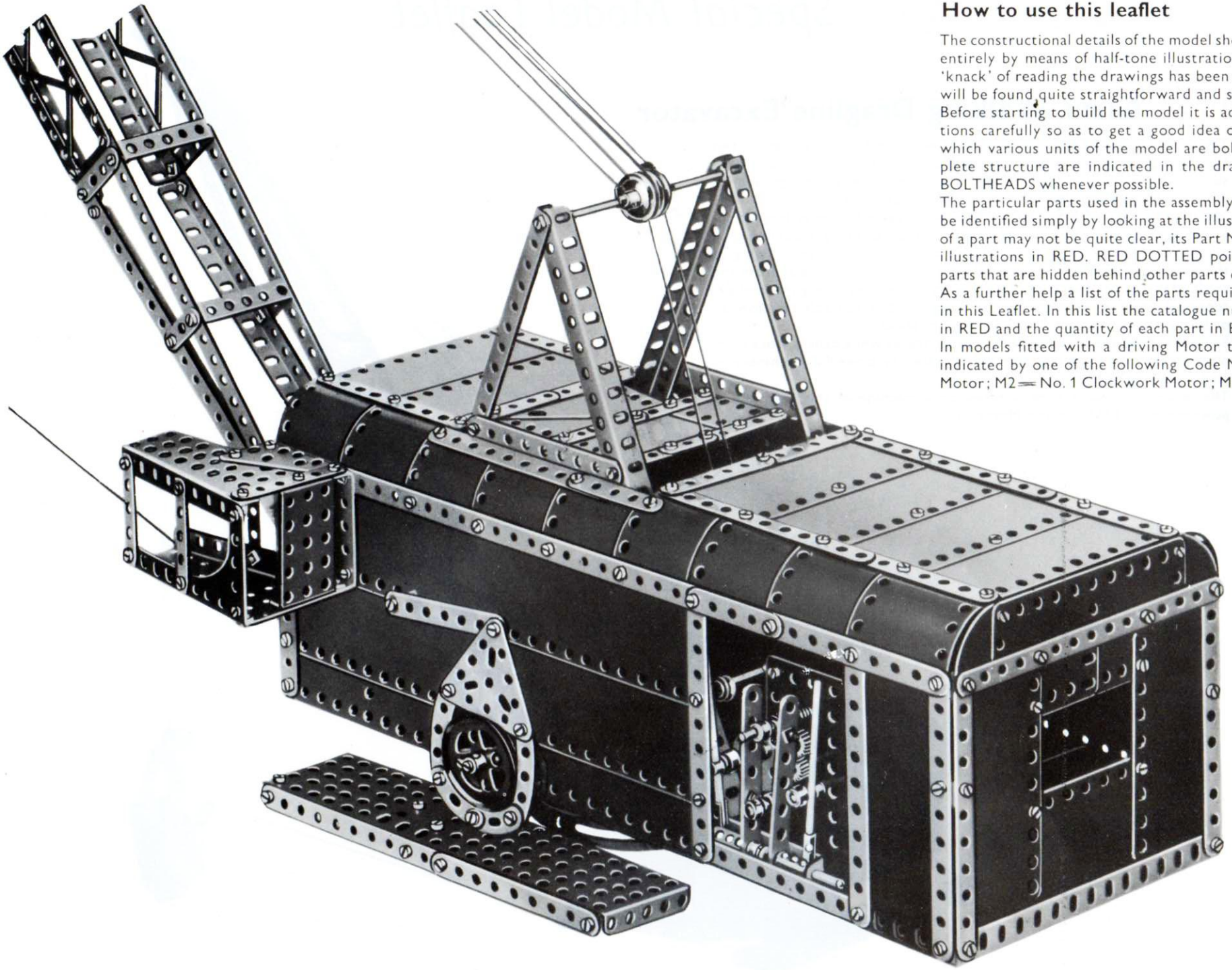
10.24 Giant Walking Dragline Excavator

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.

This model can be built with Meccano Set No. 10



How to use this leaflet

The constructional details of the model shown in this entirely by means of half-tone illustrations and lin 'knack' of reading the drawings has been acquired a will be found quite straightforward and simple to c Before starting to build the model it is advisable to tions carefully so as to get a good idea of its vario which various units of the model are bolted togeth plete structure are indicated in the drawings by BOLTHEADS whenever possible.

