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**EDITORIAL** Included in this Issue are updates for Eitech, STOKYS, and 'POLYLONG'. I also checked MERKUR and AMILAC but noticed no changes since, respectively, 2009 (OSN 40) and 2007 (OSN 38). METALLUS still list a huge range of parts but running through them quickly I didn't notice any particularly interesting new items. But if you think I missed anything of note please let me know. VEX likewise.

### Shorter NOTES, with thanks to all contributors.

1. **Guibert's Encyclopédie.** In 43/1292 Jean-Pierre Guibert's address was given wrongly, it should have been [jeanpierre1g@orange.com](mailto:jeanpierre1g@orange.com). [44/1324]

### Encyclopédie des Jeux de Construction [44/1324]

2. **Snippet. 'New' system: DER KLEINE INGENIEUR.** The Ebay photos below are all that is known of this small German system, with no indication of date or the size of the parts. It is the third system with the same name that has been recorded: the first has STABIL-style parts (see 17/476), the second a small selection of light coloured, possibly



FIG.1

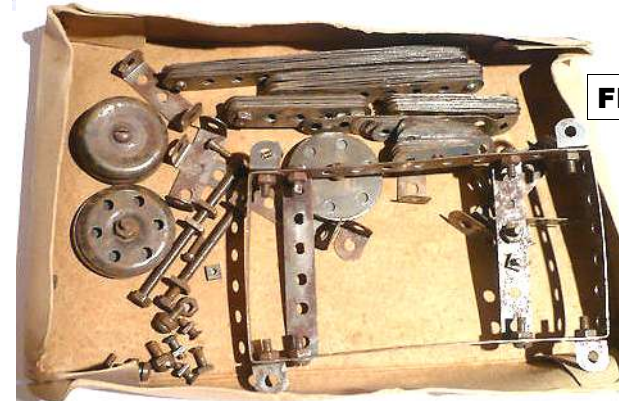


FIG.2

aluminium, Strips and a 5\*9h Flanged Plate (see 43/1320).

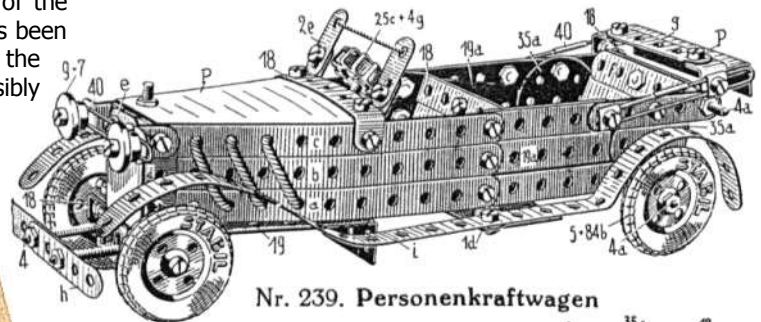
The parts that can be seen in the box are as follows.  
• 3,5,8,11h Strips. • 1\*3\*1 & 1\*6\*1h DAS. • An A/B. • A Road Wheel, 6h Pulley Disc, & 6h Wheel Disc. • Long Bolts in 2 lengths with hexagonal heads, or perhaps they are Screwed Rods. • Various N&B including roundheaded Bolts with hex & square Nuts; and smaller diameter countersunk headed Bolts with square Nuts.

**DER KLEINE INGENIEUR [3]: S1**

[44/1324]

3. **STABIL** Werner Sticht has recently added a number of new items to his website ([www.stabilbaukasten.de.vu](http://www.stabilbaukasten.de.vu)), and the highlights are:

- Stabil Model Contests in the 1920s & 30s (click Detailinfos -> Wettbewerbe, Kundenkontakte)
- Stabil advertising material for dealers, Unterstützung für Händler (Detailinfos -> Teilekabinett, Reklametafeln)
- What you have to pay for Stabil sets, Begehrte Objekte (Sammeln, Fälschen, Restaurieren -> Begehrte Objekte)
- Many new Stabil models (Stabil -> Ausgewählte Modelle)
- More details about the 1953 clockwork motor (Stabil -> Stabil Motore -> Der Stabil-Federmotor ab 1953)
- Special parts for the Gun Sets, Kanonenbaukästen (Stabil -> Stabil Sonderkästen -> Kanonen-Baukästen -> Spezialteile)
- STABIL & its competitors, over the years, mainly MECCANO & MÄRKLIN (Stabil -> Stabil und die Mitbewerber). This section includes some nice small STABIL models from 1936 which used the newly introduced Tyre, and the model below, for Set 50, is one of them.
- New discoveries about Walther's Ingenieur (Walther's andere Systeme -> Walther's Ingenieur Bauspiel).



Nr. 239. Personenkraftwagen

Abb. 239 a läßt die Lagerung der Hinterradwelle Nr. 4 a in den Achslagern Nr. 2 d erkennen und gibt Aufschluß über den Einbau der Karosserieplatten Nr. 19 a und 35 a.  
Die Steuerwelle Nr. 4 g ist mit dem Schraubhaken Nr. 38 a an der hinteren Seitenleiste c angeschraubt.  
Die Kühlrippen lassen sich sehr schön aus dicker Schnur herstellen. Näheres über die bei den Sitzen und der oberen und vorderen Motorhaubenseite verwendeten Pappen siehe unter dem Abschnitt „Zur besonderen Beachtung“ auf Seite 11.

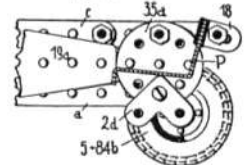


Abb. 239 a

Quite apart from the above the site contains an enormous amount of information with numerous internal links to all aspects of STABIL and other Walther systems. If one's German is limited it's not that easy to navigate but clicking around is well worthwhile. The links for the new items above (from the left column on the home page) will help newcomers to get an idea of the scope of the site.

Much has been discovered on WALTHER'S INGENIEUR since the last note on it in 26/779 and it is hoped to include an update in a future Issue.

**STABIL: S7**

[44/1324]

4. **DER KINDER-KONSTRUKTEUR** Jean-Pierre Guibert wrote that he has the set described in 43/1298 (see p1352) & that the coloured Pulleys & Tyres are not part of the system.

**KINDER-KONSTRUKTEUR: S3**

[44/1324]

### SMALL AD

[44/1324]

**Wanted: Philips Mechanical Engineer Set 1201.**  
Contact Paul Goodman at 07957 197867 or at [p.goodman4@ntlworld.com](mailto:p.goodman4@ntlworld.com).



5. **Snippet. 'New' System: KRÜGER'S Maschinenbau+kasten** The Ebay photos below show the lid and 2 layers of parts. All that was said of the set was that the parts are aluminium.



**FIG.1**

A Google translation of the slogan on the lid is 'For the young Mechanic & Mechanical Engineer or how to become one'. The bottom right panel gives the firm's address as 2 Blumenstrasse, Magdeburg SO. Magdeburg is 120km SWS of Berlin and was in the DDR, if that is relevant – there is no indication of date.



**FIG.2**



**FIG.3**

The only parts which may not be entirely clear are: the plate Gear with probably 17 teeth; probable 10h Strips and Slotted Strips of the same length but with no holes between the 4 'hole' span slots at each end; a wire Handle Crank in the top right corner above; the N&B, with some square Nuts, some hexagonal, and cheeseheaded Bolts. None can be seen but

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**Payments** Please make cheques etc payable to P.A.Knowles. Remittances must be in Pounds Sterling (GBP) or, as cash, in Euros or US Dollars (£1=€1.10=\$1.50). Payments from overseas may also be made using PayPal (in Sterling please).

**Small Ads** Short ads are free to subscribers; insertion guaranteed in OSN 45 if received by mid-August (but repeats may not always be possible, please ask).

presumably Screwed Rods were used as axles. There is nothing to indicate the hole size or pitch.

**KRÜGER: S1**

[44/1325]

6. **GLORIA** Jean-Pierre Guibert has sent details of his No.1 set, and included the photo below which shows each of the parts except the 1\*4\*1h DAS. The details correspond closely to the photo in 28/839 & the notes in 43/1316, but with the following differences & additions. The box measures 160\*95\*21mm and the manual (as Fig.4 in OSN 43) 150\*85mm after folding. Its back page has text extolling GLORIA's virtues. The parts are nickelled. Holes are 3mm and the Axles are 2.8mm Ø. The thread is 2.5mm Ø with a pitch of .45mm. Nuts are hexagonal; the Bolts have cheeseheads which scale at 4½mm Ø. Jean-Pierre noted that the holes' pitch and thread size are the same as MIGNON (see 10/262).



**GLORIA: S3**

[44/1325]

7. **Snippet. New System: MECHANICAL.** This No.1 set seen on Ebay has the lid below. Its contents, with 92 parts, look to be the same as the Indian MECHANIX No.1 (Basic set,



see 24/712) and the layout of the parts in the box is identical. The manual was not shown in the Ebay ad but it contains 10 models so is not the Model Sheet in OSN 24. Other No.1 MECHANIX sets on Ebay have a 10 model manual with the Racing Car on the lid above on the cover, so the MECHANICAL item may well be similar.

**MECHANICAL: S1**

[44/1325]

**OSN – Your Credit Balance:**

was £	after OSN 43
was £	after your remittance of £
is £	after this Issue
Please send at least £	if you wish to receive the next Issue.



**Snippets. STUDIO Modell-Baukasten Elektrotechnik**

The name of this German system was mentioned in 16/458 and since then 4 sets have been seen on Ebay. I'll call them A, B, C, & D. Nothing is known of the maker except the GB logo (Fig1) – I can't trace it but it doesn't seem to be Gebrüder



**FIG.1**

Bing. 1930s was the date given for one of the outfits and this could be possible given the presentation of the various sets.

