

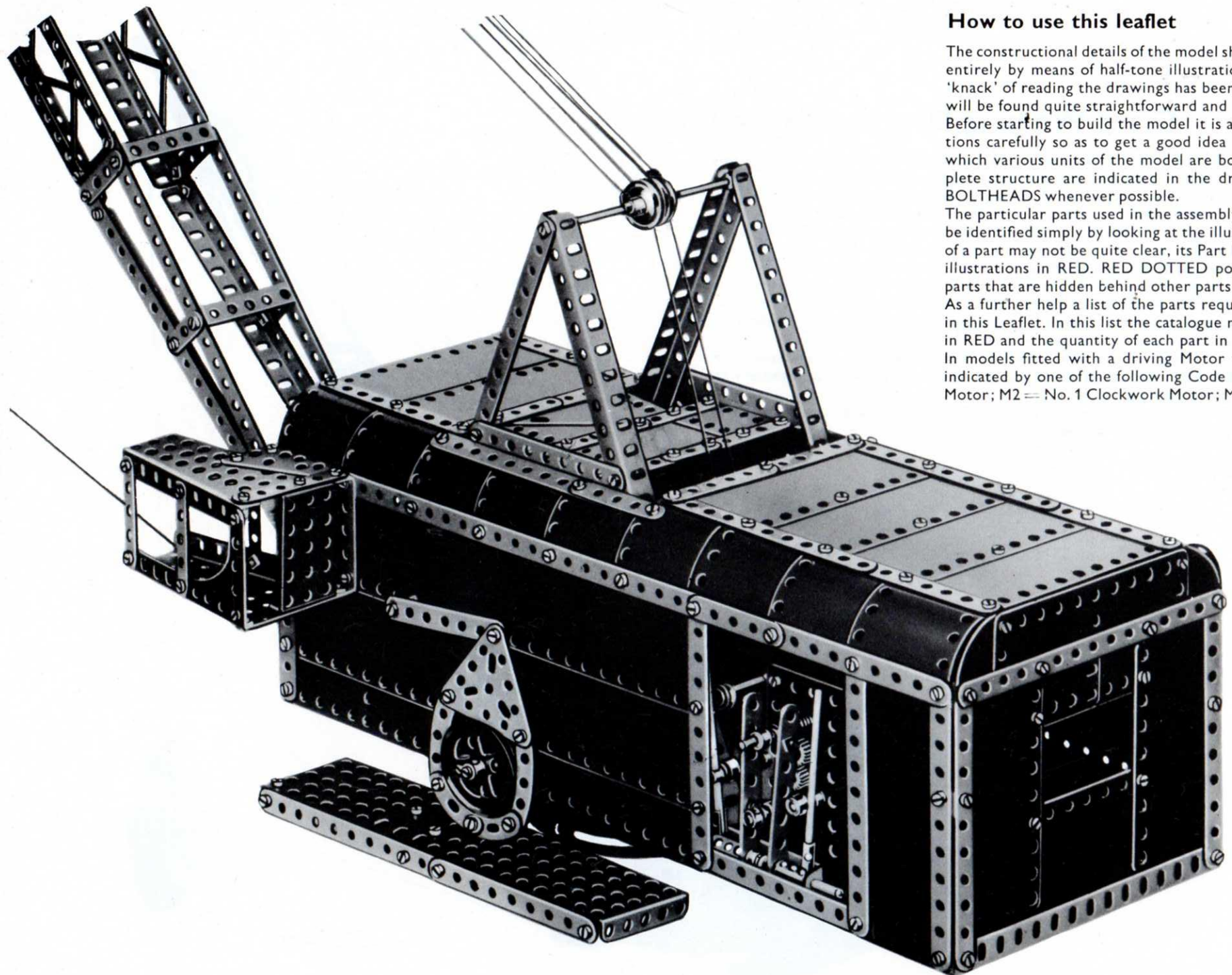
## 9.4 Giant Walking Dragline Excavator

The Giant Dragline Excavator illustrated with constructional plans in this Leaflet, is based on actual machines used for massive excavation operations such as are required in the making of canals and railway cuttings, and for work in clay pits and clearing overburden in open-cast mining. The name 'dragline' is derived from the fact that the digging bucket is dragged towards the machine on a flexible rope, instead of being mounted on a pivoted arm fixed to a jib as in the case of mechanical shovels. Owing to this action it is possible to place a dragline some distance away from the scene of the actual operations, and due to this feature a dragline is of exceptional value in locations where the ground is too soft to allow an ordinary mechanical shovel with short jib to stand.

Some draglines are mounted with creeper tracks while others move from place to place on giant feet that are operated by powerful machinery to give a 'walking' motion.

The model illustrated here is based on a machine of this kind and is powered by an E15R Electric Motor.





## How to use this leaflet

The constructional details of the model shown in this leaflet are given entirely by means of half-tone illustrations and line drawings. If the 'knack' of reading the drawings has been acquired, the construction will be found quite straightforward and simple to follow. Before starting to build the model it is advisable to study the illustrations carefully so as to get a good idea of its various parts, which various units of the model are bolted together. The complete structure are indicated in the drawings by the use of the word BOLTHEADS whenever possible.

The particular parts used in the assembly of the model are identified simply by looking at the illustrations. If the number of a part may not be quite clear, its Part Number is given in the illustrations in RED. RED DOTTED pointer lines indicate parts that are hidden behind other parts of the structure. As a further help a list of the parts required to build the model is in this Leaflet. In this list the catalogue numbers are given in RED and the quantity of each part in BLACK. In models fitted with a driving Motor the parts are indicated by one of the following Code Marks: M1 = Electric Motor; M2 = No. 1 Clockwork Motor; M3 = Mechanical Motor.



