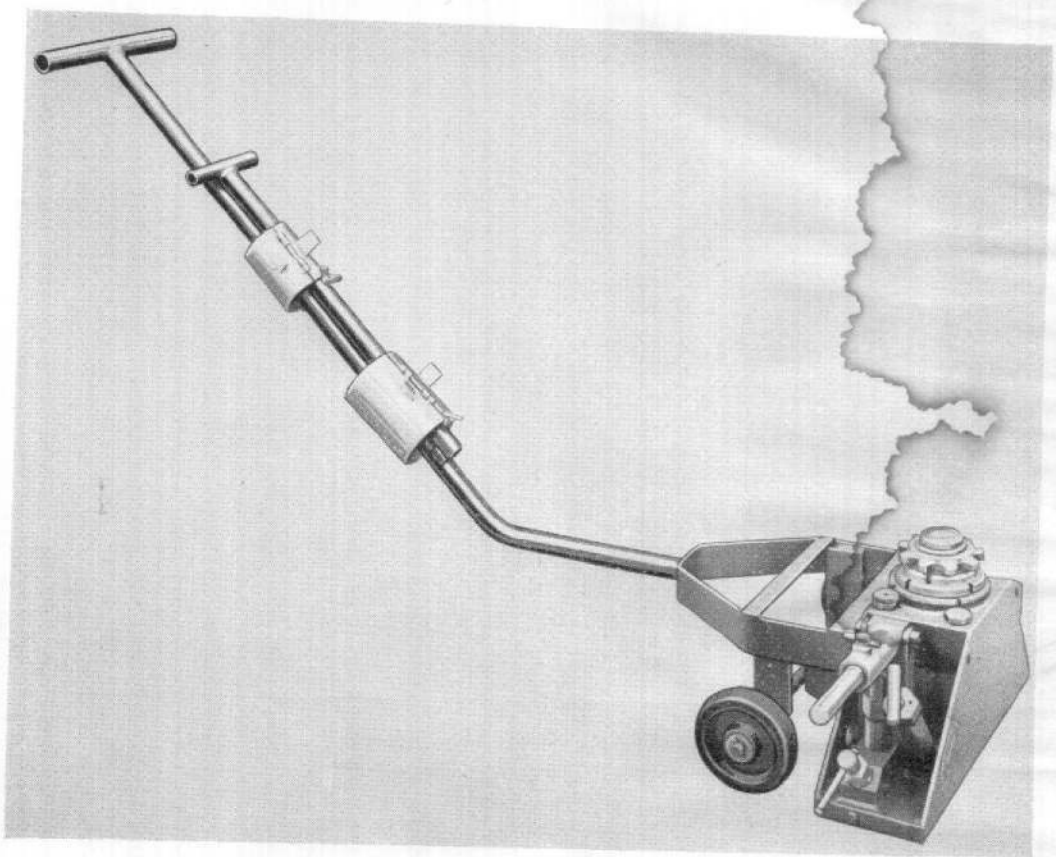
~~RESTRICTED~~

P22113 84149/2786 6/53 2280 C & P Gp. 1

A.P.4306A, Section 9
A.L.52, Dec. 62

ITEM 49

TROLLEY, JACK TRANSPORTING



A.P. Reference 2817A, Vol. 1, and Vol. 6, Part 1, Sect. 3, Chap. 10

Ref. No. 4Q/2666

Classification 2

Overall dimensions

Length 5 ft. 2 in. **Width** 1 ft. 9½ in. **Height** 1 ft. 2 in.

Weight 40 lb.

Brief description This trolley is used to facilitate the movement and manoeuvring into position of the 15 ton pillar hydraulic jack (Ref. No. 4Q/2657) (Item 47), and for carrying the jack operating handle and the split sleeves used for safety-locking the jack rams. The jack is supported at the front of the trolley on two projecting studs which are inserted into holes drilled in the sideplates of the jack. The illustration above shows the jack attached to the trolley.