Before going into details a summary of the sets. Although their contents differ markedly, all have the same wooden box, 32\*21\*6cm, with a sliding lid, and the same partitioning (as in Fig.2). All have a manual with the same cover.



**Set A** (Fig.2). The label is similar to Fig.1 (from Set B) apart from the colour. The array of parts in the main compartment includes the only coloured parts seen, the blue 5h Ø Disc and, not seen in the other sets, the red Toothed Discs (are the 'teeth' pole pieces?).

**Set B.** The lid has the Fig.1 label and, unlike the other lids, it has a batten near and along each of its sides. These have metal tapped inserts in them to allow models to be attached (as in Fig.6, from the Set's manual). The parts in the 3 left hand compartments are shown in Fig.3 and in this set only this area is covered by a lift-off wooden lid with 2 finger holes in it (one quarter of it can be seen under the parts in Fig.4). Fig.4 is a view from underneath of the parts in the righthand compartment – from above there is a Pulley Disc atop each of the 5h Ø Discs, and the 6 insulated wiggly Wires can be clearly seen. The manual cover (Fig.5) features a boy with a Crane fitted with an electromagnet. The model in Fig.6 is from the manual and it is built on the battened lid already mentioned.

**Set C.** The label is similar but white with black or dark blue print. Its few remaining parts have been seen in Set B except for 2 Winding Drums, & a pastry cutter Gear Ring which is appreciably larger than the 5h Disc. Both are probably foreigners and the Drums look like those in the METALL-BAUKASTEN shown in 34/1035. Fig.7 is a model from the manual.

**Set D.** The top of the lid is not shown. Most of the remaining parts match those in the other sets but there are others which are either obvious or likely foreigners. In the latter category Pulleys that look to be aluminium, a 6h Wheel Disc, and Strips with rounded ends. The manual was said to have 12 pages.

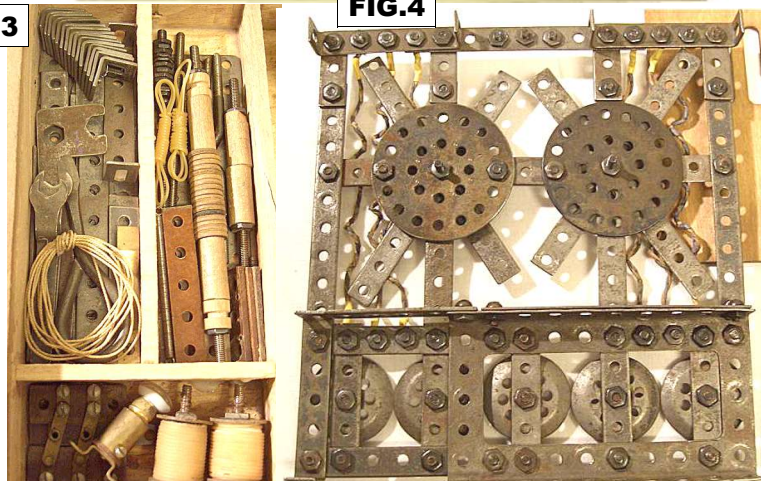
**FIG.5**



**FIG.2**

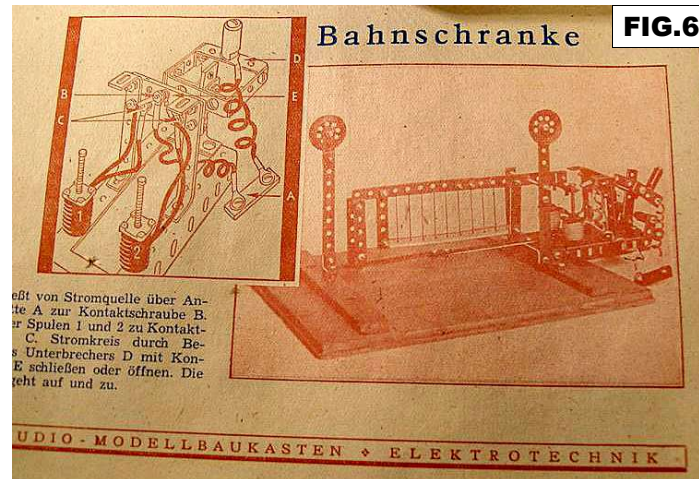


**FIG.4**



**The PARTS** By scaling, holes are at  $\approx 1/2$ " pitch, perhaps 12.5mm, &  $\approx 3 1/2$ mm Ø. All ends & corners are square. † parts are probable. • Strips, 3,5,9†,10,12h†. • DAS, 1\*5\*1h with slotted lugs, 1\*3\*1h†. • A/G, 5h with slotted holes in one flange. • A/B with at least one slotted hole. • Flanged Plate, 10\*5h with 3\*8h cutout (bottom right Fig.4). Slotted holes in the flanges. • Perforated Plate, 3\*8h†. • 5h Ø Disc. • The red Toothed Disc in Fig.2. • 3h Ø Pulley Disc. • Screwed Rods. • Hex Nut & RH Bolt. • Spanners: cranked single-end; double-ended with ring & angled jaws†. Span-driver, 'L' shaped with openings (Fig.3). • Wire Screwdriver, like MECCANO but shorter. • Coils: without base (Sets B, D); with base (Sets A, C). • Lamp Holder & Bulb. • Flat, open, double pole Switch (bottom left in Fig.3). • Insulating parts (Fig.3): 5h Strip; Washer  $\approx 12$ mm Ø; 10mm Ø Wooden Sleeves: 20mm long; 10mm long with pulley groove. • Various insulated wire and the

wiggly wire in Fig.4.



**FIG.6**

**FIG.7**





## TEST

by Jacques Pitrat

MCS has an entry for this MECCANO-like French system, and OSN 16 (p448) gives a short description. Both are based on a photo of a set, so I will complete them with information from a mint set. The maker's name is not indicated on the box, and no manual was ever produced. It seems that there was only one unnumbered set, and all the known examples are of exactly the same set. The period given in OSN, the 1950s, is likely, but no positive indication of date is known.

**The set** is in a 420\*280\*30mm blue cardboard box with a small label (Fig.1) on the lid. A model label (Fig.4) nearly fills its underside. The parts, including the small parts box, are fixed to a yellow insert using the set's Nuts & Bolts.

**The parts** are listed below with their quantities in brackets. Nearly all can be seen in the open box, Fig.3, & the small parts box, Fig.2. All are steel, except the brass bosses. The latter are single-tapped and fitted with a Grub Screw. The thread is  $\frac{5}{32}$ " BSW, like MECCANO. The diameter of the holes is 4.0 mm and their pitch 12.0 mm. The only slotted holes are in the Cranks & Trunnions. All the Plates have square corners. The light coloured parts have a sprayed silver/aluminium finish.

**Perforated Strips:** 27h (4), 13h (4), 7h (4), 5h (4), & 3h (5). **DAS** 1\*5\*1h (4). **Curved Strip**, 5h (6). **A/G** with square corners, 9h (2).

**Double Bracket** (2). **Angle Bracket** (10).

**Cranked Bent Strip** (1). **Double Bent Strip** (4).

**Flanged Plate** 9x5h (2).

FIG.2



**Flat Plates:** 9x5h (2); 9x3h (2); 5x5h (2)

**Flat Trunnion** with 6 round & 3 slotted holes (2).

**Trunnion** (4 - 2 sit atop the Flat Trunnions).

**Pulleys:** 70mm (2); 30mm (4).

**Bush Wheel**, 36mm diameter.

**Cranks:** with 1 round & 1 slotted hole (1); with 1 slotted hole (1).

**Axles** (silver painted), 3.9mm diameter: 80mm (3); 30 mm (1).

**Crankshaft** 85 mm (1).

**Crank Handle** (1).

Card of red **Cord** (1).

**Wire Hook** (1).

**Rubber Driving Band** (2), see Fig.2, it almost looks like a tyre.

**Spring Clip** (10).

**Nut**, hexagonal, 8.0mm A/F (45). Many of them have lost part or the whole of their silver paint.

FIG.4

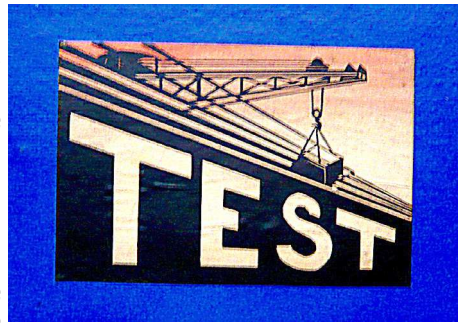
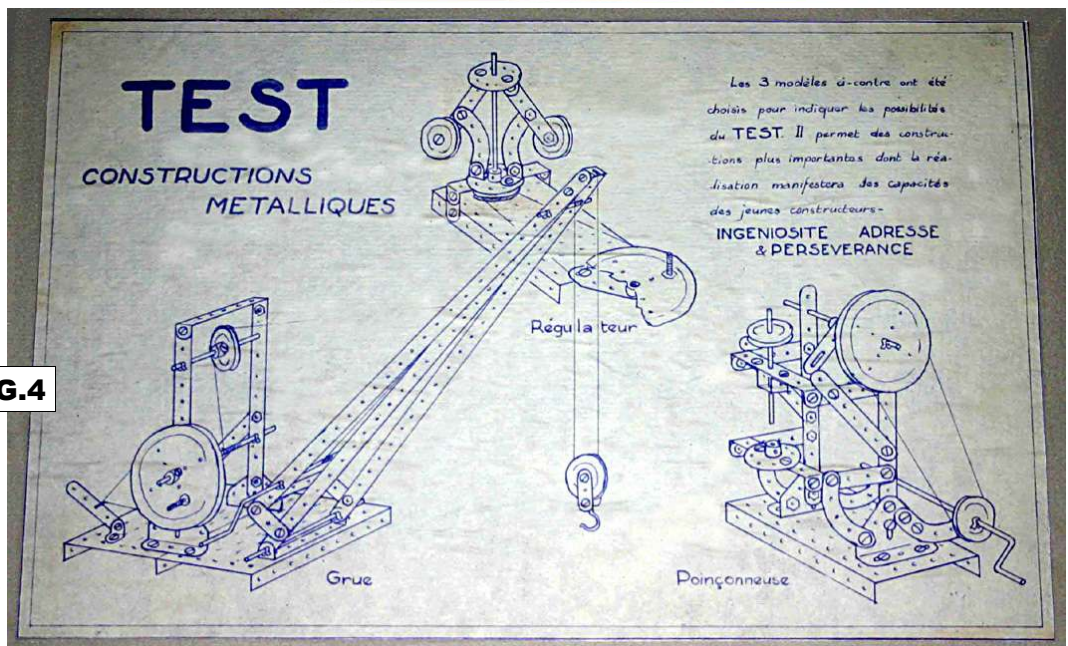