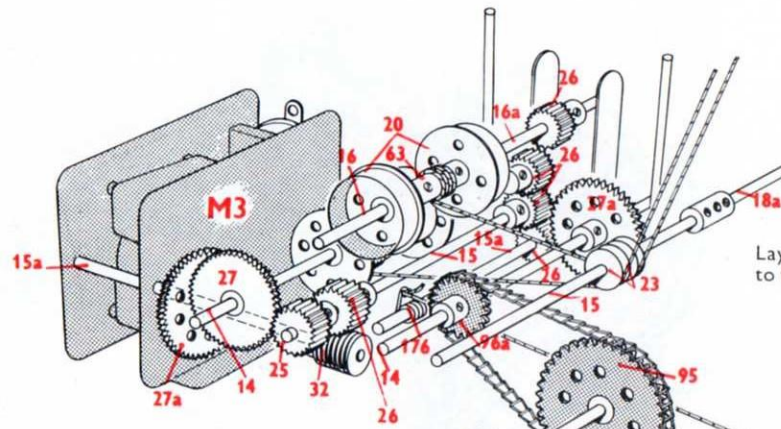
this Leaflet are explained  
line drawings. Once the  
assembly of the model  
to carry out.

to study all the illustra-  
tions. Points at  
together to form the com-  
plete model by RED DOTS or RED

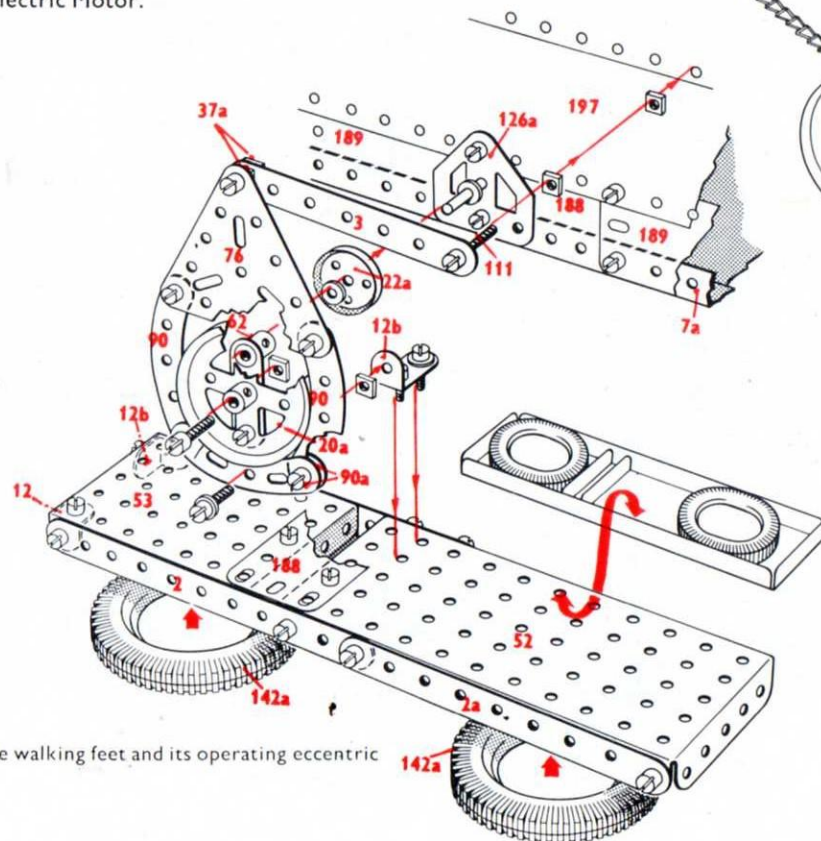
model can in most cases  
be identified, but where the identity  
is not printed on the model  
parts, red dots are used to indicate  
the correct structure.