~~RESTRICTED~~

ITEM 50

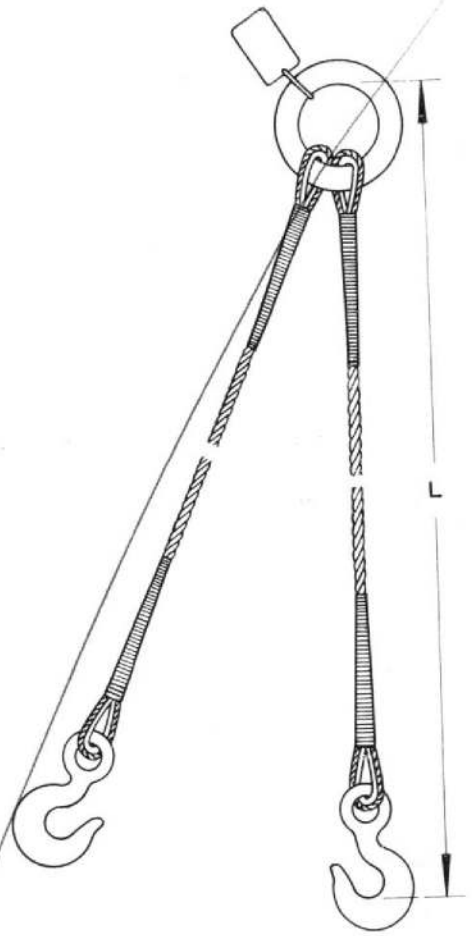
SLINGS, WIRE ROPE, TWO-LEGGED

A.P. Reference 2817A, Vol. 1, and Vol. 6, Part 1, Sect. 11

Drawing No. G.M.4530A—N

Classification 2

Brief description Each of these standard slings consists of two wire rope legs spliced to hook fittings at one end and to a steel ring at the other end. Details of the slings are as follows:—

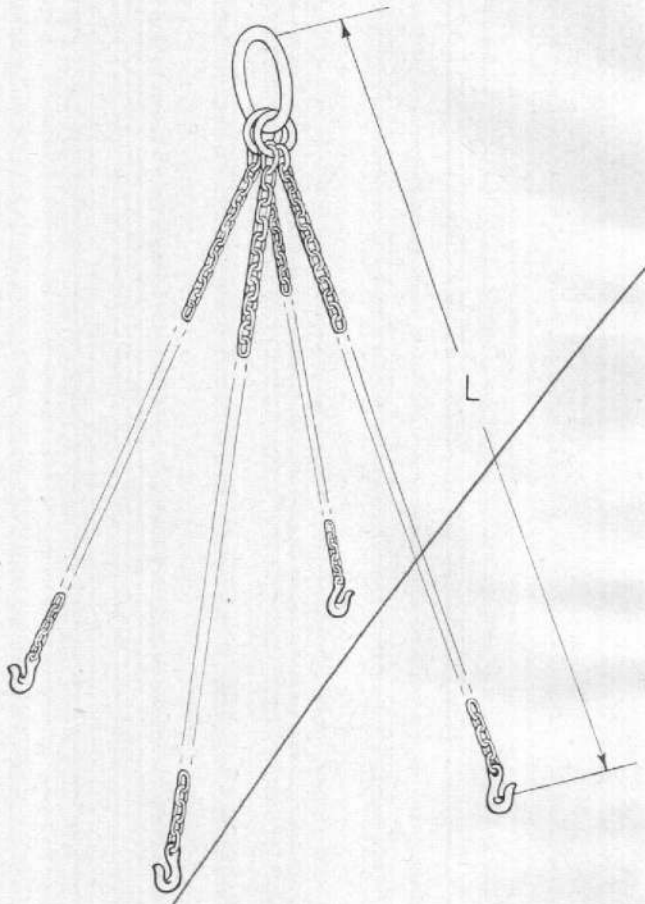


Ref. No.	Length "L"	S.W.L. (*cwts.*) of complete sling when included angle between diagonally opposite legs is:—				Wire rope	
		30 deg.	60 deg.	90 deg.	120 deg.	dia. (*in.*)	Break load (*tons*)
4L/2596 2597	3 ft. 6 in. 5 ft. 0 in.	19¼	17¼	14	10	5/16	3·3
2598 2599 2600	4 ft. 0 in. 6 ft. 0 in. 10 ft. 0 in.	38½	34½	28½	20	7/16	6·5
2601 2602 2603 2604	3 ft. 0 in. 4 ft. 0 in. 5 ft. 0 in. 7 ft. 6 in.	58	52	42½	30	½	9·3
2605 2606	6 ft. 0 in. 12 ft. 0 in.	96½	86½	70½	50	11/16	16·1
—	17 ft. 0 in.	87	78	64	45	⅝	14·5

Printed for H M Stationery Office by Chorley & Pickersgill Ltd Leeds
P32150/280394/7411 2250 2/63 Gp 375