FIG.1

**Bolts: Short**, with pan head, length 10mm (35); **Long**, with mushroom head, length 15 mm (10).

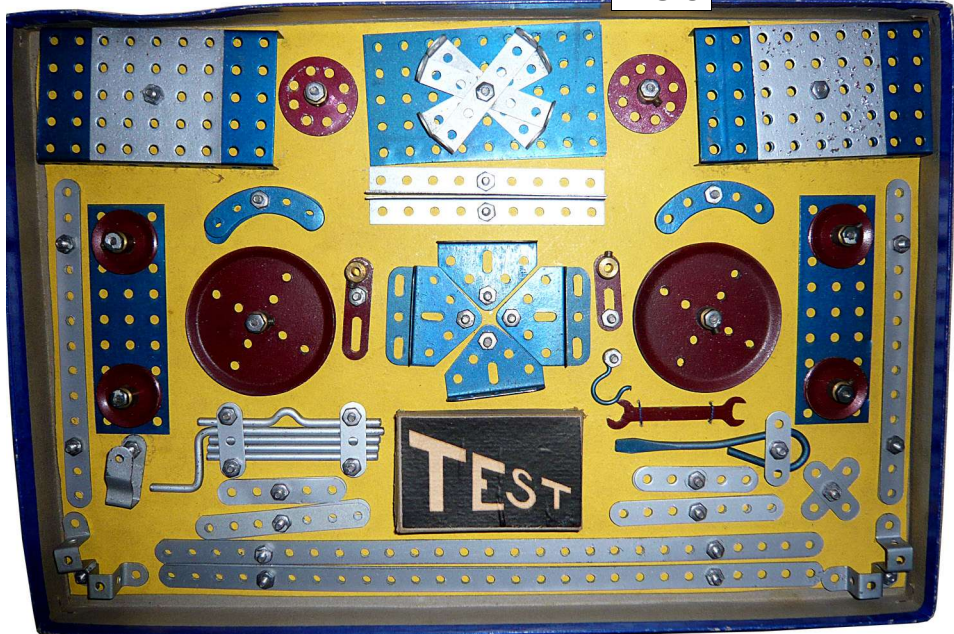
**Screwdriver** (1). **Spanner** (1).

**Remarks** The parts of this system are well made, but the set does not include a manual and only three models are displayed on the inside of the lid. They do not take advantage of all the possibilities of the set: none use the A/G, the Flat Plates, the Flat Trunnion, or the Crankshaft. The

inability of the maker to offer better models is described in the top right corner of the model label as a virtue: this system 'allows more important models whose realization will show the capabilities of the young builders'. It would also have been interesting and useful to show the maker's ability in this direction. This system was not successful, and sales were certainly not very high - mint sets are very rare, while used sets are still rarer.

**Editor's Note** Thanks are also due to Jean-Pierre Guibert who sent photos of another mint set, and to his fellow club member who provided them. The set looks identical to Jacques' but the holes were 4.3mm Ø (at 12.0mm pitch), and the Axles 4.0mm Ø.

FIG.3





**WITHE** A snippet in 38/1158 showed a manual cover and a few parts but now Jürgen Kahlfeldt has sent details of his set – probably the only size produced. It has no manual and isn't complete but has enough parts to show what the Bridge model on the manual cover would be like.

The box measures 311\*221\*20mm and the label right, 299\*202mm, covers nearly all of the lid. The name in the top right corner is Gerhards. A label inside the lid, 207\*202mm, (Fig.2) shows the parts and the quantities in the Set.

Most of the main parts can be seen in the open box (Fig.3) & also in the scan (Fig.4), with #7 inset. Most parts are around .8mm thick but #1,6,7,14 are .35mm. Bright parts are nickel. Holes are 4.2mm Ø at 12.7mm pitch, but in the Pulley Disc #6 they are 4.6-4.7mm. From its name #7 might be expected to

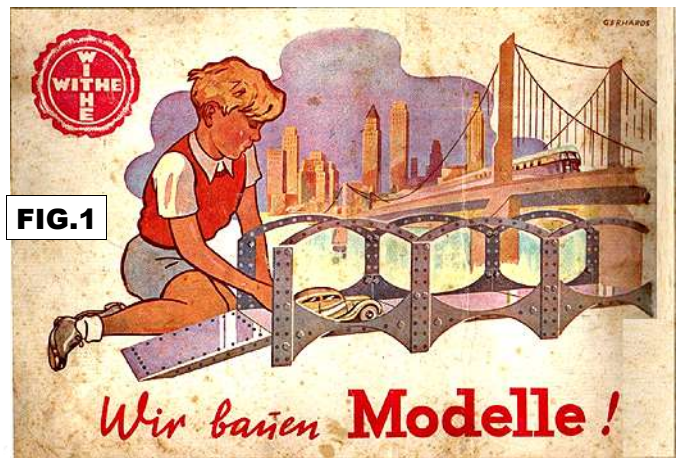


FIG.1

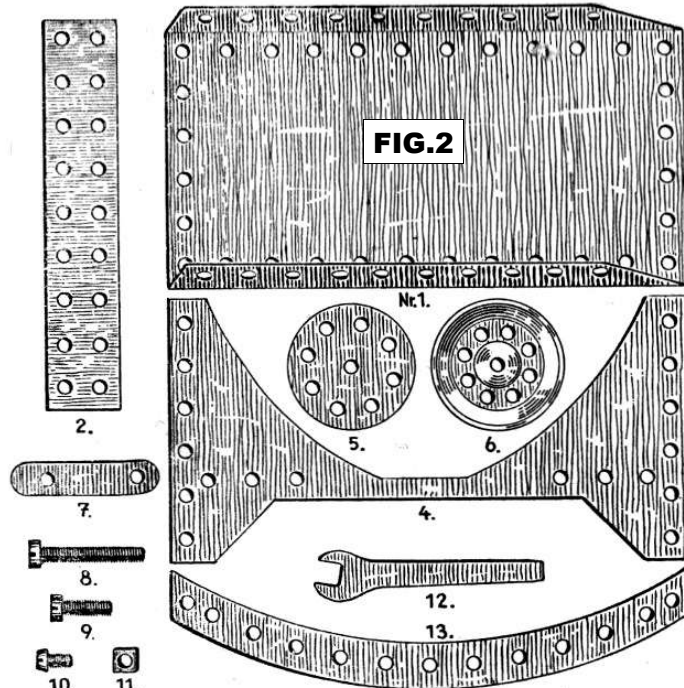
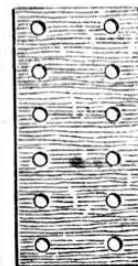
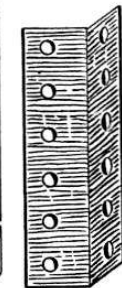


FIG.2



3.



14.

**Inhalt des Baukastens**

Nr.	1	Platten	6 Stück
„	2	Streben	10 „
„	3	Verbindungsplatten	4 „
„	4	Pfeilersücke	8 „
„	5	Räder	4 „
„	6	Seilrad-Hälften	8 „
„	7	Verbindungswinkel	5 „
„	8	Schraube 30 mm	1 „
„	9	Schrauben 15 mm	5 „
„	10	Schrauben 6 u. 8 mm	80 „
„	11	Muttern	86 „
„	12	Schraubenschlüssel	2 „
„	13	Bogenstücke	9 „
„	14	Winkelstücke	20 „
		Gesamthalt	248 Stück

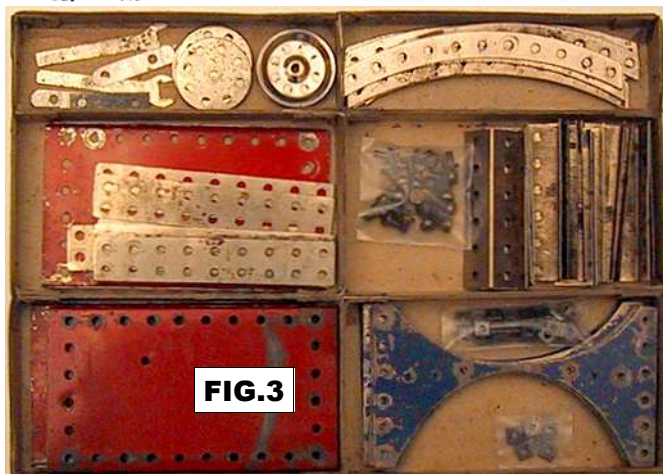


FIG.3

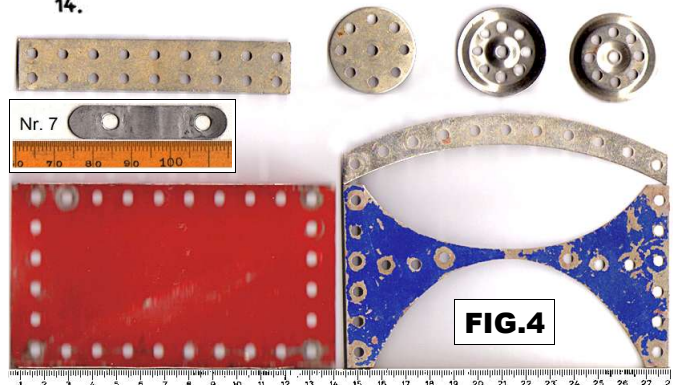


FIG.4

be an A/B but it is flat with holes at 24mm pitch. The blue 2h Strip that can also be seen top left in the box is probably a foreigner. The thread is M4. Nuts are plain steel & square: 9 of

those remaining are 8mm A/F, the 40 others, 7mm. The Bolts in the Set are brass & roundheaded.