When building the model is given  
the list of parts are printed

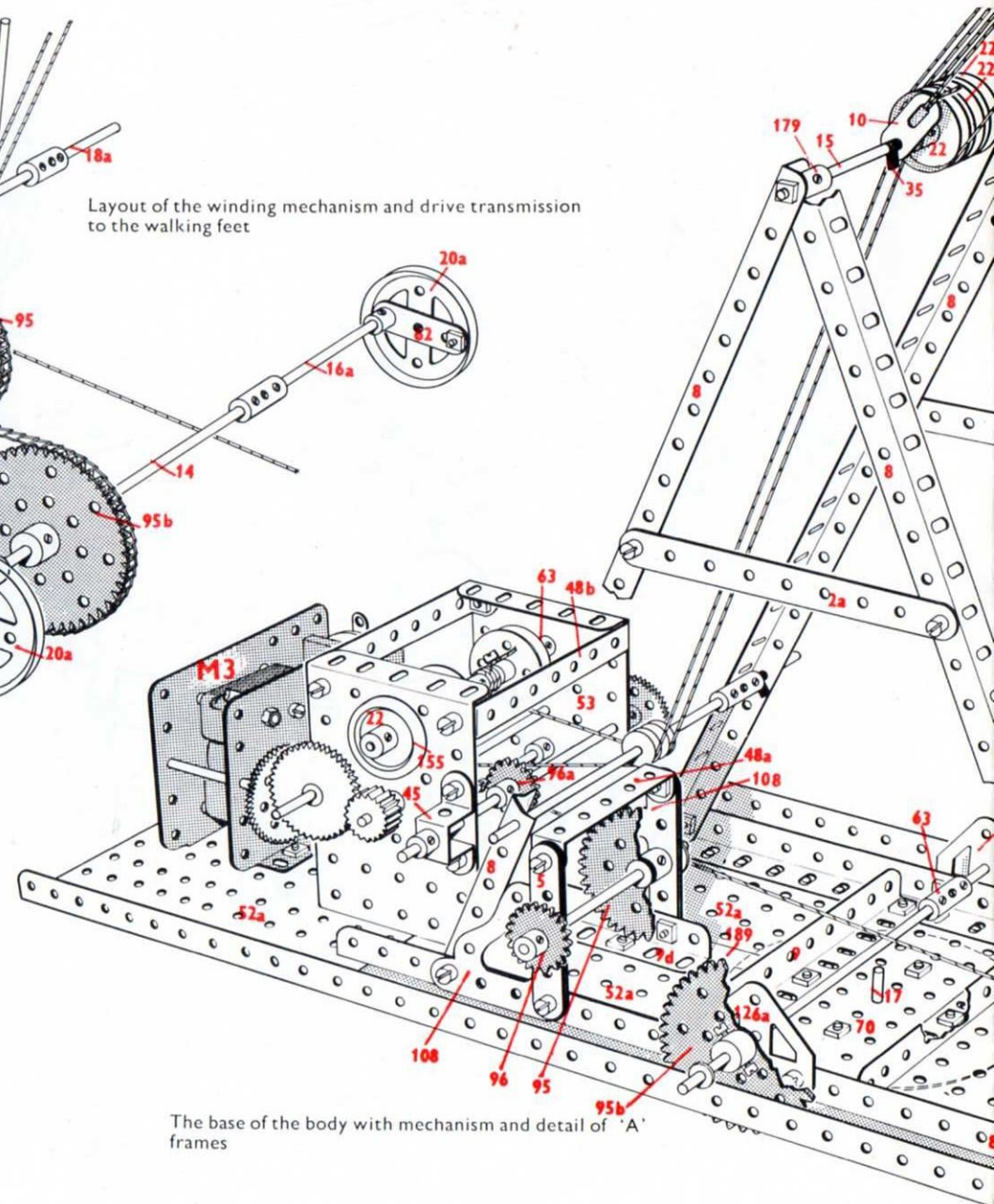
particular type of Motor is  
M1 = Magic Clockwork  
Motor or M2 = Electric Motor.



Layout of the winding mechanism and drive transmission to the walking feet



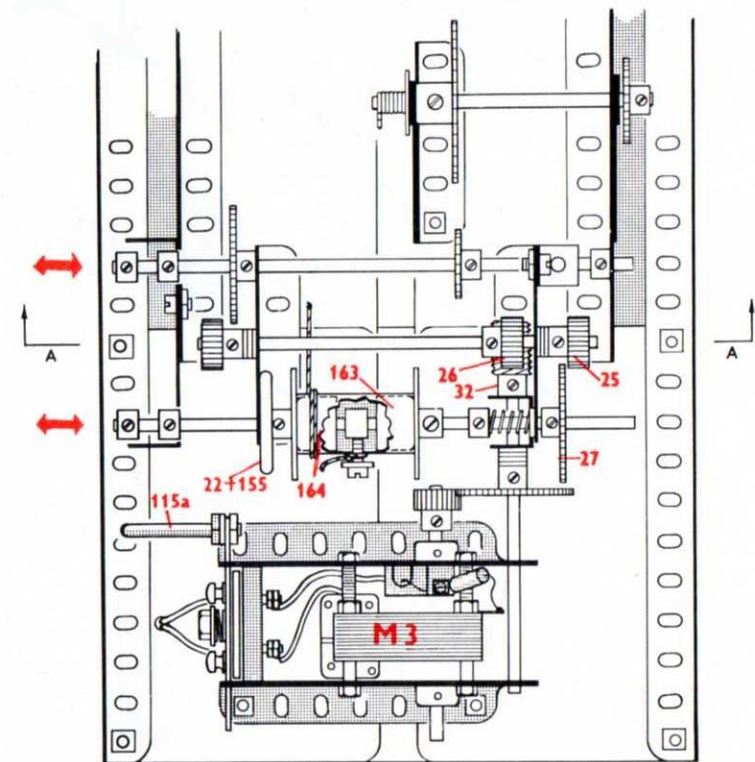
Base of the walking feet and its operating eccentric



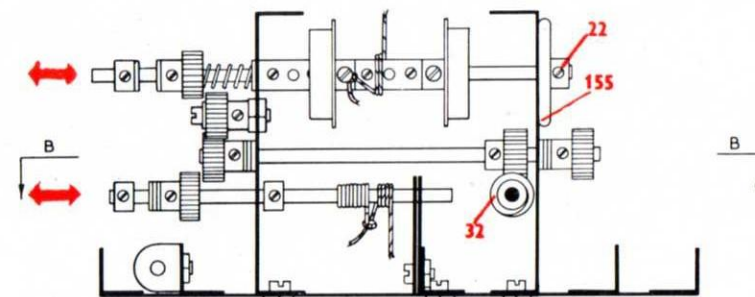
The base of the body with mechanism and detail of 'A' frames