ITEM 55

SLINGS, CHAIN, FOUR-LEGGED



A.P. Reference 2817A, Vol. 1, and Vol. 6, Part 1, Sect. 11

Drawing No. G.M.4535A—C

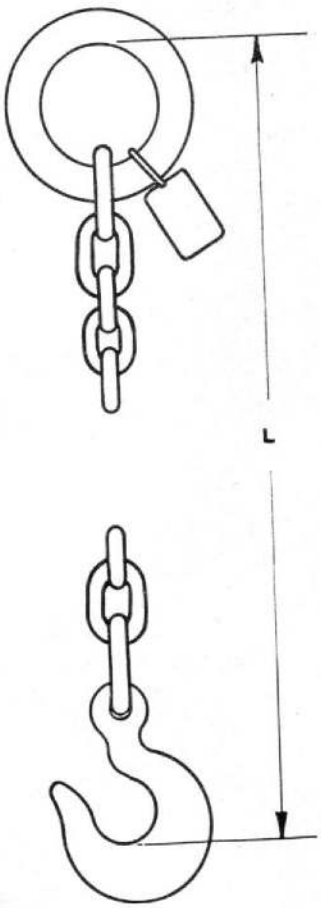
Classification 2

Brief description Each of these standard slings consists of four chain legs fitted with hooks at their lower ends and attached in pairs to two intermediate rings at the top; a main ring carries the two intermediate rings. Details of the slings are as follows:—

Ref. No.	Length 'L'	S.W.L. of complete sling when included angle between diagonally opposite legs is:—				Link Nominal size
		30 deg.	60 deg.	90 deg.	120 deg.	
4L/2587	4 ft 0 in	84 cwt.	76 cwt.	62 cwt.	44 cwt.	$\frac{3}{16}$ in
2621	8 ft 0 in	84 cwt.	76 cwt.	62 cwt.	44 cwt.	$\frac{1}{4}$ in
2588	7 ft 6 in	114 cwt.	102 cwt.	84 cwt.	60 cwt.	$\frac{5}{16}$ in

ITEM 56

SLING, CHAIN, SINGLE LEG



A.P. Reference 2817A, Vol. 1, and Vol. 6, Part 1, Sect. 11

Stores Ref. 4L/2589 **Classification** 2

Drawing No. G.M.4536A

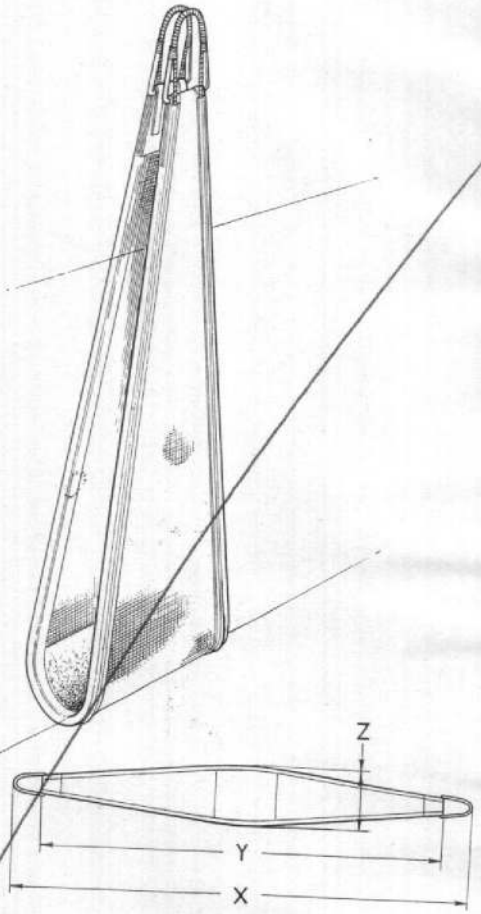
Dimensions

Length 'L' 2 ft. 6 in. Link section dia. $\frac{5}{16}$ in.

Brief description This standard sling consists of a length of chain having a steel ring at one end and a hook at the other end. The safe working load of the sling is 10 cwt.