Fig.5 shows, as far as the parts available allow, the model on the manual cover. The Plate #3 is used to connect the Flanged Plates #1 to form the deck, with the approach ramps attached by Strips #7. The Wheel Disc, Pulley Disc & 6h A/G are not used in the model and are no doubt needed for other models in the manual.



FIG.5



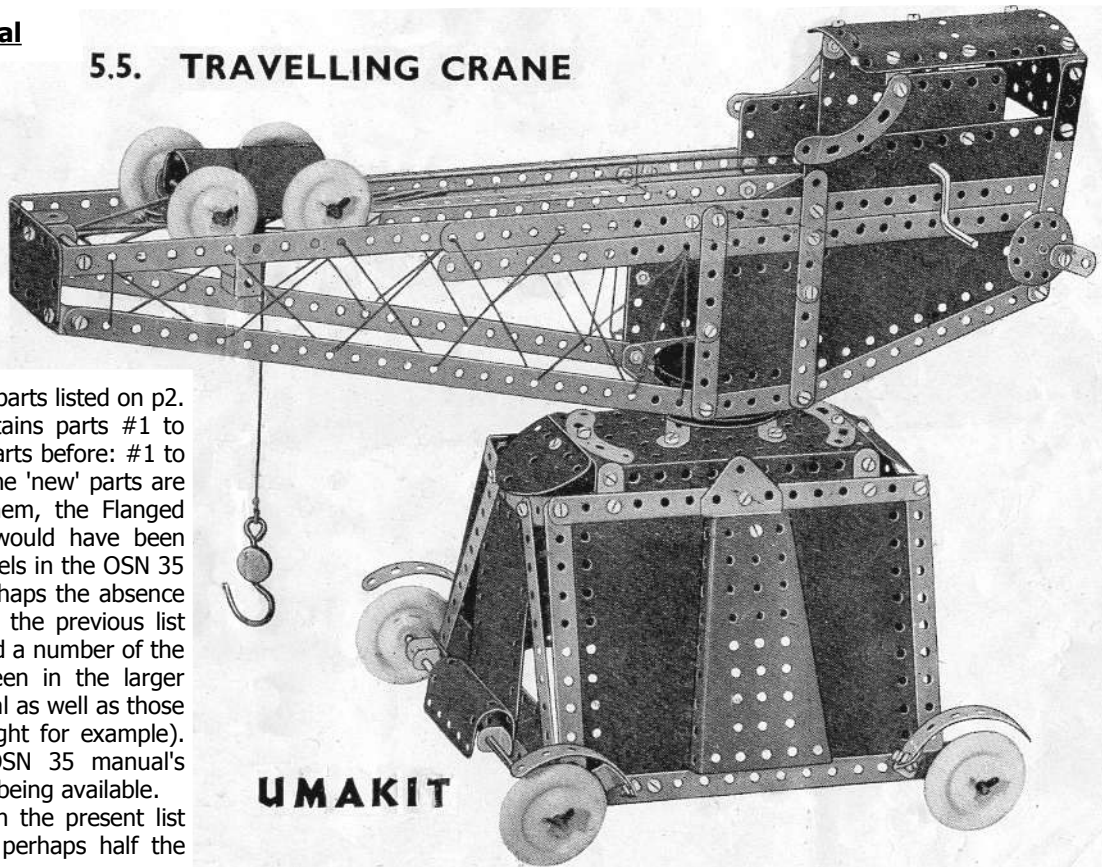
## Another UMAKIT Manual

Ivor Ellard kindly sent this item and like the edition described in 35/907 it has 8 of the same size pages. It differs though in covering only Set 3-5, and includes new larger models for each set. Also as before, there are no covers & no evidence that they are missing. p1 has the same Intro but in larger type to fill the whole page, with the parts listed on p2.

**The Parts.** The list contains parts #1 to #82 as opposed to the 39 parts before: #1 to #61 but with many gaps. The 'new' parts are shown below. Certain of them, the Flanged Sector Plate for example, would have been needed for some of the models in the OSN 35 manual & also the N&B! Perhaps the absence of the parts after #61 from the previous list was simply a mistake. Indeed a number of the 'new' parts here can be seen in the larger models in the OSN 35 manual as well as those in this one (in the model right for example). And remember that the OSN 35 manual's Intro spoke of over 80 parts being available.

The prices of the parts in the present list are either the same or, in perhaps half the

## 5.5. TRAVELLING CRANE



No.	Description	Price	No.	Description	Price
9.	Angle Girder, 9½"	...	6d.	64 Curved Plate, "U" Section, 5/16" radius, 2½" x 2½"	4d.
10.	" " 7½"	...	5½d.	65 Curved Plate, 1½" radius, 2½" x 2½"	3½d.
11.	" " 5½"	...	4d.	66 Nuts	doz. 3½d.
12.	" " 3½"	...	3½d.	67 Bolts, ¼"	4d.
13.	" " 2½"	...	2½d.	68 " 3/8"	5d.
14.	" " 1½"	...	2d.	69. " 1/2"	6d.
28.	Crank handle, 5"	...	5½d.	70. Washers	4d.
29.	Single Throw Crankshaft 3½"	...	5½d.	71. Hank of Cord	4d.
30.	Double " 3½"	...	5½d.	72. Spring Clips, ...	Box of 24 1/10d.
31.	Single Throw Handcrank 3½"	...	6d.	73. Fishplates	doz. 11d.
32.	" " 5"	...	6½d.	74. Hook	9d.
33.	Axle Rod 8"	...	3½d.	75. Rod Connecting Tube	2½d.
34.	" " 6½"	...	3½d.	76. Rod and Strip Connector	2½d.
35.	" " 5½"	...	3d.	77. Driving Bands, 2½"	doz. 5d.
36.	" " 5"	...	3d.	78 " " 4½"	7d.
38.	" " 4"	...	2½d.	79. Spanner	5d.
40.	" " 2"	...	2d.	80. Screwdriver	7d.
41.	" " 1½"	...	1½d.	81. " extra long	8d.
45.	Wheel, 2½" diameter	...	9½d.	82. Cylinder, 2½" x 1½" diameter	9d.
46.	" 3"	...	11½d.	Supplementary Sets ... 3A 10/9 4A 14/6 5A 10/9	
53.	Collar with Screw	...	3½d.		
54.	Cord-anchoring Collar	...	3½d.		
62.	Flanged Plate, 3½" x 2½"	...	6½d.		
63.	" Sector Plate, 4½"	...	10d.		

items, appreciably less than in OSN 35.

**The Sets.** Notice the last item in the list, the Supplementary Sets. The smallest is the 3A, no doubt because the Manual has no models for Sets 1 & 2; the No.5A is the only known reference to a set larger than the No.5.

**The Models** for Sets 3 & 4 are as in the earlier manual except that there they were for Sets 4 & 5. The five models for the No.5 go from 5.1 MOTOR LORRY to the Crane above, the most original of the five. They include the Tanker shown in 13/339 which was on the lid of a probable No.1 outfit, and said lid also showed the Crane, and a Tank almost identical to the 1937-53 Meccano No.5 Military Tank.

**Remarks.** With its complete list of parts and the larger No.5 models it seems most likely that the present manual was later than the OSN 35 edition. Another possible indication is that 2 telephone numbers were added to the Denton Claff address: TEM. 9155 & 3821. The lower prices for many of the parts is rather surprising as varying degrees of inflation occurred throughout the postwar years (the only reductions in MECCANO prices arose from changes to the Purchase Tax rate

from time to time but these were relatively small). Perhaps the UMAKIT reductions were intended to make their prices match or be lower than their competitor's.

No details are known of the contents of the sets, other than the No.1, and there are various unanswered questions. Was there ever a No.6? And if so did it allow the present larger No.5 models to be made from it? Were the larger sets renumbered downwards at some point so that a No.6 became a No.5, and so on. It seems unlikely from a marketing point of view. Alternatively were the sets, or at least the larger ones, upgraded? That might have meant price rises, but at least it would have avoided the problems which arose for shops when Meccano downgraded their sets in 1970.

Earlier notes in OSN have shown the similarities between UMAKIT & CONSTRUCTO, and the models in the latter's Set 3-5 manual described in 25/740 are identical to those in the present UMAKIT one. The photos are even identical in size, and the only differences are a few minor changes to the names of the models and one of the present No.4 models was said to be for Set 5.

A Google search for 'Denton Claff' gave only one relevant result, an announcement in The London Gazette for 5<sup>th</sup> Jan. 1962 that the company would be dissolved in 3 months time.