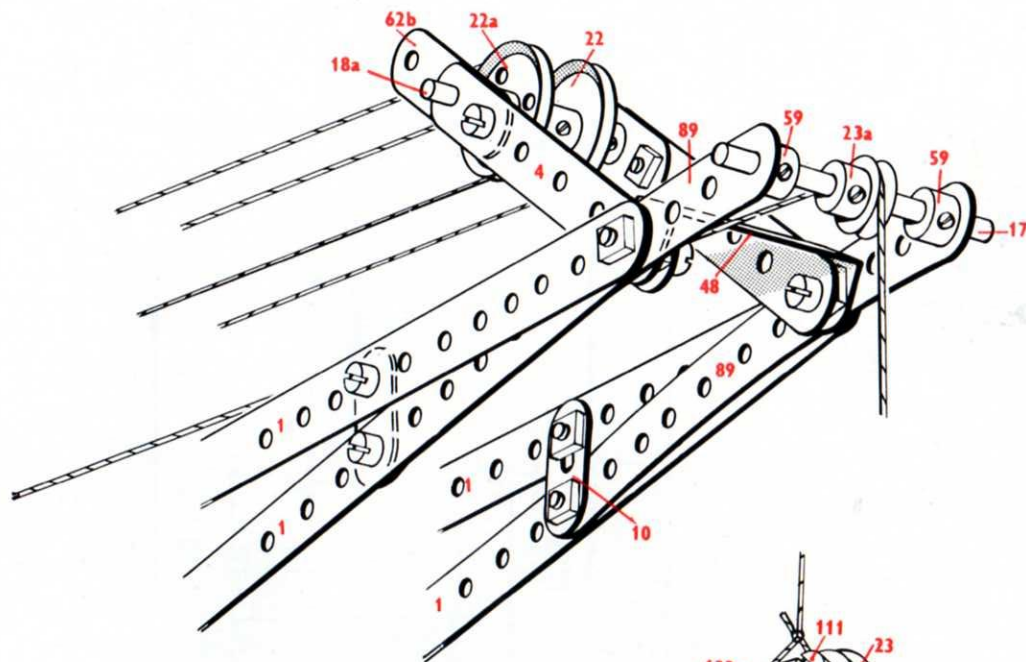
Diagrammatic layout of the winding mechanism for the boom and digging bucket