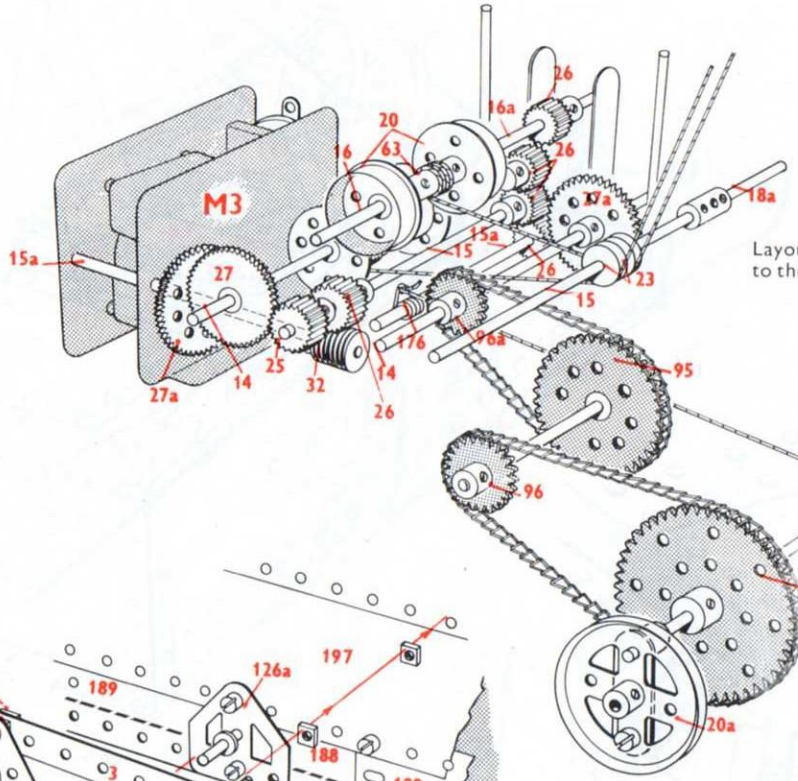
The particular parts used in the assembly of the mo be identified simply by looking at the illustrations, b of a part may not be quite clear, its Part Number is illustrations in RED. RED DOTTED pointer lines parts that are hidden behind other parts of the stru As a further help a list of the parts required to bu in this Leaflet. In this list the catalogue numbers of in RED and the quantity of each part in BLACK.

In models fitted with a driving Motor the particu indicated by one of the following Code Marks: M1 Motor; M2 = No. 1 Clockwork Motor; M3 = Mecca

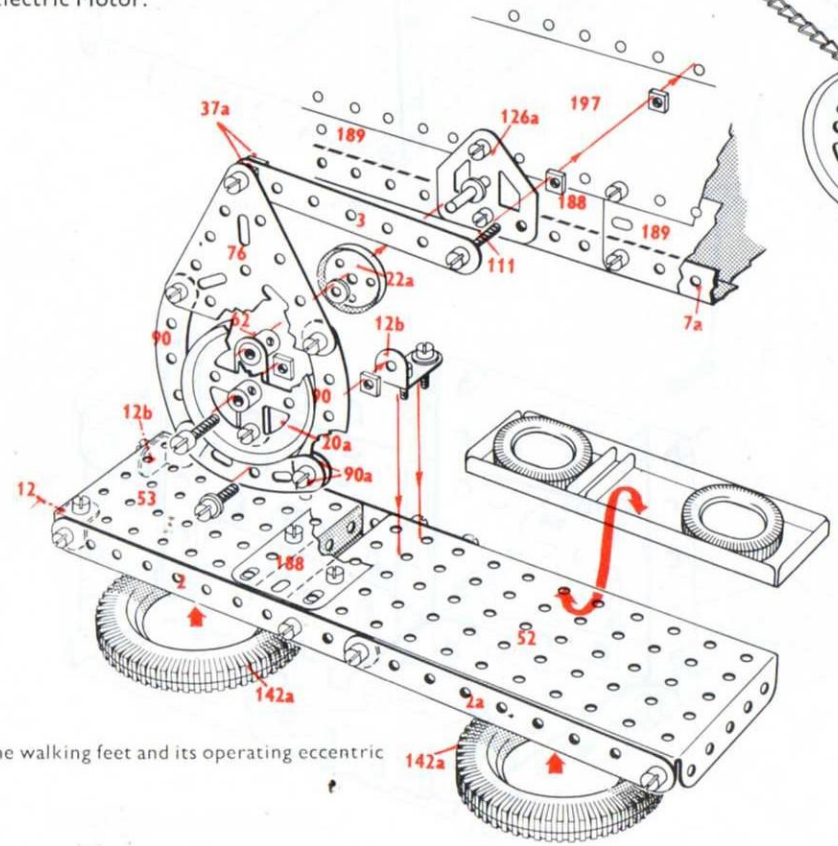
his Leaflet are explained
line drawings. Once the
d assembly of the model
o carry out.
to study all the illustra-
rious sections. Points at
ether to form the com-
oy RED DOTS or RED

model can in most cases
, but where the identity
is printed on the model
es are used to indicate
ructure.
build the model is given
of the parts are printed