**CONSTRUCTION in 2010** from a catalogue and the Eitech web site. 9 new sets were added for 2010 and 4 dropped.

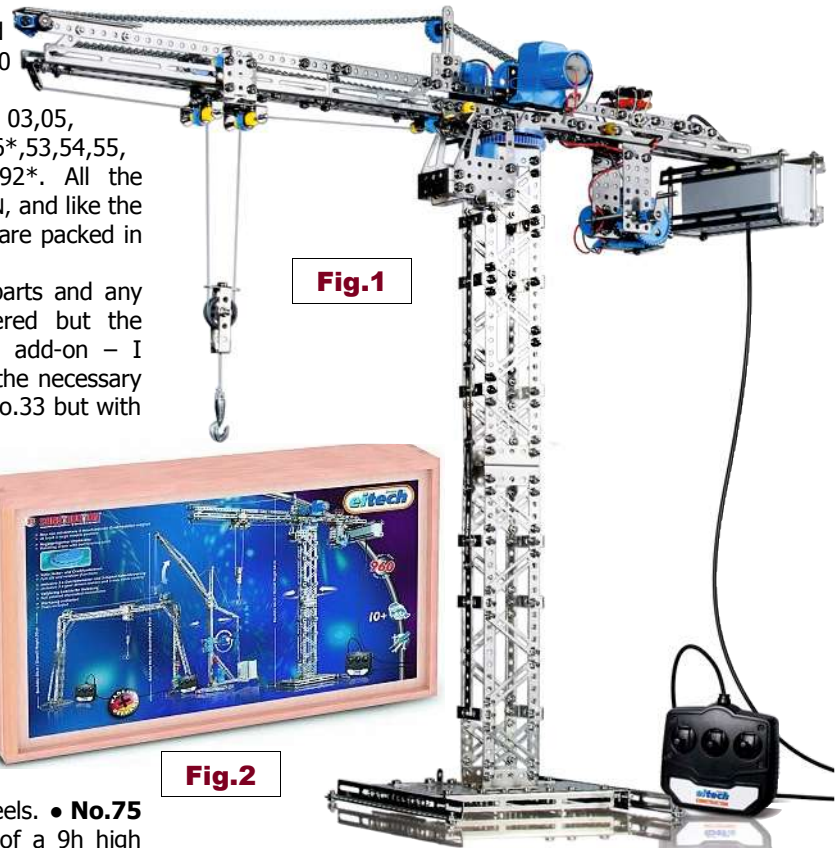
**The new range**, with the new sets asterisked, is: 03,05, 08,09\*,17,19,20,21,23,24,25,30,31,33,34\*,35\*,45\*,46\*,53,54,55, 56\*,57\*,61,62,64,67,72,73,74,75\*,80,82,83,84,87,91,92\*. All the new lids emphasise 'eitech' rather than CONSTRUCTION, and like the existing large 30-series sets, the new ones, 34 & 35, are packed in wooden boxes.

**The New Sets.** • **No.09** (Fig.3) has over 440 parts and any one of 3 models can be made. None are powered but the Motor/Gear Accessory Set 135 is suggested as an add-on – I wonder though how easy it would be to incorporate the necessary parts in the models. • **No.34** is the Eiffel Tower set No.33 but with the Strand of Light included to illuminate it inside.

• **No.35** is a set with 960+ parts for one of the 3 Cranes shown on the lid (Fig.2). The featured model (Fig.1) stands some 90cm high and the jib turns on a Geared Ball Bearing, probably the one shown in 35/1062. It is powered by 3 remotely controlled 6v Geared Motors. The 3 channel Controller is the one shown in the No.134 set in 37/1107. • **Nos.45 & 46** are simplicity models of a 7h span Biplane and a Rocking Horse respectively. • **No.56** is a larger, rather nice, simplicity model of a Tractor & Trailer running on 3 & 2cm Discs as wheels. • **No.57** is another small model, a Buggy of some sort using Eitech's smallest Road Wheels. • **No.75** is a Solar model with a 30cm arm rotating on top of a 9h high pylon. The Cell is at its centre, with the Motor at one end driving a large red plastic propeller, and the No.45 Biplane at the other. • **No.92** has 180+ parts & features a Racing Car on the lid, sized to match the standard Road Wheel. 2 other model are possible.

**2 new sets** are featured on the Eitech home page as coming soon. One is a small tracked Excavator; the other the Bridge in Fig.4 which combines metal parts with Eitech's TEIFOC bricks – shades of ANCHOR in the early 20<sup>th</sup> century except that the Bricks are cemented together. They can be soaked apart, like BRICKPLAYER years ago.

**The Deleted Sets.** • **No.18** was a 500 part set for Cranes, see 35/1063. • **Nos.51 & 52** were small sets for a Helicopter & a Biplane respectively, again see 35/1063. • **No.85** was introduced in 2005 & should



**Fig.1**



**Fig.2**



**Fig.4**



**Fig.3**

have been mentioned in 34/1023 – it had 180 parts for a small Buggy. **Accessory Packs & Add-on Sets** The range of sets with Gears, Motors, etc is Nos.130-133, 135, 136 & 140-143. No.143 is new and has 2 red flashing LED's powered by 2 AA cells in a switched Battery Box. Among the Parts Packs the 6m long Strand of Light is now included as No.137.

CONSTRUCTION [1]: S11

OSN 44/1330

**An M'TEK Update** The sets of that name, from the Indian Toy-Kraft brand, which were available in 2009 were described in 40/1226. They continue and 7 new ones were added later in that year. 6 are entry-level theme 'u CAN do it' outfits which are packed in canisters and each has instructions for 2 small models. The Mini Cars set is shown right; the others are for Bikes, Airplanes, Racer Cars, Trucks, and Helicopters. The M'TEK name can't be seen on them. The other introduction, far right, does have the name on the lid, though, as before, it is in tiny letters in one corner. The set has 146 parts and a 3v Motor. Its 24 page manual describes 'construction methodology' and more prosaically, 20 models of all manner of vehicles.



M'TEK: S2

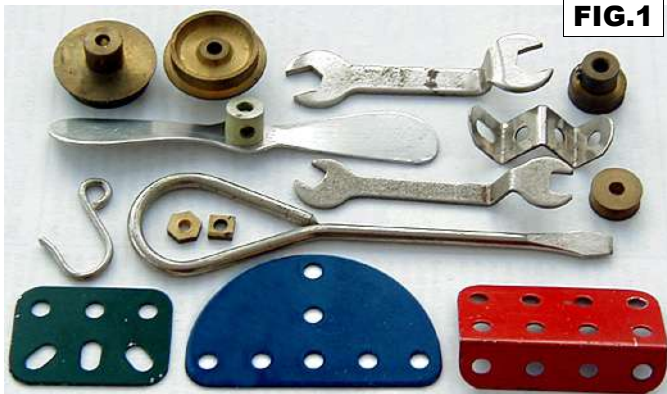
OSN 44/1330



**More NECOBO** These notes add to those in 4/56-9, 5/85, 7/147, 24/714 & 26/778, and are mainly based on: a manual for Set 5 & 6 models; a Price List from April 1953; manuals for the Mechanisms sets; and some parts, probably most of a No.5 outfit (or more likely a No.4 and a No.4a), plus a few extras.

**The 5-6 Manual** Its covers and possibly outside pages are missing with 16, unnumbered, 240\*167mm, remaining. The 5 No.5 models are from Locomotief to Sportwagen, and the 5 for No.6 from Havenkraan (a multi-jib crane on a gantry) to Vrachboot, the Cargo Boat shown in OSN 4. All are attractive models and a parts list & lengthy building instructions are provided (& needed) for each. Some of the photos of a rather splendid No.5 Battledozer (Google translates the Dutch name as Bulldozer Gun Carrier), & a No.6 Fire Engine, are shown overleaf, together with a list of their parts.

**The PARTS & SETS** Fig.6 gives the set contents of Sets 3-6 taken from the last 2 pages of the Manual with the 'a' sets omitted, and also the contents of Sets 0-2 taken from the last manual described in OSN 4. Fig.7 lists all the other parts in the system which were not used in Sets 0-6, taken from the 1961 Price List shown in OSN 4, and it also has the illustrations of certain parts, taken from various sources. These may help to identify some of the parts in Fig.6, but even then all may not be clear and the following may help. **#11a**, not known and not used in the No.6 models. **#12-21** Flat Girders. **#22** A/B. **#58, 59, 60c** Perf. Plates 5\*15, 5\*19, 9\*11h. **#86, 85**, small brass Pulleys with, w/o boss. **#91** Screwdriver. **#92, 92a** Bolts. **#92d** Nut. **#92e** Washer. **#94** Spring Clip. **#140** Flanged Wheel – it can be seen as the steering wheel in the Bulldozer. **#174** Tension Spring, short enough to be used with the Pawl with both mounted on a Face Plate. **#187** Threaded Coupling. **#200** Sprocket Chain. **#201-5** Sprockets. **#210-2** Hinged Plates. **#215-7** Door Hinges? (a NECOBO first?). A few of the parts are shown below.



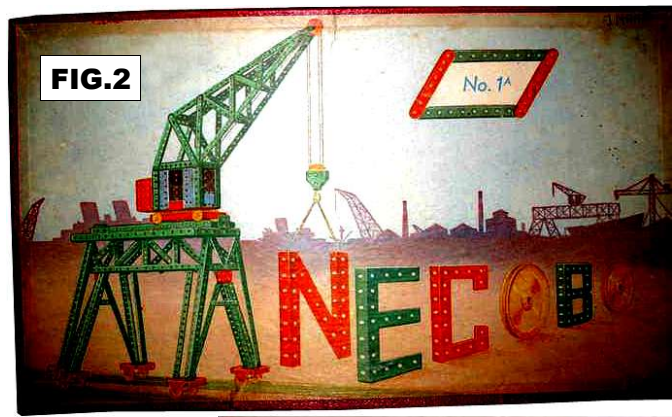
**FIG.1**

To show how the system grew over the years the following parts were listed in the first 0-3 manual in OSN 4: #1-73, 74a-k (except 'j', which was never used), 80-84, 87-94 (92 & 93 were 6 & 15mm Bolts with Nuts). The parts included 10 Flat Girders (all the MECCANO lengths) but in the next manual seen, a 0-4, none were listed. This remained the case until 4 sizes were reintroduced for Set 6 was introduced.