ITEM 57

SLINGS, MAINPLANE HANDLING, TYPES A AND B



A.P. Reference 2817A, Vol. 1, and Vol. 6, Part 1, Sect. 11

Drawing No. G.M.6029A—B

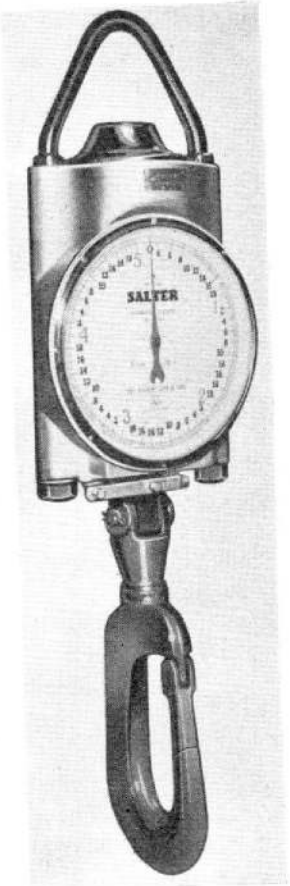
Classification 2

Brief description These slings are used for lifting mainplanes. Each sling consists of a cradle, along the sides of which a length of steel wire rope is secured by webbing, the rope forming a loop at each end of the sling for attachment to the lifting hook. The cradle consists of canvas-covered felt, and is reinforced by leather sheeting in the centre. Details of the slings are as follows:—

Stores Ref.	Type	S.W.L.	Dimensions			Wire rope (breaking load)
			X	Y	Z	
4L/2569	A	3,000 lb.	20 ft. 0 in.	17 ft. 0 in.	2 ft. 6 in.	45 cwt.
2578	B	3,000 lb.	30 ft. 0 in.	27 ft. 6 in.	3 ft. 3 in.	45 cwt.

ITEM 58

MACHINES, WEIGHING, TESNIOMETER TYPE (3, 5 and 10 tons)



A.P. Reference

Stores Ref. 4L/2638, 2639 and 2577

Classification 2

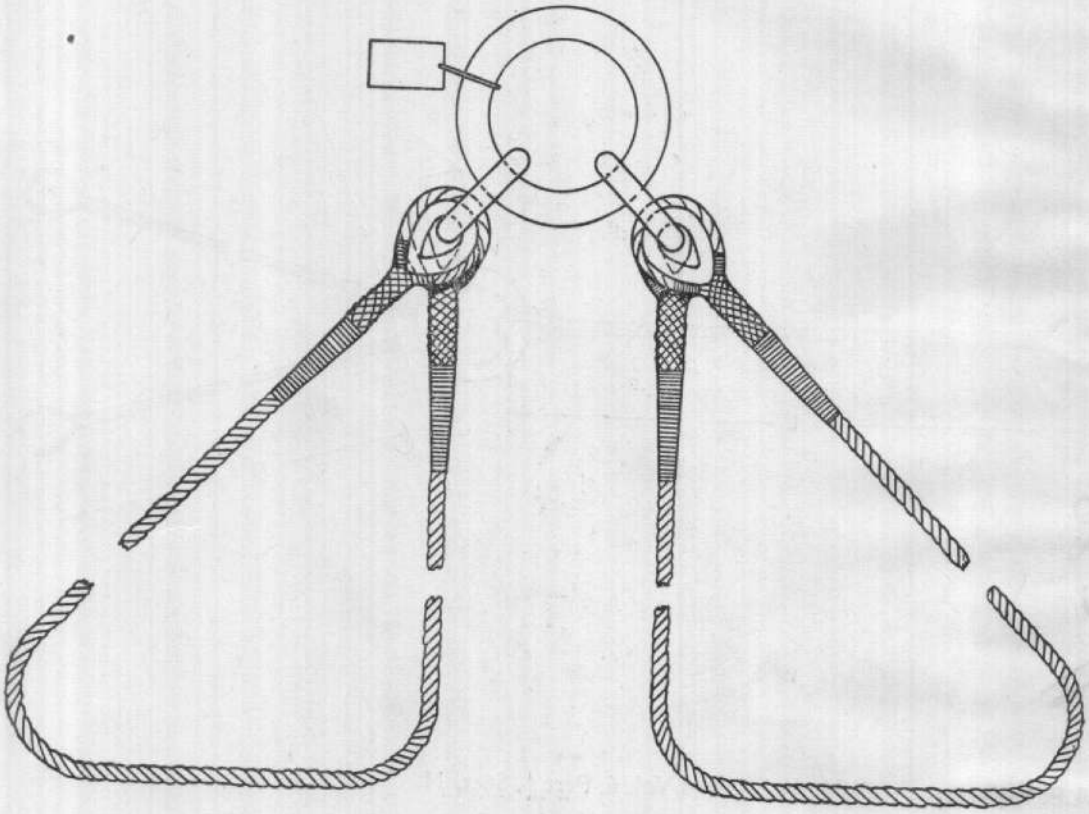
Overall dimensions and weights

Machine	Length	Width	Depth	Weight
3 Ton	3 ft. 8 in.	1 ft. 3 in.	10 in.	240 lb.
5 Ton	4 ft. 2 in.	1 ft. 3 in.	10 in.	278 lb.
10 Ton	4 ft. 6 in.	1 ft. 3 in.	10 in.	320 lb.