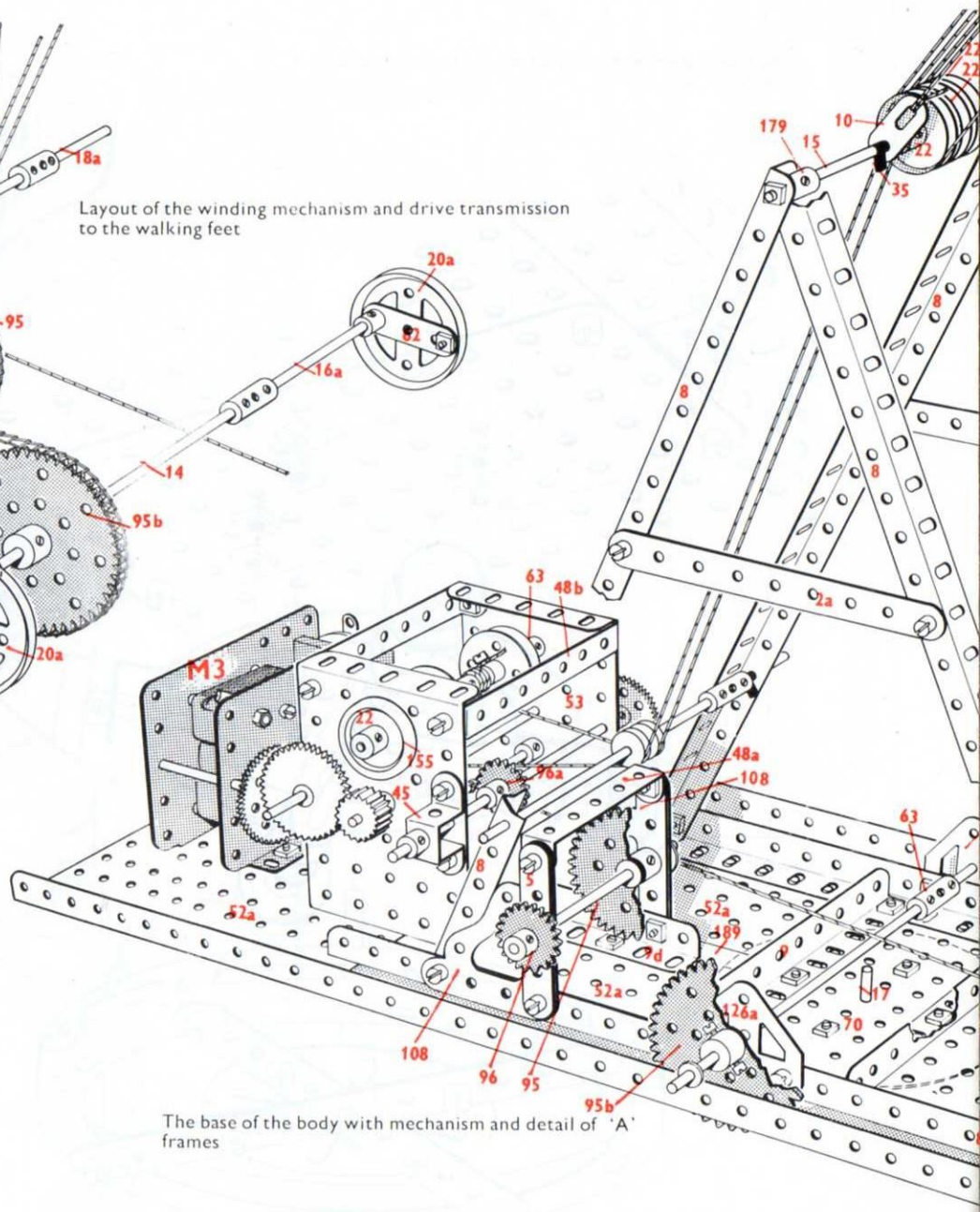
icular type of Motor is
M1 = *Magic* Clockwork
cano Electric Motor.