Sets 0-4 remained much the same throughout. Set 0 for instance lost 2x 1\*5\*1h DAS but gained a 5\*9h Flanged Plate, an extra Axle, 4 Washers, and 2 each of the Flat Bracket, A/B, 3\*9h Flexible Plate, Rubber Ring, N&B, & Spring Clip. No.4 gained an Axle, a Coupling, 1 each of the brass Pulleys #85 & 86, 8 Washers, 4 Nuts, and 2 each of the Flat Bracket, A/B, Bolt, & Collar.

Very few sets, in fact only two, have been seen on Ebay, Marktplaats, etc. The lid from one, a No.1A is shown in Fig.2; and is the same design as the early manual cover in OSN 4. The second was also in a red box, but larger, and with a similar label of probably the same size.

All that is known of the smallest, Junior, set is the manual cover shown in Fig.3. The Crane is similar to the



**FIG.2**

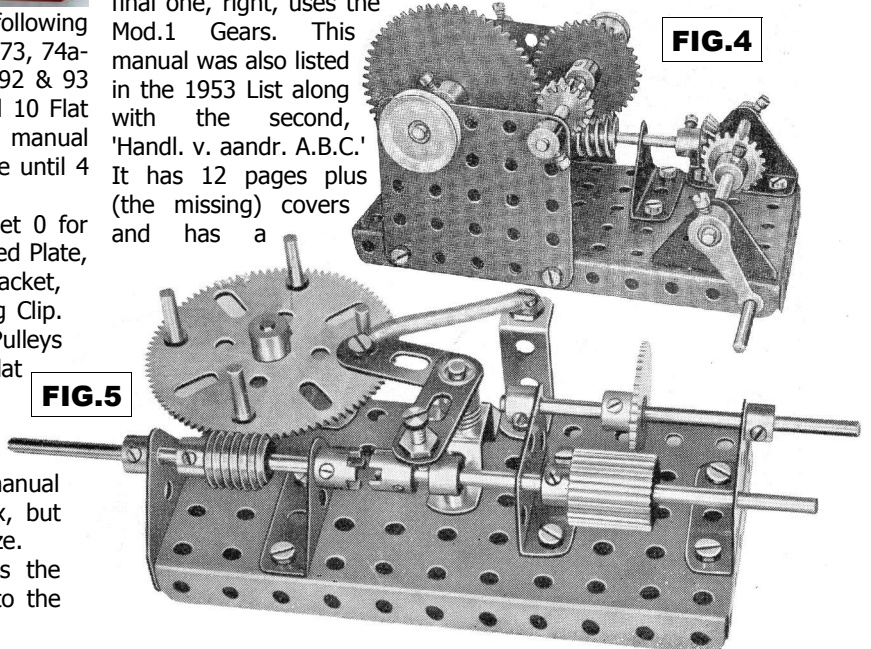
one on the later manual cover in OSN 4 but not identical. The manual was said to contain 16 pages. At some point the Junior set was discontinued – it was not included in the Bé & Bé Price List mentioned in OSN 4. Said List would have been later than the 1961 List because the latter did include the Junior as well as all the parts in the Bé & Bé List.



**FIG.3**

**The 1953 PRICE LIST** The same Sets were listed as in the 1961 List described in OSN 4: the Junior, 0-6, 0a-5a, A, B, & C. The parts were also as in 1961 except that the Trunnion variants #67b,c & 68a,b,c, and the hinged parts #210-217 had not been introduced. Also the main manual was 0-4 rather than the later 0-2 & 3-4. And unlike in 1961 the Mod.1 Gears (#127-130a as described in OSN 7). were shown as well as the later ones. In the undated, but earlier Price List in MCS/FB (p3/4) only the Mod.1 Gears are listed.

**The MECHANISMS SETS** The Dutch name Aandrijfdoos translates as Drive Set and Sets A, B, & C were available. Two manuals are to hand, both in portrait format, 136\*213mm. The first, Handleiding v. aandrijfdoos, was in the MCS Price List and has 8 pages. It starts by saying that the Aandrijfdoos (singular) contains the most common parts needed to drive your models, and it is therefore probable that at the time there was only one set. Various simple mechanisms are shown, the final one, right, uses the Mod.1 Gears. This manual was also listed in the 1953 List along with the second, 'Handl. v. aandr. A.B.C.' It has 12 pages plus (the missing) covers and has a