Brief description These tensiometer type weighing machines are used for the general purpose weighing of heavy stores and equipment. Each machine has a lifting eye at the top for attachment to the hook of a crane or gantry, and a hook at the bottom for supporting the equipment to be weighed. The weight of the equipment is registered on a dial on the body of the machine. The 5 ton machine is shown in the illustration above, the 3 and 10 ton machines are of similar design.

ITEM 59

SLING, COMPRESSED GAS TRANSPORT CYLINDERS



A.P. Reference 2817A, Vol. 1, and Vol. 6, Part 1, Sect. 11

Stores Ref. 4L/2650

Classification 2

Drawing No. G.M.4434

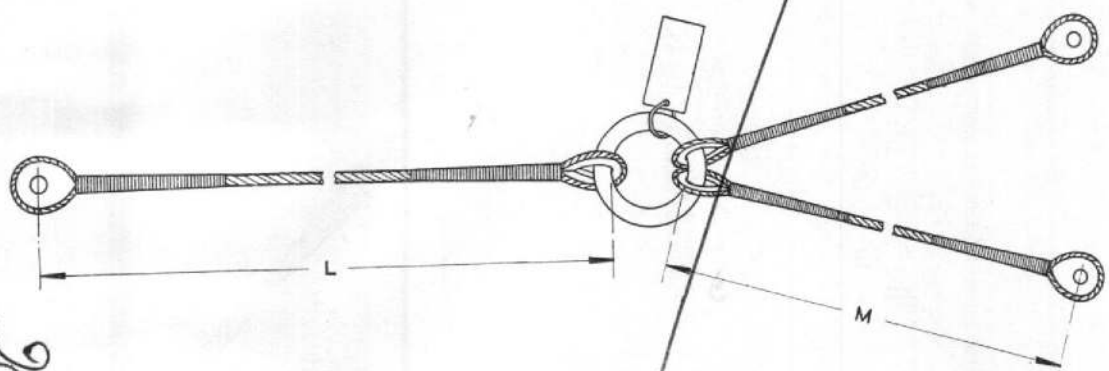
Dimensions

Length of each wire rope, between thimble centres 24 ft. 0 in.
Wire rope circumference 1 in.

Brief description This sling is used for lifting transport gas cylinders. It consists of two lengths of wire rope having eyes spliced at each end for connection to two intermediate rings; a main ring carries the two intermediate rings. The safe working load of the sling is 2 tons.

ITEM 60

GUY, ERECTION, SIDE AND BACK, 105 FT. MAST



A.P. Reference 2817A, Vol. 1, and Vol. 6, Part 1, Sect. 11

Classification 2

Stores Ref. 4L/2624

Drawing No. G.M.28489

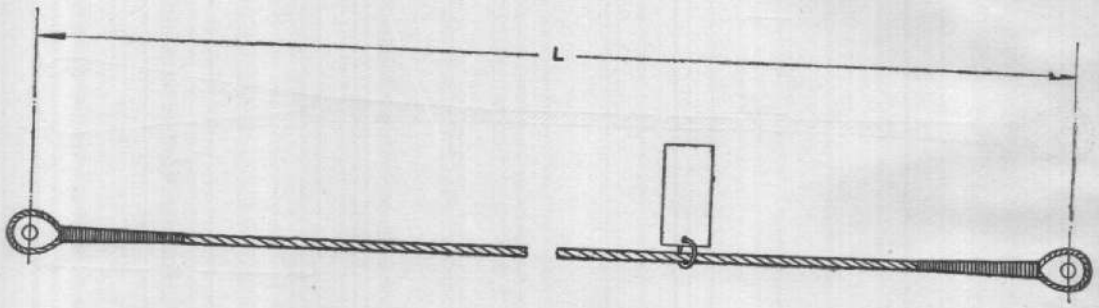
Dimensions

Main leg—Length 'L'	73 ft. 7 in.	Wire rope circumference $1\frac{1}{2}$ in.
Short legs—Length 'M'	6 ft. 6 in.	Wire rope circumference $1\frac{1}{8}$ in.