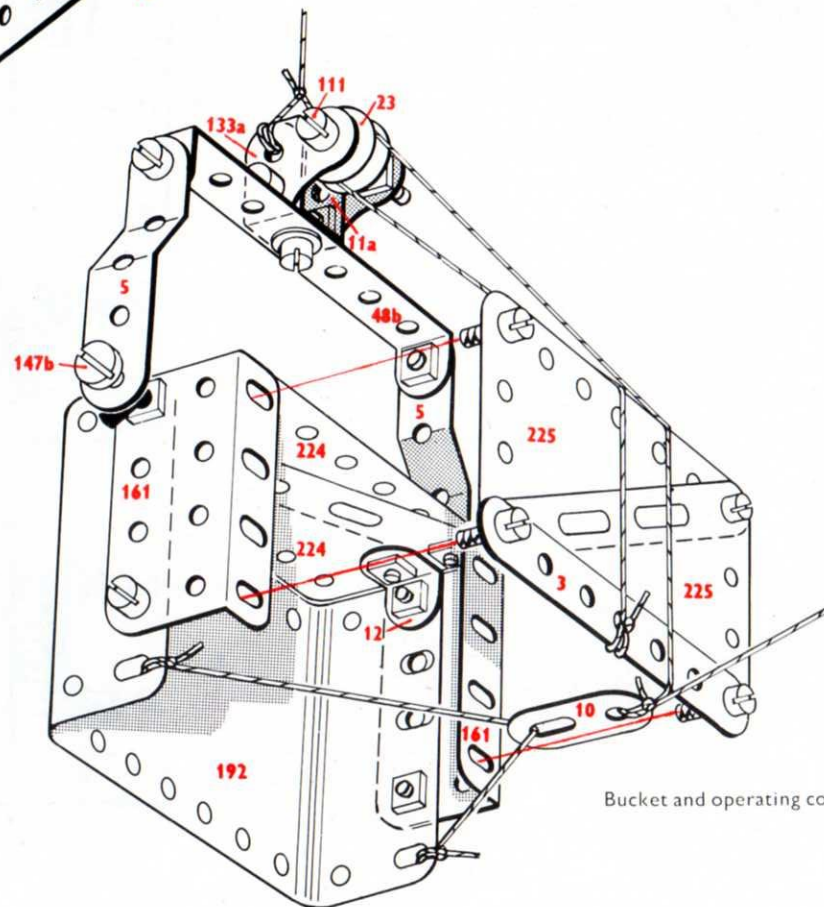
B - B



A - A



The jib-head and pulley assembly

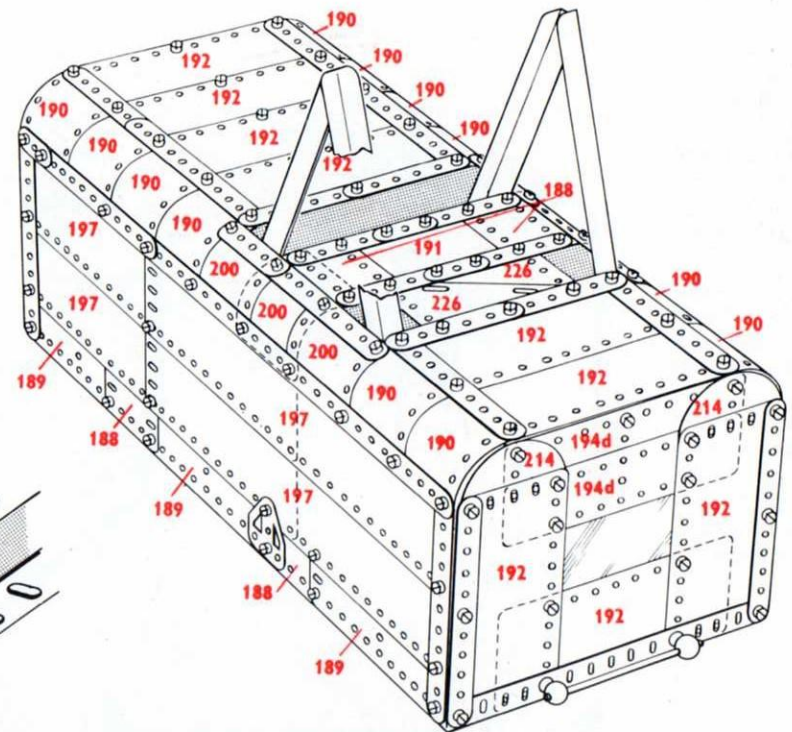
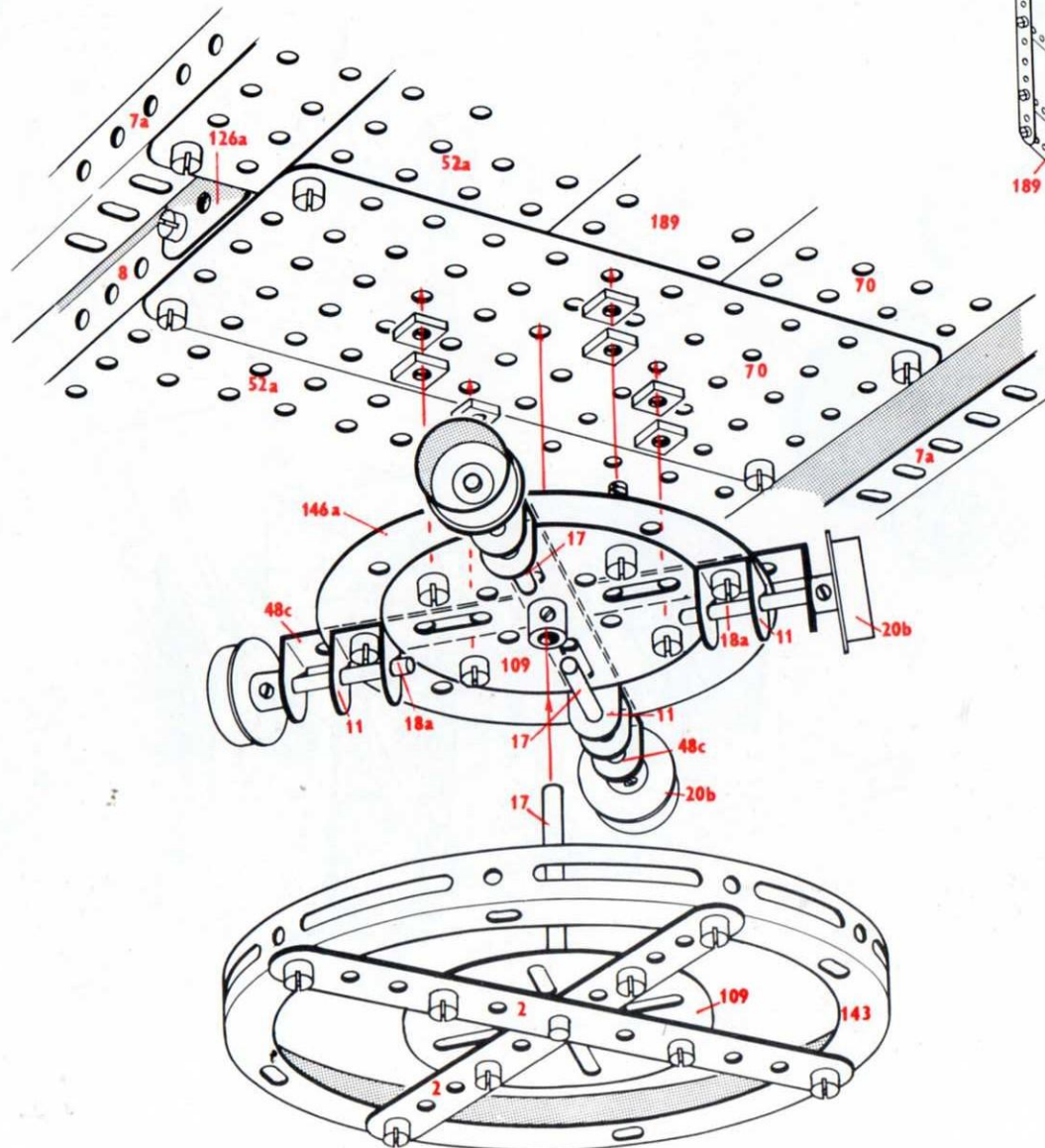