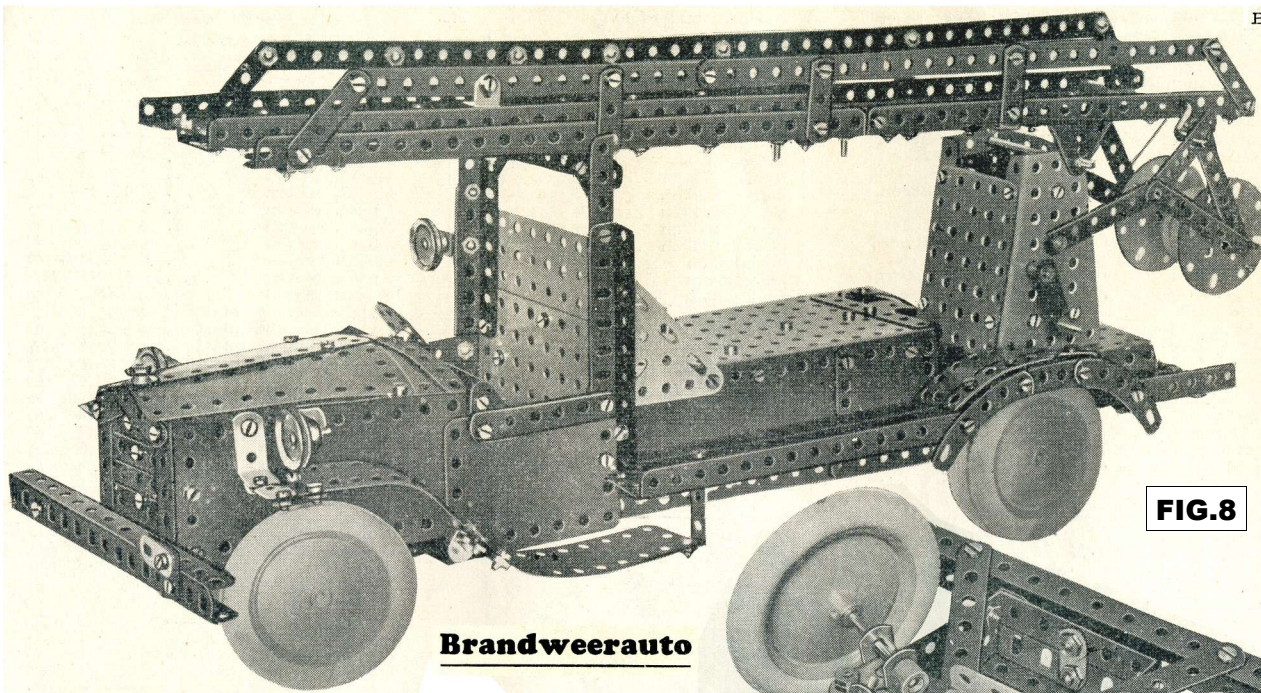
**FIG.4**

**FIG.5**







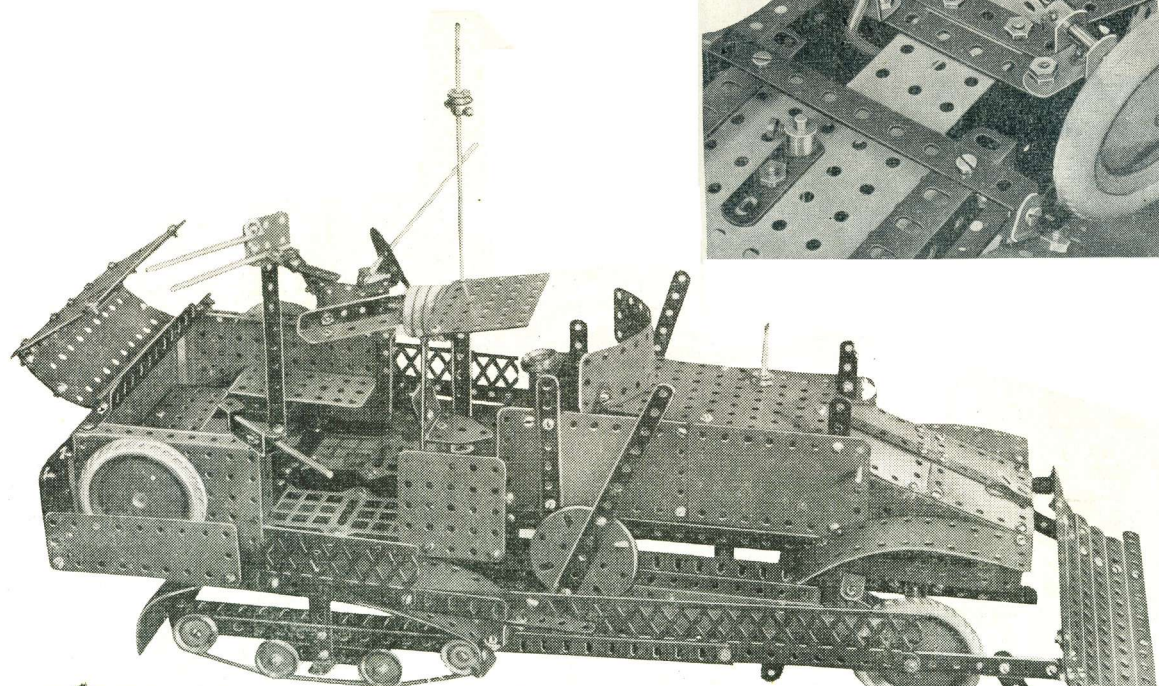


**Brandweerauto**

**FIG.8**

Benodigde		onderdelen	
No.	No.	No.	No.
14	1	2	48
4	2	4	50
16	3	1	51
8	4	1	52
4	5	1	53
2	6	1	53A
2	8	1	54
4	10	1	55
9	11	1	57
2	14	1	60
2	15	1	60A
2	18	1	61
16	22	1	62
3	23	1	63
4	24	1	66
4	25	2	66B
4	26	4	67
4	27	7	68
6	28	2	70
2	29	1	72
4	30	2	74C
2	31	2	74F
6	32	1	74G
2	33	1	74H
2	35	1	74K
1	36	1	80
2	37	1	81
2	41	1	82
2	42	1	83
2	44	1	85
3	45	1	86
4	45A	4	87
2	46	3	88
2	47	6	88A
		4	88B
		6	88C
		2	89
		4	95
		2	99
		2	107
		2	108
		2	109
		1	109B
		2	112
		4	110
		2	116A
		4	118
		1	119
		4	120
		4	121
		3	122
		3	123

278 korte schroeven  
20 lange schroeven  
306 moeren  
7 veerclips



**FIG.9**

Benodigde		onderdelen	
No.	No.	No.	No.
6	1	1	65
6	3	1	66
4	4	3	67
4	5	6	68
2	6	2	69
12	7	2	70
7	8	2	71
6	9	2	72
8	10	2	73
2	11	2	74A
14	22	1	B
4	23	2	C
4	24	2	D
4	25	1	F
4	26	2	G
4	27	2	H
4	28	2	J
4	29	2	K
4	30	1	80
4	31	1	81
4	32	1	82
2	33	1	83
2	34	1	84
2	35	1	85
2	36	1	86
2	37	1	87
2	38	1	88
2	41	4	88A
3	43	4	88B
2	44	4	88C
2	45	4	89
4	46	1	95
2	47	2	97
2	48	1	98
4	49	2	99
4	50	1	106
1	51	2	107
1	52	1	108
1	53	1	109
1	54	2	110
1	55	2	118
1	56	1	121
1	57	2	123
1	60	4	126
1	61	1	140
1	62		
1	63		
1	64		

8 veerclips  
208 schroeven en moeren

**Bulldozer gevechtswagen**



similar opening paragraph but it refers to Aandrijfdozen, plural. The 3 non-Gear drives in the first booklet are shown plus numerous other mechanisms including the example in Fig.5. Others also use the later Gears, plus Sprockets, Slotted Strips, and the Pawl & Ratchet. Nothing is known of the contents of A-C sets & particular sets are not mentioned in either booklet.

**The PARTS** They are well made with 4.4mm holes (a few 4.3mm) at 12.7mm pitch. Slots are 7.8-8.4mm long. The thread is  $\frac{5}{32}$ " BSW. Bosses are brass, 9.9-10.1mm Ø, bore 4.1 (a few 4.2), double-tapped, with deep, MÄRKLIN-type peening.

The various parts seen are listed below, and except where stated are MECCANO pattern (or MÄRKLIN for 'their' parts).

- **Strips** are 12.6-12.8mm wide, all with large radius ends.
- **Brackets**: • #11 (Flat Bracket, 27mm long o/a, with, unlike its MECCANO counterpart, the slotted hole extended outwards); • #22 (A/B, typically 13.3\*14.8mm o/a); • #33 (D/B, 14.8mm wide o/a); • #41 (1\*2h A/B, no slotted hole); • #69, 70 (1,2h Reversed A/Bs); • #71 'W' Bracket, MÄRKLIN-like but with one end hole slotted; • #73,72 (Double Bent Strip, & MÄRKLIN variant spanning 5 holes).
- **A/Gs**: all, #23-32.
- **Flat Girder**: #13 (4h long).
- **DAS**: all, #34-38.
- **Flexible Plates**: #43-45, 46-50 (3 & 5\*5,7,9,11h, but not the tapered ones). No slotted or centre holes. 0.30mm thick. All are steel, unlike those described in OSN 26.
- **Perforated Plates**: #51-53, 54-57, 60 (3\*5,7,9; 5\*5,7,9,11; 7\*11h). No slotted holes.
- **Flanged Plates**: #61-66 (3,4h long Girder Brackets; 3\*5h (not shortened as in MECCANO); 5\*7h, 5\*9,11h. No slotted holes.
- **Trunnions**: #67,68. 5h pattern.
- **Axles**, 4.0mm Ø, nickelled with slightly rounded square ends.
- **Discs**: #80 Wheel Disc, & #82 Bush Wheel, both 37mm Ø; #82, & #83 Face Plate, both 62mm Ø.
- **Semi-Circular Plate**: #84.
- **Pulleys**: no face holes: • #85,86, solid brass, 5mm wide: Loose, 13mm Ø; Fast 15mm Ø. • #87,88, 25mm Ø: #87 Loose, steel, red, 3½mm wide, eyelet boss. #88 Fast, brass, 4½mm wide. • #88a, steel, red, 59mm Ø, 8mm wide.
- **Rubber Ring** #88b, for #87, white with NECOBO on one wall, 38½mm Ø & 7mm wide when fitted.
- **Tyre** #88c, for #88a, white with NECOBO on both walls, 82mm Ø & 11½mm wide when fitted (earlier this part was described as a Rubber Ring).
- **Crank Handle** #89, 4.0mm Ø, 113mm long o/a.
- **Hook** #90, see Fig.1, 2mm nickelled wire, 30½mm long o/a.
- **Screwdriver** #91, see Fig.1, 3.9mm wire, 121mm long o/a.
- **N&B**. 2 types were found: • 1) brass, with 8.0mm A/F hexagonal machined Nuts, 2mm thick, and 6-6½ & 16mm u/h Bolts with 6.0mm Ø cheeseheads; • 2) brass steel, with 6.4mm A/F square pressed Nuts, 2mm thick, and 6½ & 16mm u/h Bolts with 6.0mm Ø tapered cheeseheads. All the manuals seen show the large hexagonal Nuts in the models and so these were no doubt the original pattern. This fits with the parts to hand if they were a No.4 & a No.4a, because there are appreciably more of the hex type than the square. The authenticity of both patterns is supported by the 2 types of Spanner found in the Lot, one for the hex Nuts & one for the squares.
- **Washer** #92e nickelled, 10mm o.d.
- **Stelschroef** #93. Set Screw? but none found and more likely the 4mm long nickelled Grub Screw found in many of the bosses.
- **Spring Clip** #94, blued, 5.6mm wide. The parts also included 3 wound-wire type Clips, similar to the VOGUE part but with shorter 'wings' – they grip well but no mention has been found of this part in the literature to hand.
- **Formed Strip** #95, 5h with slotted end holes (as #109), 3" radius.
- **Propeller** #96, see Fig 1 – aluminium including the boss, 100mm long o/a & 15mm wide.
- **Railings** #97,98. They differ from the MÄRKLIN part in having round holes, being deeper (by 5mm to 38mm) &

- having wider (3¼mm) cross bracing.
- **Flanged Sector Plate** #99. 8h long, no slotted holes, straight ends.
- **¼" Pitch Strips**: #106-8 (4,6,8h).
- **Slotted Strips**: #109 (5h with the end holes slotted outwards); #109a (9h with centre 3 holes slotted together).
- **Curved Strip** #110, 3" radius, with end holes slotted outwards.
- **Triangular Plate** #116, not equilateral but 5h spacing possible on all sides. 8.7mm slots.
- **Collar** #118, brass, 9.5mm Ø, 7mm long.
- **Coupling** #119, brass, 10.0mm Ø, 22mm long with end holes at 15mm pitch.
- **Joint Plates** #120-123, they differ from the MÄRKLIN pattern, particularly in having fully rounded corners.
- **Spanners** #125, see Fig.1. About 70mm long, with the width of the centre portion 6mm for the square version and 8mm for the hexagonal.
- **Window** #126, with, unlike the MÄRKLIN part, 10\*10mm square openings, & holes at 5\*5cm pitch, not 5\*4cm.
- **Flanged Wheel** #140, see Fig.1. Solid brass, 27mm o.d with 23mm Ø tread.
- **Finish** All the parts listed under 'Brackets' above are nickelled except the wide MÄRKLIN type Double Bent Strip. The Window is silver; the Flexible Plates & Semi-Circular Plate are a rich blue, slightly darker than the prewar MECCANO shade; and the rigid Plates, Disc parts, & Pulleys #87, 88a are light red, about the 1960s MECCANO colour. However red parts in a slightly darker shade were described in 26/778 and other examples have been seen since. Apart from the non-ferrous parts, all the other parts are dark green, appreciably darker than late 1920s MECCANO. The green paint comes off rather easily, the red is much better, and the blue is excellent, as good as the prewar MECCANO Flexible Plates. Fig.7 includes a part in the 3 main colours.