Brief description This wire rope guy consists of one long and two short legs which are connected by a steel ring. An eye is spliced at both ends of each leg. The eyes connected to the ring have ordinary thimbles and the other eyes have solid thimbles, that on the main leg is drilled to suit a $\frac{3}{4}$ in. dia. pin and those at the end of each short leg are drilled to suit a $\frac{5}{8}$ in. dia. pin. The safe working load, when the short legs are splayed at 30 deg. inclusive, is 1 ton.

ITEM 61

GUY, LIFTING DERRICK, 105 FT. MAST



A.P. Reference 2817A, Vol. 1, and Vol. 6, Part 1, Sect. 11

Stores Ref. 4L/2628

Classification 2

Drawing No. G.M.28491

Dimensions

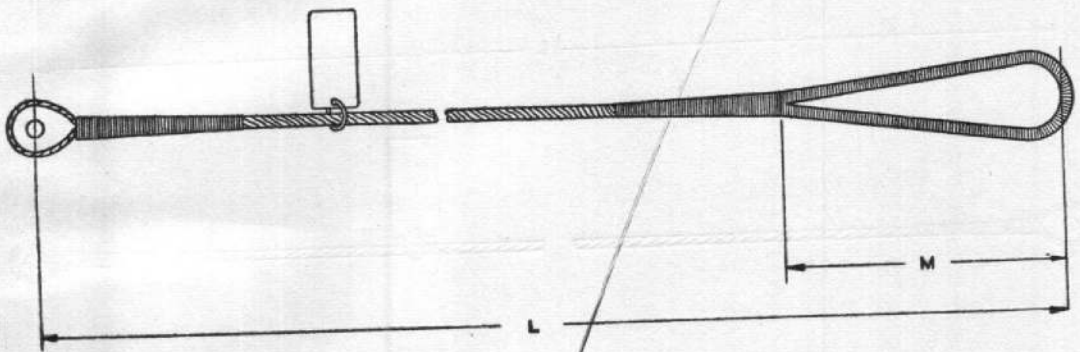
Length 'L' 25 ft. 0 in.

Wire rope circumference 1 in.

Brief description This guy consists of a single length of wire rope spliced to form an eye at each end. Each eye has a solid thimble which is drilled to suit a $\frac{1}{2}$ in. dia. pin. The safe working load of the guy is 10 cwt.

ITEM 62

GUY, WORKING DERRICK



A.P. Reference 2817A, Vol. 1, and Vol. 6, Part 1, Sect. 11

Classification 2

Stores Ref. 4L/2625

Drawing No. G.M.28495

Dimensions

Length 'L' 45 ft. 0 in.

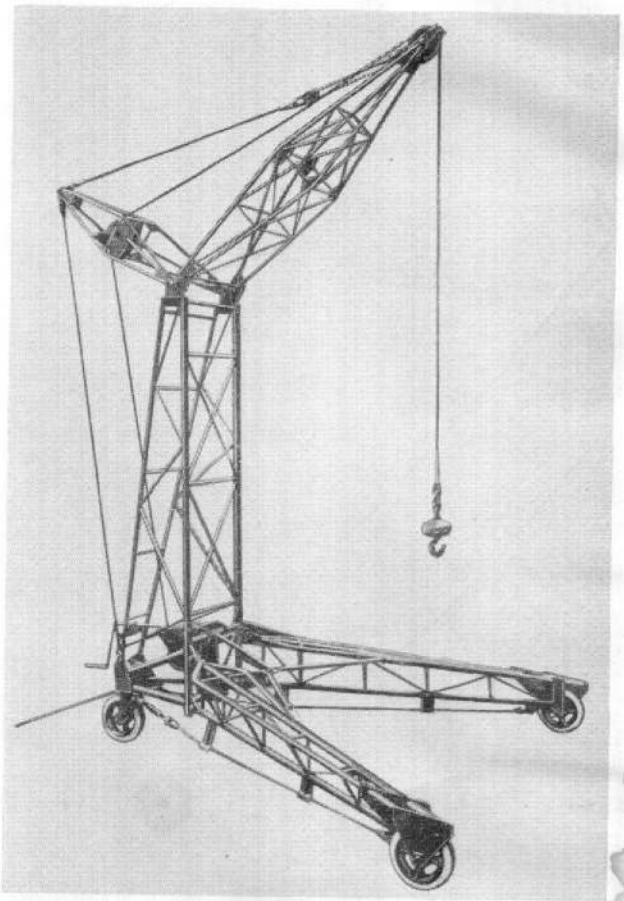
Length 'M' 1 ft. 0 in.