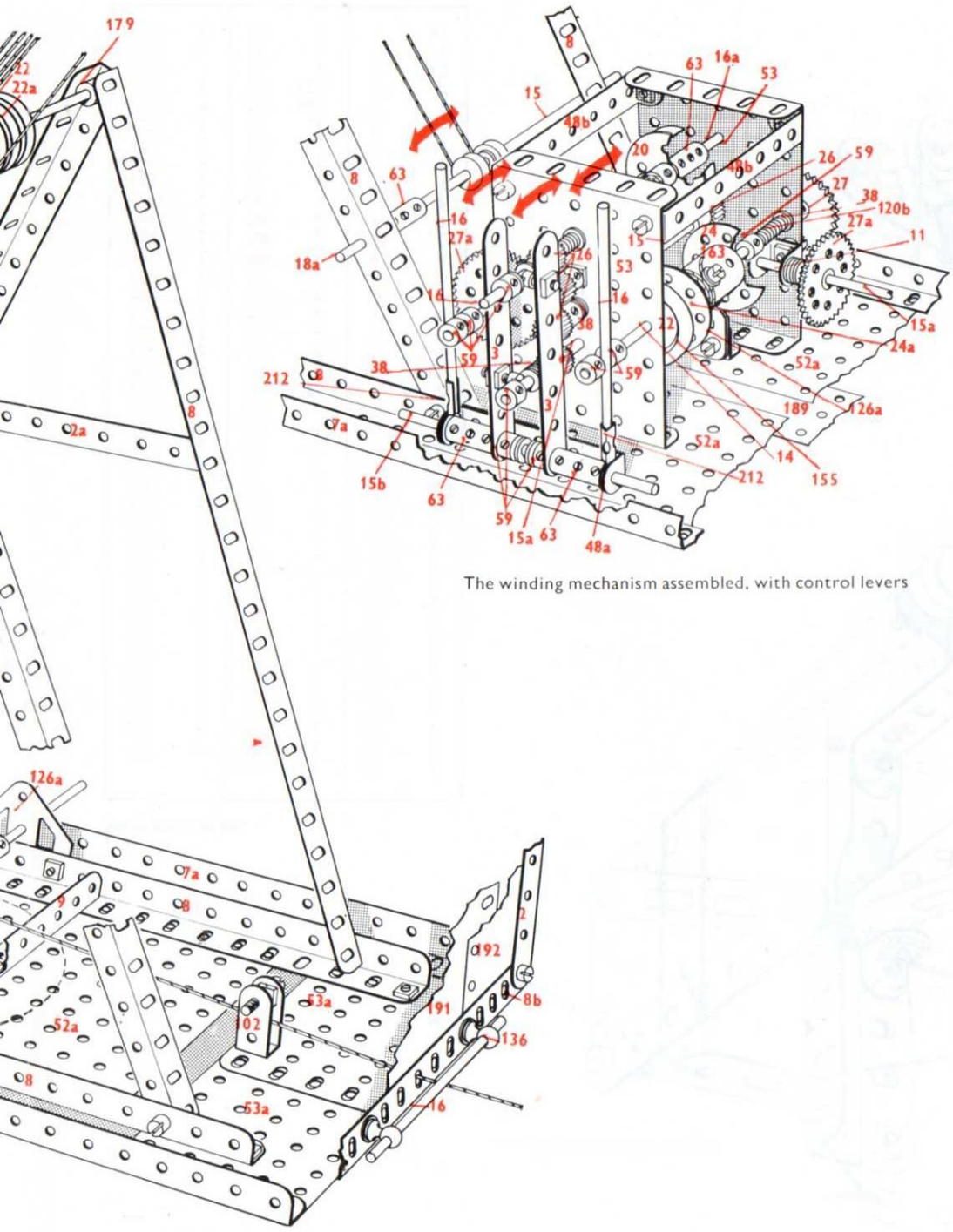
Layout of the winding mechanism and drive transmission to the walking feet