Bucket and operating cords

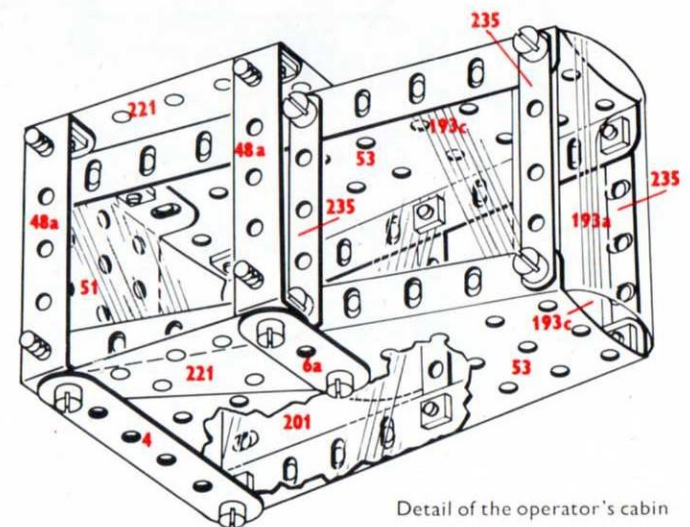
9.4

14 - 1	2 - 27a	3 - 111a
2 - 1b	1 - 32	10 - 111c
24 - 2	4 - 35	1 - 115a
6 - 2a	329 - 37a	2 - 120b
5 - 3	299 - 37b	6 - 126a
8 - 4	31 - 38	2 - 133a
13 - 5	1 - 38d	2 - 136
4 - 6	2 - 40	4 - 142a
5 - 6a	1 - 45	1 - 143
4 - 7a	1 - 48	1 - 146a
6 - 8	9 - 48a	2 - 147b
2 - 8a	3 - 48b	2 - 155
4 - 9	2 - 48c	2 - 161
1 - 9d	1 - 51	1 - 163
1 - 9f	2 - 52	2 - 164
4 - 10	4 - 52a	1 - 165
5 - 11	4 - 53	2 - 176
1 - 11a	2 - 53a	2 - 179
12 - 12	2 - 54	5 - 188
2 - 12b	12 - 59	6 - 189
3 - 14	2 - 62	12 - 190
3 - 15	2 - 62b	3 - 191
2 - 15a	6 - 63	12 - 192
1 - 15b	2 - 70	1 - 193a
5 - 16	2 - 76	2 - 193c
2 - 16a	1 - 80c	2 - 193e
4 - 17	2 - 89	2 - 194
4 - 18a	4 - 90	3 - 194d
2 - 20	4 - 90a	6 - 197
2 - 20a	1 - 94	6 - 200
4 - 20b	1 - 95	1 - 201
5 - 22	1 - 95b	2 - 212
4 - 22a	1 - 96	4 - 214
3 - 23	1 - 96a	2 - 221
1 - 23a	2 - 99	2 - 224
1 - 24	2 - 100	2 - 225
1 - 24a	1 - 102	2 - 226
1 - 25	2 - 108	4 - 235
5 - 26	2 - 109	
1 - 27	2 - 111	