Wire rope circumference $1\frac{1}{2}$ in.

Brief description This guy consists of a single length of wire rope spliced to form a soft eye loop at one end and an eye fitted with a solid thimble at the other end. A hole is drilled through the thimble to suit a $\frac{3}{4}$ in. dia. pin. The safe working load of the guy is 1 ton.

ITEM 65

HOIST, ENGINE CHANGING, PORTABLE, TYPE C



A.P. Reference 2817A, Vol. 1, and Vol. 6, Part 1, Sect. 8, Chap. 9

Stores Ref. 4Q/2756 **Classification** 2

Overall dimensions (*erected*)

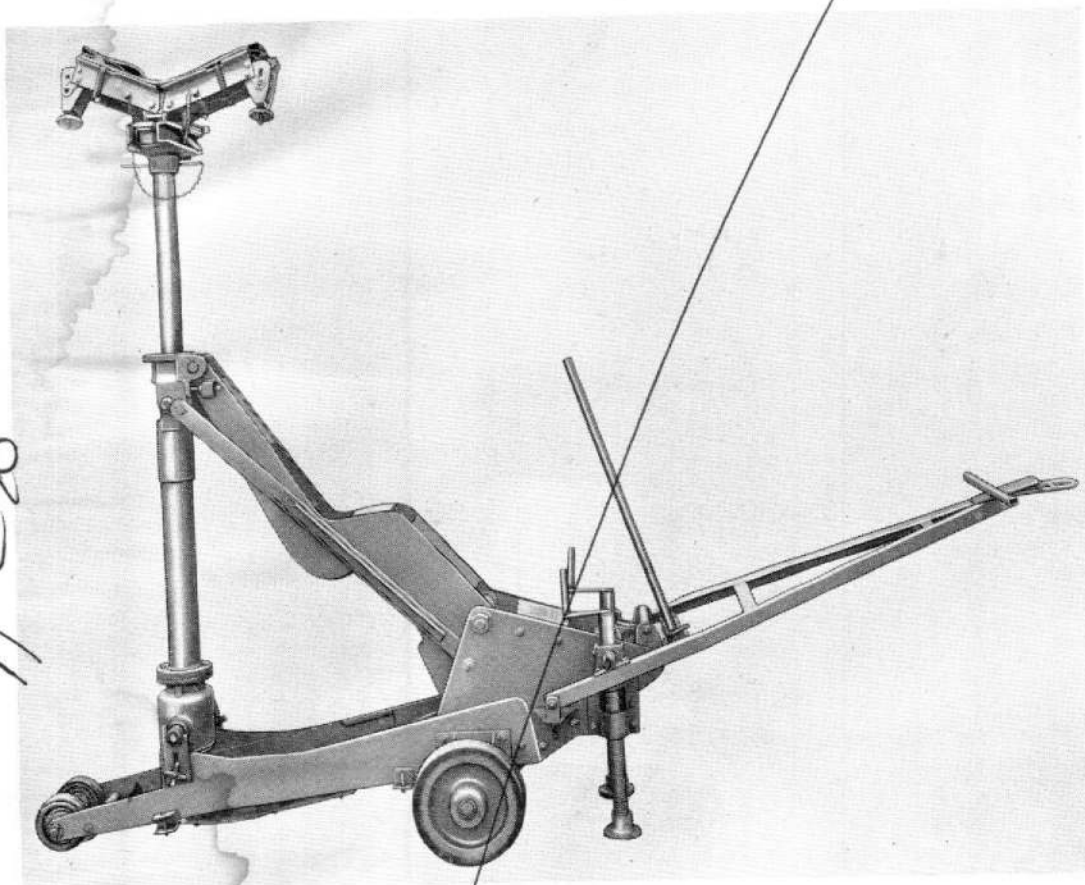
Length 13 ft. 0 in. **Width** 12 ft. 10 in. **Height** 18 ft. 3 in.

Weight (*approx.*) 15 cwt.

Brief description This portable hoist is used for engine changing operations on all types of fighter aircraft, except the Vampire and Sabre, and for general lifting purposes during the servicing of aircraft. The framework of the hoist consists of six main sections which can be dismantled when the hoist is to be transported by air or road. The hoist incorporates a hand-operated winch and is mounted on three solid rubber-tyred wheels, the rear wheel having a castoring action which is controlled by a combined steering and towing arm. The maximum towing speed of the hoist is 4 m.p.h., and its maximum safe working load is 2 tons.