ne of the walking feet and its operating eccentric

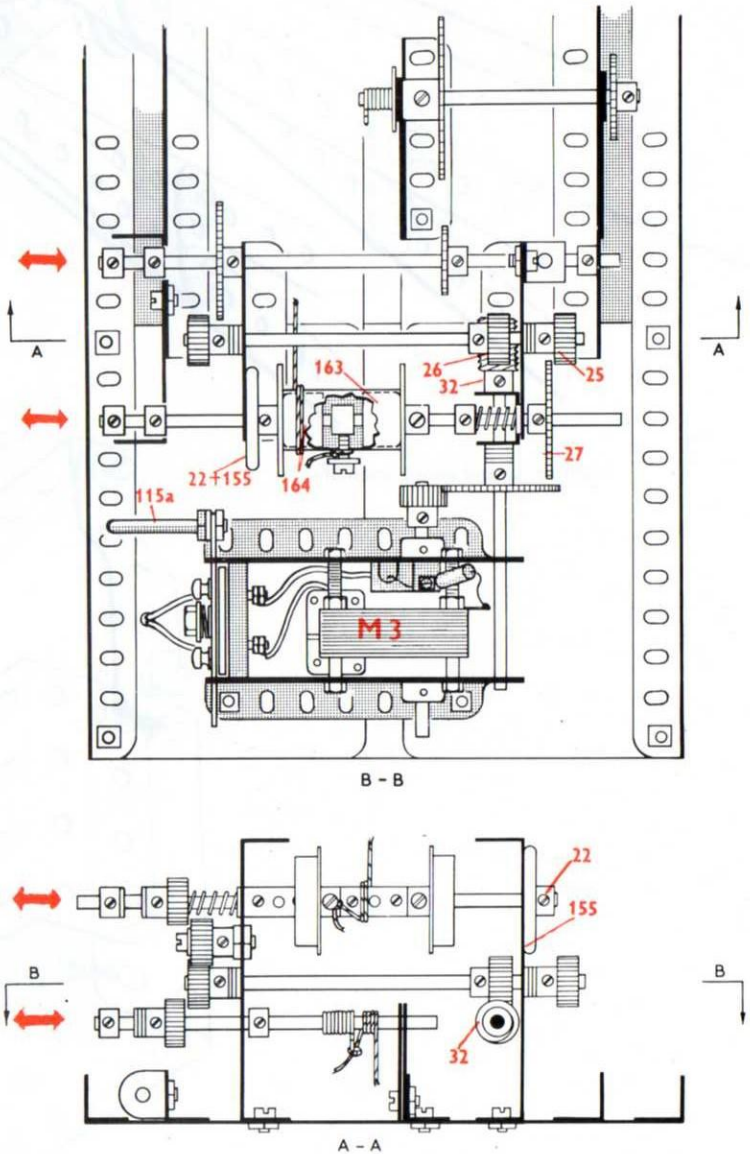


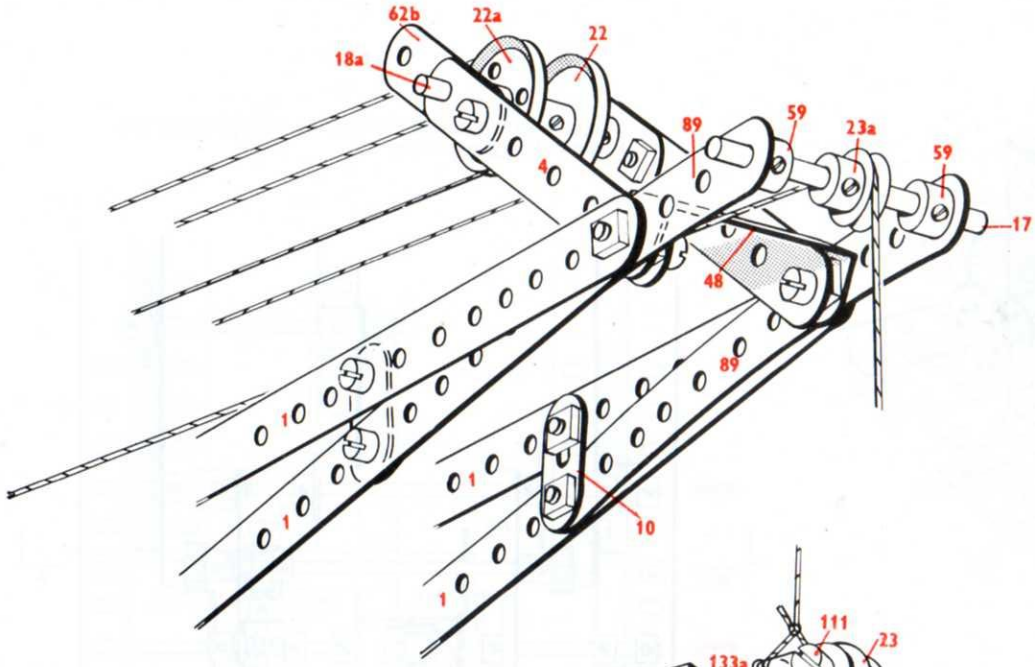
The base of the body with mechanism and detail of 'A' frames



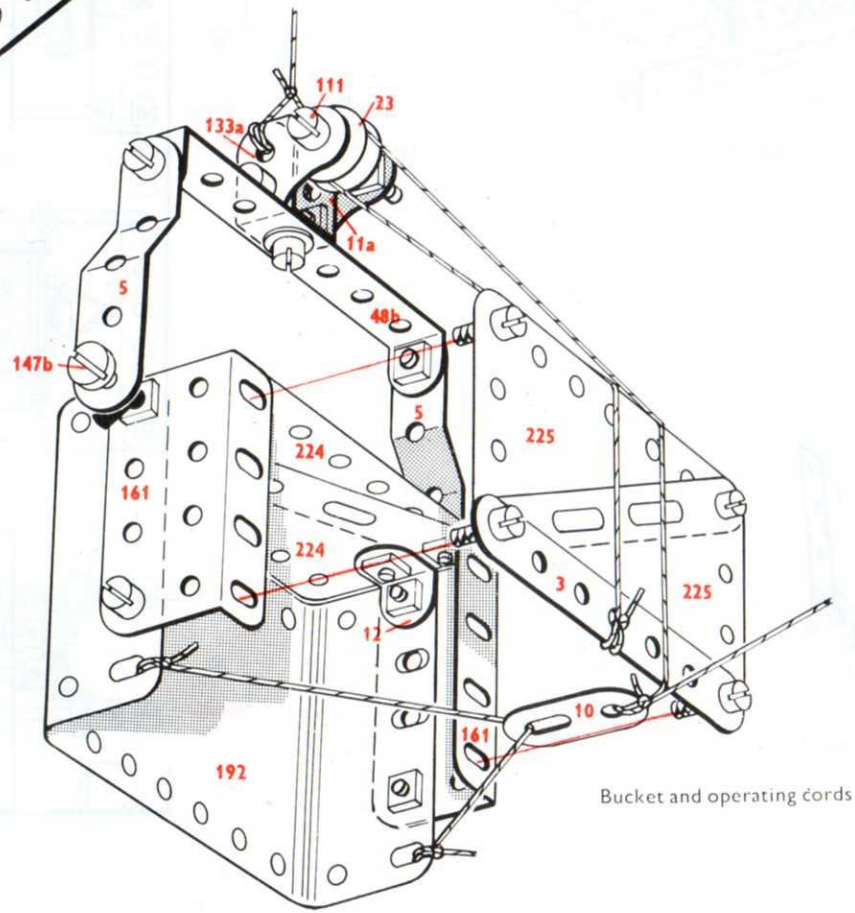
The winding mechanism assembled, with control levers