The body, seen from the front end



Detail of the operator's cabin

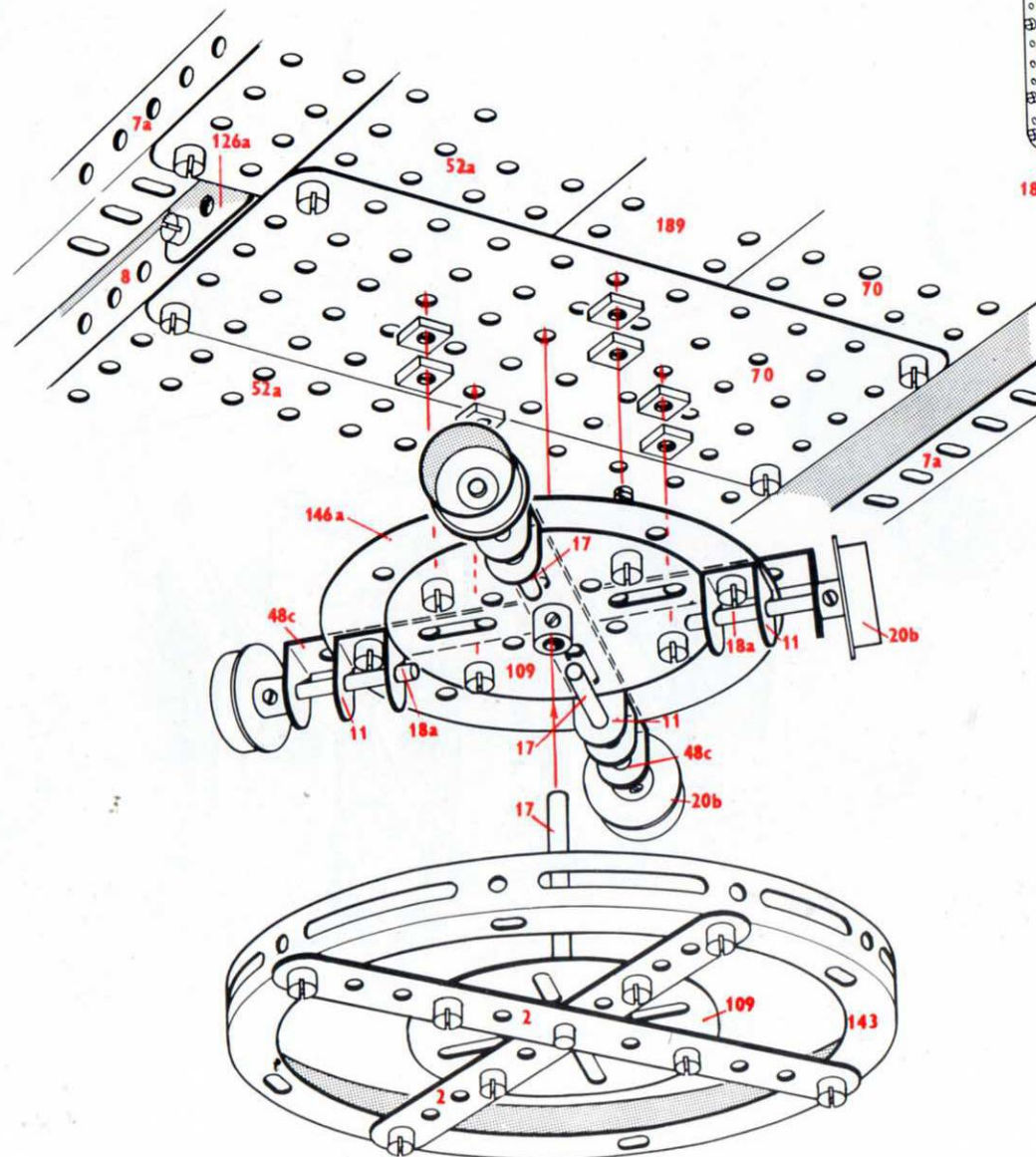


The jib-head and pulley assembly

Bucket and operating cords

9.4	14	-	1	2	-	27a	3	-	111a
	2	-	1b	1	-	32	10	-	111c
	24	-	2	4	-	35	1	-	115a
	6	-	2a	329	-	37a	2	-	120b
	5	-	3	299	-	37b	6	-	126a
	8	-	4	31	-	38	2	-	133a
	13	-	5	1	-	38d	2	-	136
	4	-	6	2	-	40	4	-	142a
	5	-	6a	1	-	45	1	-	143
	4	-	7a	1	-	48	1	-	146a
	6	-	8	9	-	48a	2	-	147b
	2	-	8a	3	-	48b	2	-	155
	4	-	9	2	-	48c	2	-	161
	1	-	9d	1	-	51	1	-	163
	1	-	9f	2	-	52	2	-	164
	4	-	10	4	-	52a	1	-	165
	5	-	11	4	-	53	2	-	176
	1	-	11a	2	-	53a	2	-	179
	12	-	12	2	-	54	5	-	188
	2	-	12b	12	-	59	6	-	189
	3	-	14	2	-	62	12	-	190
	3	-	15	2	-	62b	3	-	191
	2	-	15a	6	-	63	12	-	192
	1	-	15b	2	-	70	1	-	193a
	5	-	16	2	-	76	2	-	193c
	2	-	16a	1	-	80c	2	-	193e
	4	-	17	2	-	89	2	-	194
	4	-	18a	4	-	90	3	-	194d
	2	-	20	4	-	90a	6	-	197
	2	-	20a	1	-	94	6	-	200
	4	-	20b	1	-	95	1	-	201
	5	-	22	1	-	95b	2	-	212
	4	-	22a	1	-	96	4	-	214
	3	-	23	1	-	96a	2	-	221
	1	-	23a	2	-	99	2	-	224
	1	-	24	2	-	100	2	-	225
	1	-	24a	1	-	102	2	-	226
	1	-	25	2	-	108	4	-	235
	5	-	26	2	-	109			
	1	-	27	2	-	111			

The base and roller bearing on which the Dragline body is mounted



The body, seen from the front end

Detail of the operator's cabin

## 9.4 Giant Walking Dragline Excavator

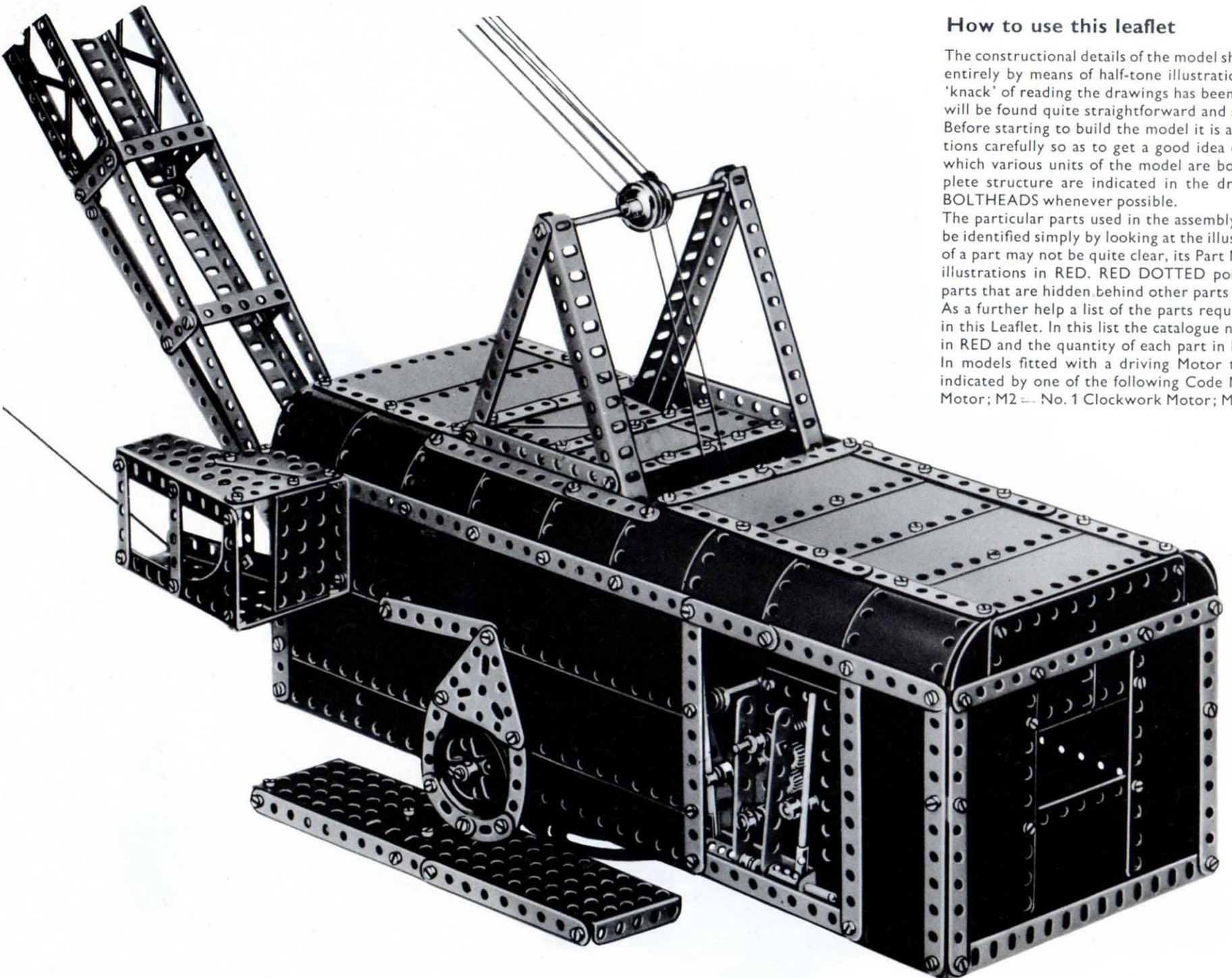
The Giant Dragline Excavator illustrated with constructional plans in this Leaflet, is based on actual machines used for massive excavation operations such as are required in the making of canals and railway cuttings, and for work in clay pits and clearing overburden in open-cast mining. The name 'dragline' is derived from the fact that the digging bucket is dragged towards the machine on a flexible rope, instead of being mounted on a pivoted arm fixed to a job as in the case of mechanical shovels. Owing to this action it is possible to place a dragline some distance away from the scene of the actual operations, and due to this feature a dragline is of exceptional value in locations where the ground is too soft to allow an ordinary mechanical shovel with short job to stand.

