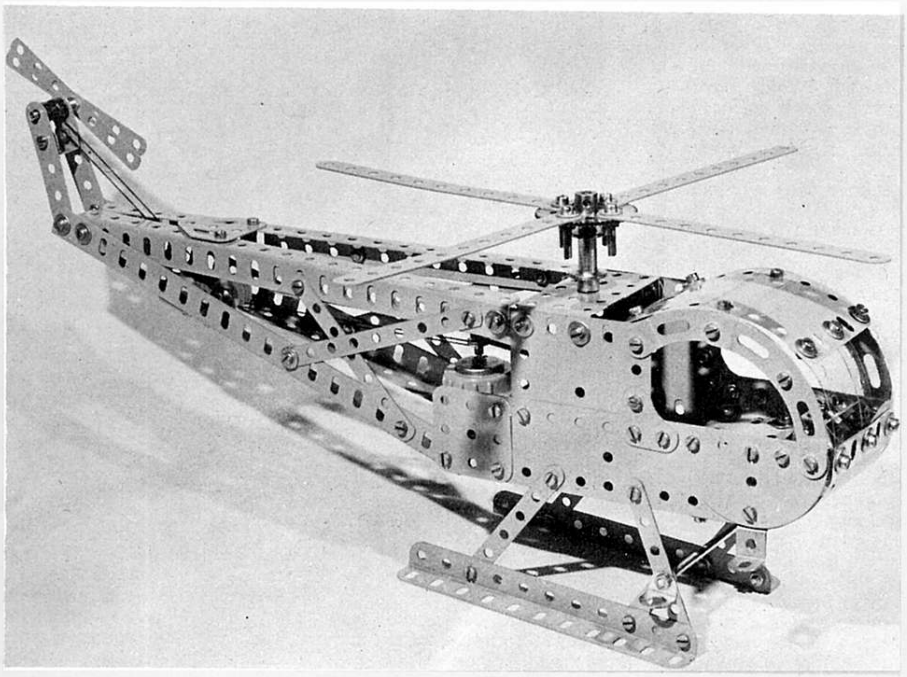
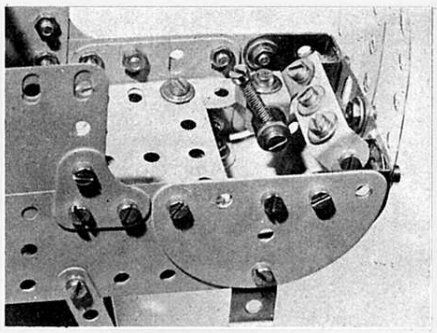
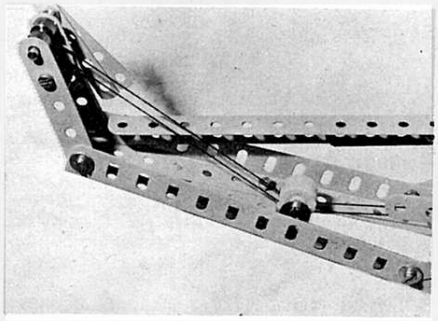






CRANE KIT TAKES OFF!