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





The jib-head and pulley assembly

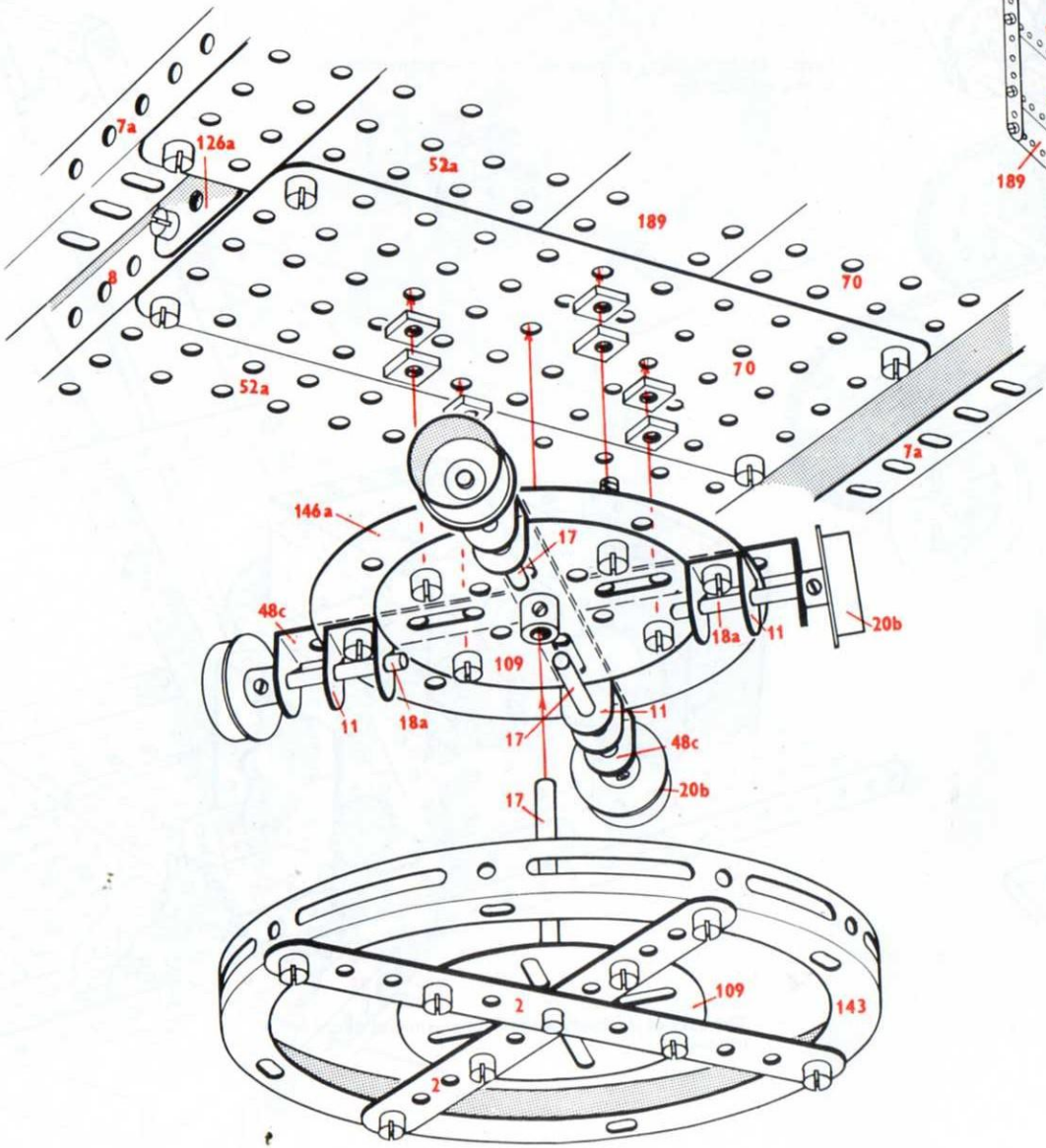


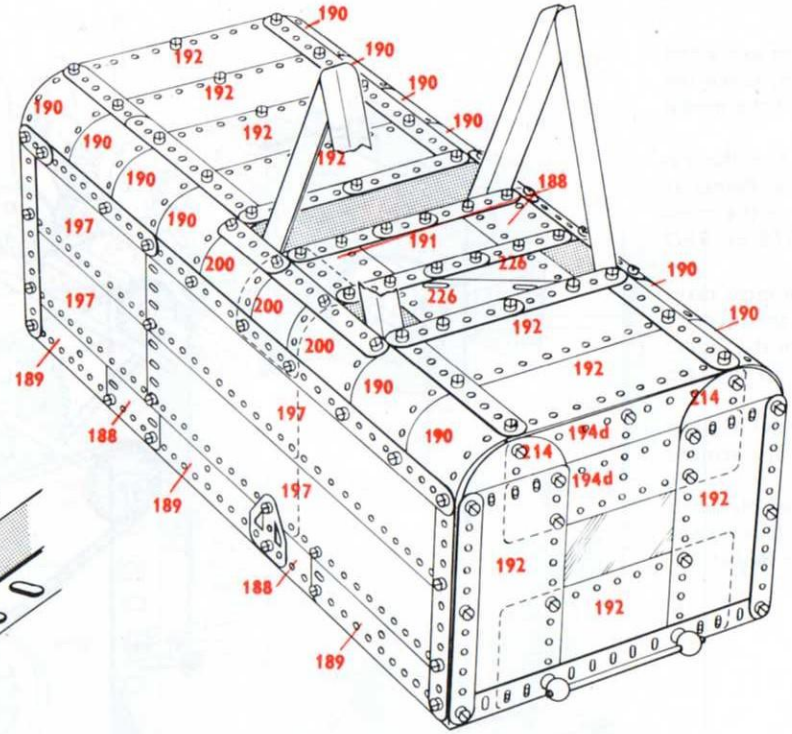
Bucket and operating cords

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	M3
1	27	2	111		

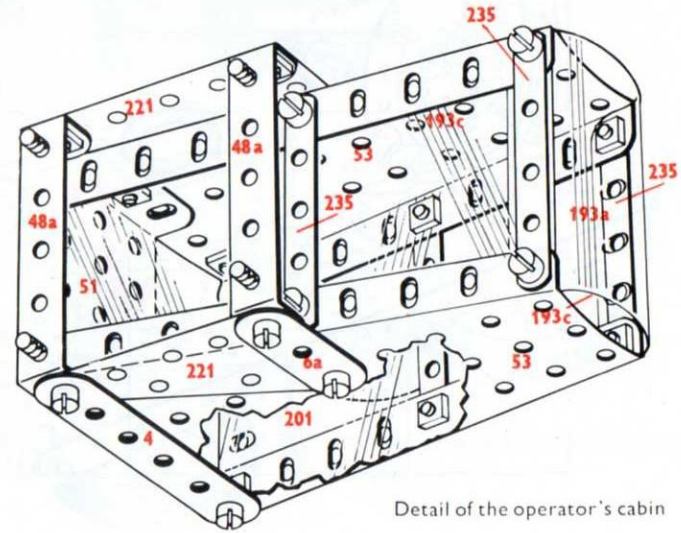
* *Not included in set*

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





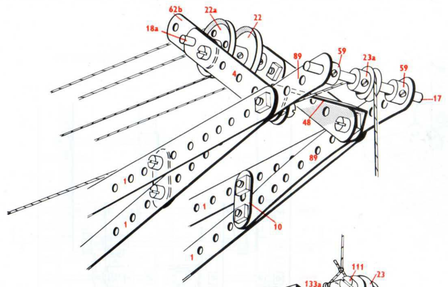
The body, seen from the front end



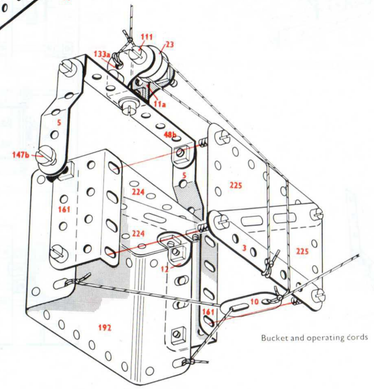
Detail of the operator's cabin

Printed in England

152524



The jib-head and pulley assembly