Some draglines are mounted with creeper tracks while others move from place to place on giant feet that are operated by powerful machinery to give a 'walking' motion.

The model illustrated here is based on a machine of this kind and is powered by an E15R Electric Motor.

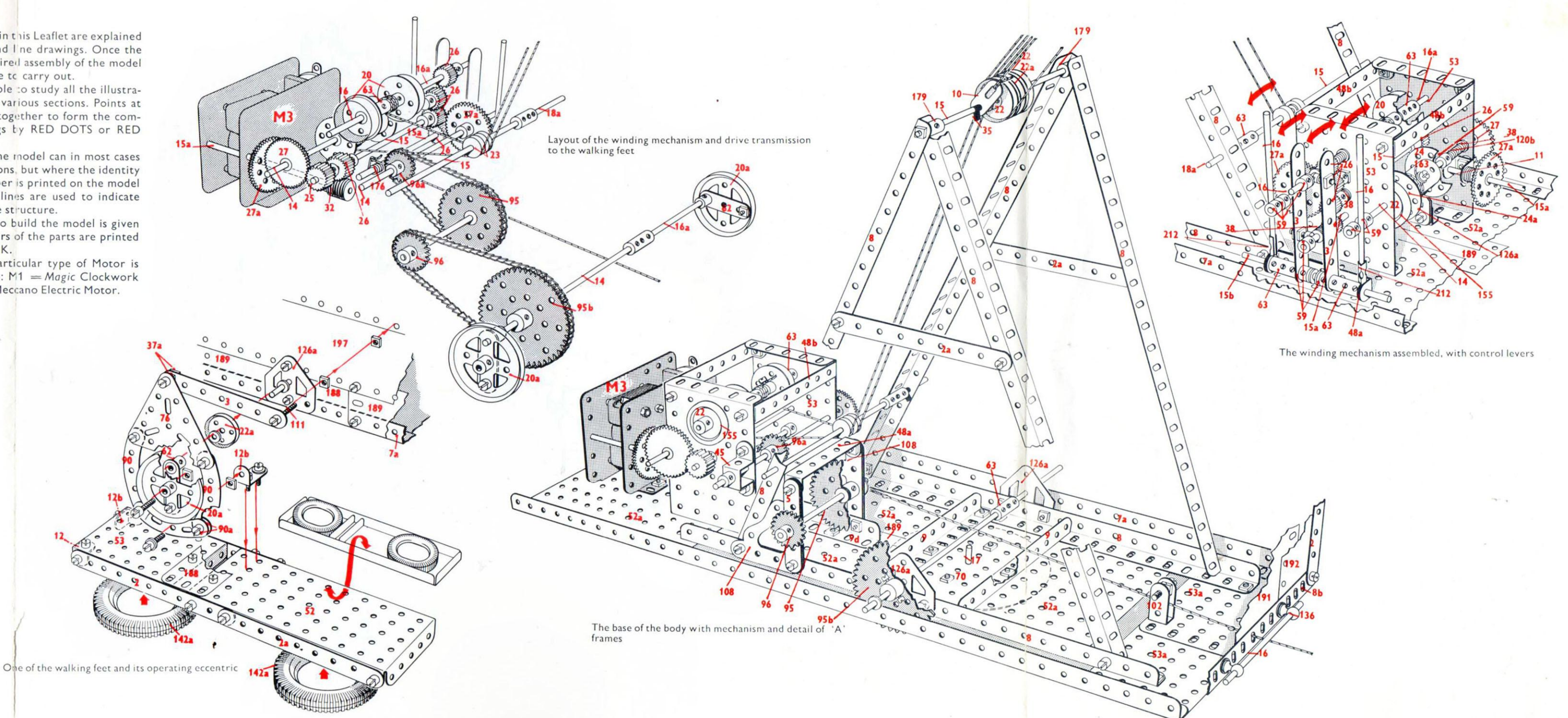






### How to use this leaflet

The constructional details of the model shown in this Leaflet are explained entirely by means of half-tone illustrations and line drawings. Once the 'knack' of reading the drawings has been acquired assembly of the model will be found quite straightforward and simple to carry out. Before starting to build the model it is advisable to study all the illustrations carefully so as to get a good idea of its various sections. Points at which various units of the model are bolted together to form the complete structure are indicated in the drawings by RED DOTS or RED BOLTHEADS whenever possible. The particular parts used in the assembly of the model can in most cases be identified simply by looking at the illustrations, but where the identity of a part may not be quite clear, its Part Number is printed on the model illustrations in RED. RED DOTTED pointer lines are used to indicate parts that are hidden behind other parts of the structure. As a further help a list of the parts required to build the model is given in this Leaflet. In this list the catalogue numbers of the parts are printed in RED and the quantity of each part in BLACK. In models fitted with a driving Motor the particular type of Motor is indicated by one of the following Code Marks: M1 = *Magic Clockwork Motor*; M2 = *No. 1 Clockwork Motor*; M3 = *Meccano Electric Motor*.



Diagrammatic layout of the winding mechanism for the boom and digging bucket