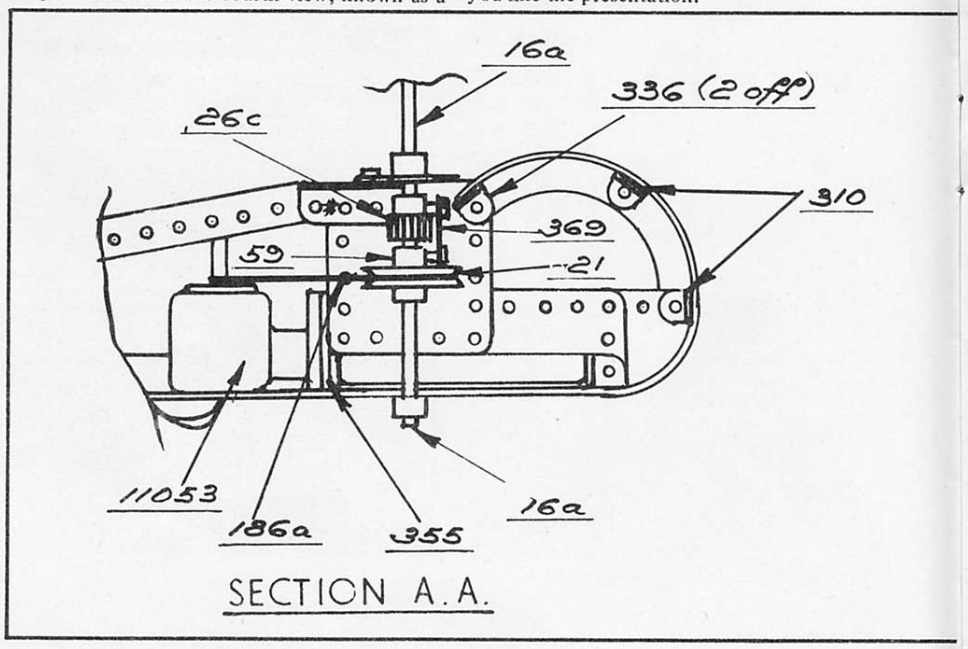
A working model from an Engineering Drawing by W.R.Hinson

"If you cannot photograph it, make a good working drawings of it". This is the sound editorial advice which Mr. Hinson of the Stevenage Meccano Club took when he designed this excellent working model Meccano Helicopter which can be built from the contents of the Crane Set. As a retired engineering draughtsman, our contributor has provided us with a first-class working drawing which we are pleased to reproduce here as an example of how the real engineer has to work from scale drawings. Each of the drawings are related in what is known as "First Angle Projection" which means that each view is 'projected' from an adjacent view. For instance, view A is known as a side elevation because, if a person was standing at the side of the model, looking at it square on, this is the view he would see.

To obtain view B, known as the 'plan' view, the dimensions of A are simply carried down the drawing paper and the object is rotated through 90° to obtain the 'plan' and we now see the top view sometimes known as a 'bird's eye view'.

If details of the object are not fully revealed at this stage, an underview or 'under plan' is required and this is shown in view C. The reader should notice that a view from the nose of the helicopter is not given (such a view would be called an 'end elevation'), but all of the required information can be deducted from the first three views. Even at this stage, internal detail may be hidden so the fourth view, known as a 'sectional' view, is provided, in the case of the Meccano Helicopter, to show the internal drive arrangements of the Crane Set Motor. As the set does not possess a long Axle Rod, a compound shaft for the motor blades is made by joining up the two 2½" Rods by a 'coupling' made from a Fishplate locking a Collar to the boss of a 19t Pinion, the lower half of the Pinion bore being used as a 'sleeve' for the upper end of the lower 2½" Axle Rod.

Printed below is the full list of parts for the Crane Set numbers and standard Meccano part numbers (thanks to Mr. Hinson), the latter provided so that readers who do not own a Crane Kit may complete the model using standard parts, assuming, of course, that they possess them! The whole thing makes a change from written building instructions; we hope you like the presentation.

SCHEDULE OF PARTS

No. OFF	CRANE SET PART No.	STANDARD MECCANO PART No.
2	16a	16a
1	21	21
1	26c	26c
1	27d	27d
4	59	59
2	355	74
1	126a	126a
1	186a	186a
2	189	189
2	190	190
2	190a	190a
2	193	193
2	214	214
4	302	2
2	304	5
6	305	9
2	310	48a
4	313	89a
1	328	51
80	329	37a
80	330	37b
28	333	38
2	336	12
1	337	111d
2	350	8a
1	353	53
1	356	19b
2	360	1b
2	363	235g
4	365	235a
4	366	235b
1	369	10
4	625	–
1	11053	–