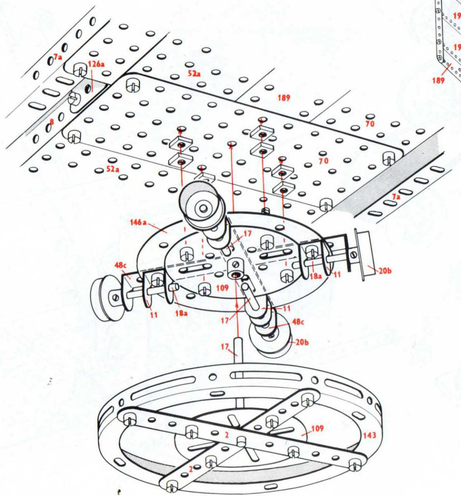


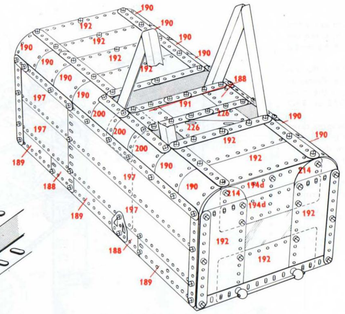
Bucket and operating cords

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	4 – M3
1	–	27	2	– 111	

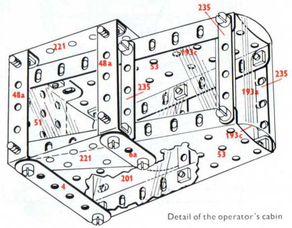
* Not included in set

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

Printed in England

152524

MECCANO Special Model Leaflet

Leaflet No. 24

10.24 Giant Walking Dragline Excavator

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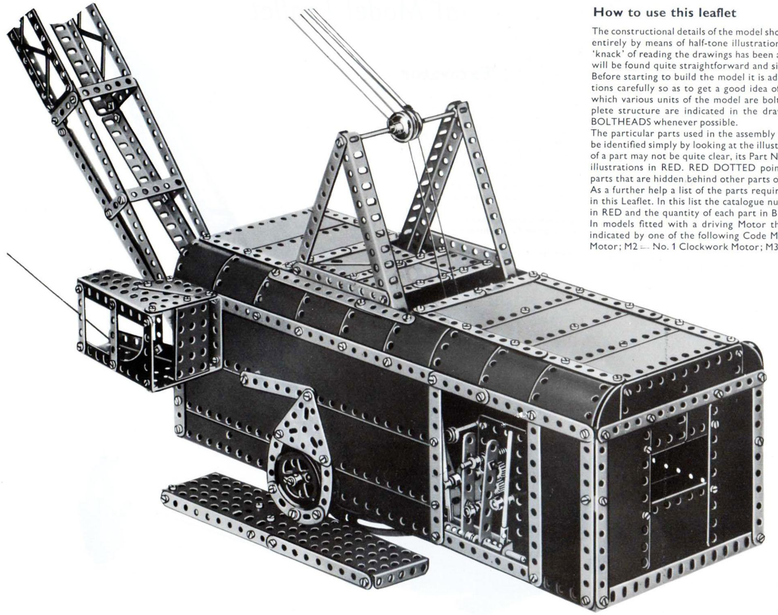
The model illustrated here is based on a machine of this kind and is powered by an E15R Electric Motor.