ITEM 66

JACK, HIGH LIFT, $2\frac{3}{4}$ TON, LEVER, UNIVERSAL (EPCO)



A.P. Reference 2817A, Vol. 1, and Vol. 6, Part 1, Sect. 4, Chap. 11

Stores Ref. 4Q/2628

Classification 2

Overall dimensions

Length (*handle folded*) 6 ft. 1 in. **Width** 2 ft. 8 in. **Height** (*jack lowered*) 2 ft. 2 in.

Length of handle 3 ft. 8 in.

Weight (*approx.*) 8 cwt.

Brief description This jack is used for raising the tail of an aircraft and supporting it in a position suitable for the alignment of armament equipment fitted to the aircraft, such as is required during gun butt testing. The jack is designed on the screw hoisting principle and is operated in two stages; the first stage raises the bell-crank lever and moves the tube jack to the vertical position, and the second stage is used to raise the ram housed in the tube jack. The minimum height of the adapter is 1 ft. 5 in. and the maximum height is 6 ft. 8 in. The lifting capacity is 4,000 lb. The jack is provided for Naval use only.

ITEM 67

JACK, LIFTING, 25 TON, "HYDRALITE"

A.P. Reference 2817A, Vol. 1, and Vol. 6, Part 1, Sect. 3, Chap. 12

Stores Ref. 4Q/2856

Classification 2

Overall dimensions
Length 9¼ in. **Width** 5½ in. **Height** (*closed*) 11½ in.

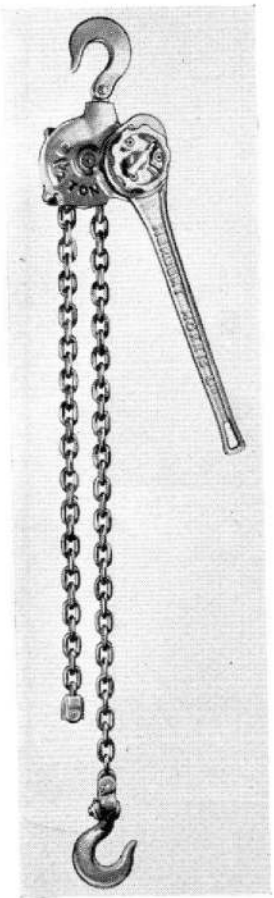
Weight 32 lb.

Brief description This hydraulic jack is of the single ram type and is operated by a single-acting force pump actuated by an operating lever. The jack has a hydraulic lift of 6 inches and is used during salvage operations on crashed heavy bomber aircraft for the initial raising of the aircraft before normal servicing jacks or salvage trolleys can be brought into use. All working parts of the jack are totally enclosed and are lubricated by the hydraulic fluid in the jack.

~~RESTRICTED~~

ITEM 68

TACKLE, LOAD SECURING



A.P. Reference

Stores Ref. 4L/2644

Classification 2

Overall dimensions (*hook-to-hook*)
Length (*closed*) 1 ft. 2 in.

Length (*extended*) 5 ft. 9 in.

Weight 35 lb.

Brief description This tackle is used for securing loads during salvage operations on crashed heavy aircraft to facilitate the removal of aircraft from the runways. The tackle is operated by a hand lever which, by setting a pointer to either 'lift' or 'lower', is used for closing or extending the distance between the hooks when the tackle is under load. An intermediate setting of the pointer allows free movement of the unloaded chain by turning a small hand wheel, without moving the lever. The maximum safe working load of the tackle is $1\frac{1}{2}$ tons.

~~RESTRICTED~~

ITEM 71

JACK, HYDRAULIC TRIPOD, 5 TON

A.P. Reference 119K-0105-13A6A

Classification 2

Ref.No.4G/2231040

Overall dimensions

Min. height $22\frac{5}{8}$in

Max. height $64\frac{1}{2}$in

Hydraulic lift 30in

Total weight 200lb

Brief description

The jack is the double ram type consisting of a hydraulic unit mounted on an adjustable leg tripod trestle. A remote pump/reservoir assembly is used to operate the jack. Connection between the pump/reservoir and the hydraulic ram unit is by means of a flexible hose. Stowage is provided on the main unit for the pump/reservoir and the jack saddles.