This model can be built with Meccano Set No. 10



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.

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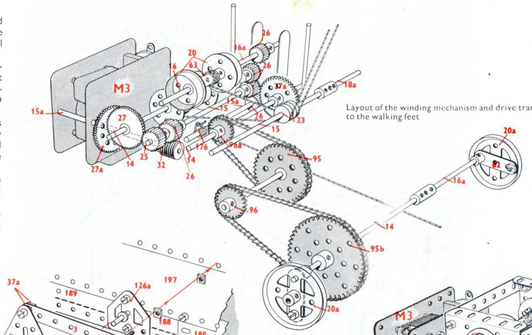
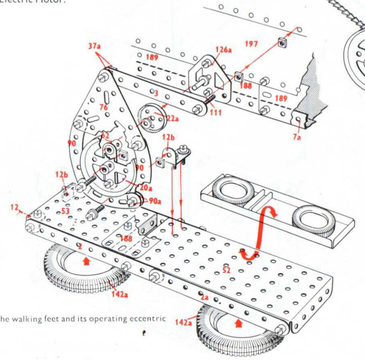
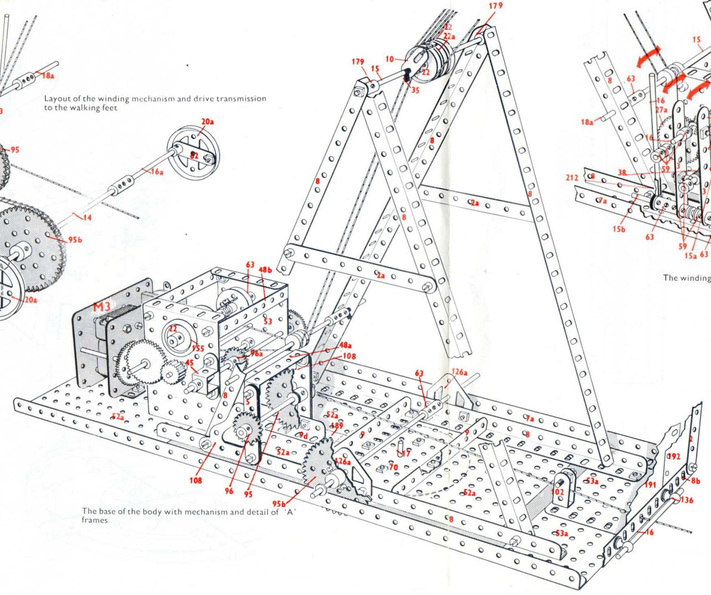


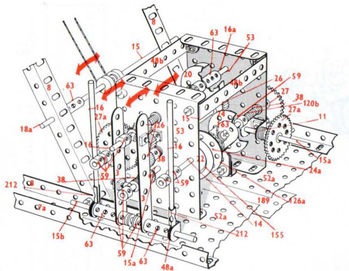
Layout of the winding mechanism and drive transmission to the walking feet



One of the walking feet and its operating eccentric



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



The winding mechanism assembled, with control levers

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