**REMARKS** In its developed form NECOBO was a quite sophisticated system with around 200 different well made parts, even if a few of them might be thought something of a luxury. In the latter category I'd put the variations on the basic Trunnions, the 'W' Bracket (has it ever been found to be essential?), the 6 Hinged Plates, & perhaps the Window. I almost included the Tapered Flexible Plates but they are used to good effect in some manual models, in the tapered legs of a Crane's tower for example. NECOBO was particularly strong in its range of Plates but lacked any large circular parts, an intermediate size of Pulley would have been useful, & more Curved Strips would have been the icing on the cake. Useful MECCANO parts not included were the Rod, and Rod & Strip Connectors, the Compression Spring, & the cylindrical parts. Also the Triangular Flexible Plates and 4:1 ratio Gears which Liverpool introduced in 1954, all far more useful than the 12 NECOBO parts introduced after 1953. And rather surprisingly for a 'serious' system, no mention is made in the Lists or Manuals of a motor to drive the models. Of the MÄRKLIN inspired parts by far the most useful are the ¼" Pitch Strips.

I made Meccano's 1962 No.8 Conveyancer with the parts to hand plus a commercial 4½v motor/gearbox & 2 extra Bush Wheels. No real difficulty was found in adapting the design to the NECOBO parts but a few points of interest did become apparent. The steering geometry was improved using the ¼" Pitch Strips in the linkages, but there was a lot of lost motion with Bolts running in the unusually large 4.4mm holes. The Flat Bracket & Curved Strip with the outwardly slotted end holes were often useful but because they were longer than usual there were times when they fouled the adjoining structure. This also applied to the 5h Slotted Strip but didn't matter so much because there was also the normal version. Possible improvements would have been slotted holes in the ends of the Flexible Plates, and face holes in the large Pulley & Mod.1 Gears (I had none of the later Gears, some of which at least were pierced).

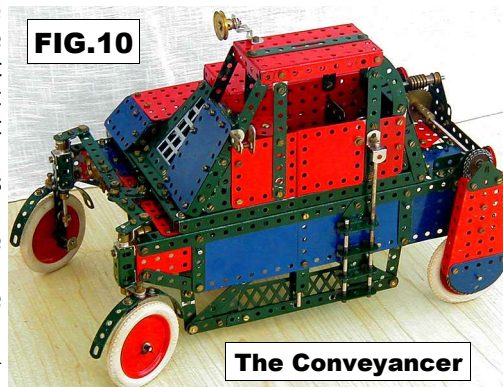


FIG.10

The Conveyancer



## A PIONIERUL

### CONSTRUCTOR Set

PIONIERUL is a Romanian system and the word just means Pioneer. The Set is near complete, and with manual. PIONIERUL is mentioned in MCS but with few details. The main wording on the MCS manual cover is the same as the present one, and the featured models on them have some similarities, but most of the other MCS information, the maker, the hole pitch, and the colour of the parts, differs.

**Maker:** Cooperativa 'Tehnometalica' ARAD of Str. Dimitrov nr. 81-85. Str is short for Strada, and no town is given. Google doesn't show a Dimitrov street in Romania but there is a Dimitrov Post Office in Bucharest. The company in MCS is Metaloglobus of Bucharest.

**Date:** The date in MCS is the 1970s and in the present manual's Intro it says that Ministry of Education approval was given in June 1974. The only other possible date is the '-87' on the lid (above) but I've not been able to find what the preceding 'S.T.I.' means.

**The PARTS Holes** Holes are often 4.1mm but some are up to 4.3mm, and a few up to 4.5mm. The pitch 12.5mm. (MCS : 4.1mm at 12.8mm.) **Slots** are 7.5mm long but 7.2 in #3 & 26. The **thread** is M4.

**Material/Finish** All the metal parts are steel, mostly nickelled but with some staining. The Strips are of (rather too) soft steel. The DAS, A/B, & Rods have a very dark grey, anti-rust finish, and the Flanged Plates & Bush Wheel a very tough palish green crackle finish (it is nearer the shade in Fig.7 than in Fig.2). The N&B have a green tinged sheen. MCS gives the Strips as blue, beige & green, and the Plates red & blue.

**List of Parts** The parts are listed below, with my English names, and quantities, from a list in the manual, in curly brackets. Representative examples are shown in Fig.2.

**#1,2 Flanged Plates:** 11\*5h; Sector, 7h long, with straight ends. All the flanges have slotted holes, and all differ slightly in depth. {1,1}

**#3-7 Strips:** 2h (the Flat Bracket), 3, 5, 7, 11h. They are 11.5-11.9mm wide depending on length, and .7mm thick. Their ends vary, see Fig.2, and their lines of holes are off centre in several. {2,2,4,2,3}

**#8 DAS & #9 A/B.** The bends are mostly not quite at right angles to the length. {4,4}

**#10 Double Bent Strip.** {1}

**#11 Washer,** 9mm Ø {10}

**#12 Hook,** flat with 48cm of thin black Cord attached. {1}

**#13 Crank Handle,** 108mm o/a. {1}

**#14 Spring Clips,** bronzed with wings 6½mm long and 5-6mm long. They grip very well. {4}

**#15 Bush Wheel,** 36mm Ø. No doubt it should have 12 equi-spaced face holes but 2 have been incorrectly pierced.

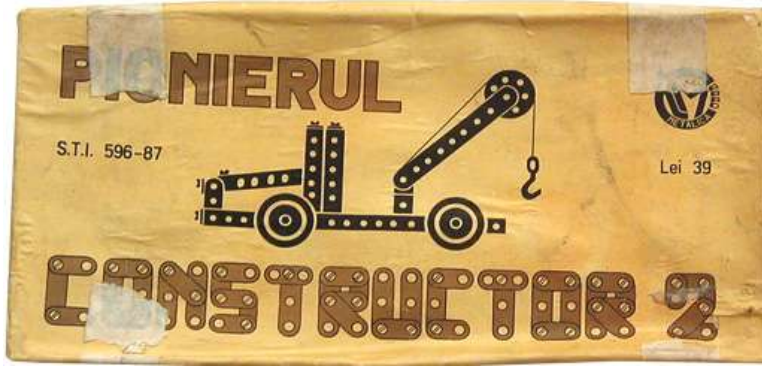


FIG.1

**#20 Road Wheel,** hard plastic, 37mm Ø, 6.6mm wide. It is a good push fit on the Axles. {4}

**#21,22 Screwed Rods,** 50, 100mm long. {2,2}

**#23,24 Axle Rods,** 50, 100mm, 4.0mm Ø. {2,2}

**#25 Long Bolt,** 20mm under a 6.8mm Ø cheesehead. Iridescent finish. {5}

**#26,27 Plastic Flexible Plates:** 3\*11h clear; 5\*9h, not seen. {1,1}

**Quality** Of the various imperfections noted above only the slanted bends in the DAS & A/B, and perhaps the Spanner, pose real problems in model building.

**The SET** The box measures 16½\*34¼\*3cm. The 39 Lei is the price and the logo top left is 'TM' surrounded by 'Tehno ARAD METALICA'. The parts are housed in a clear moulded plastic tray, with recesses for most, mainly just slightly too small for them. As found the N&B etc were loose in the box. The parts seemed unused and were as per the manual quantities except for a few missing N&B, and 2 of the #26 Plastic Plates but no #27.

Presumably the '2' on the lid is a Set No. but there is no mention of set numbers in the manual, or of any other sets.

**The MODELS** The manual has 16 pages, 207\*158mm, including the covers, all printed blue on beige. (pp1-3 are not

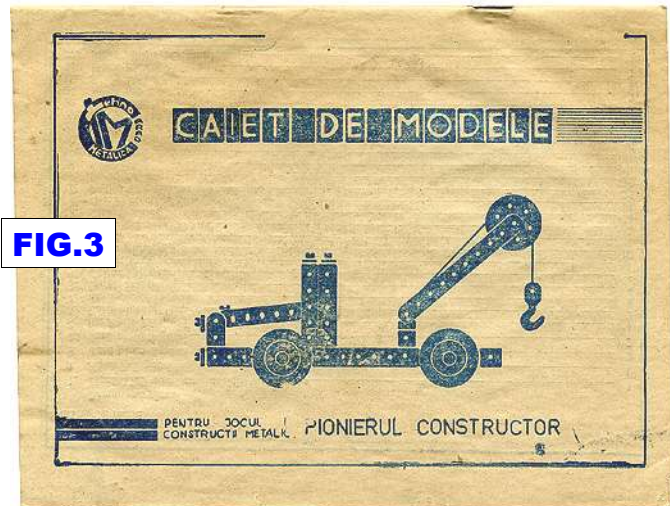


FIG.3

numbered.) The front is shown above with the logo as on the lid. The stapling is along the top edge. p2 has the Set Contents

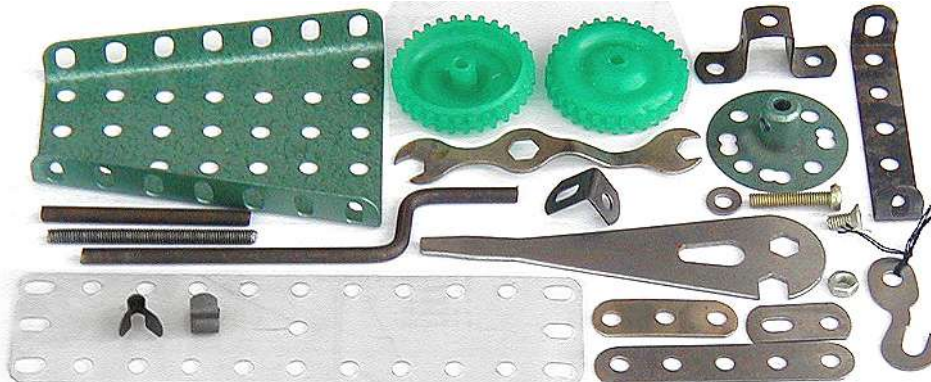


FIG.2

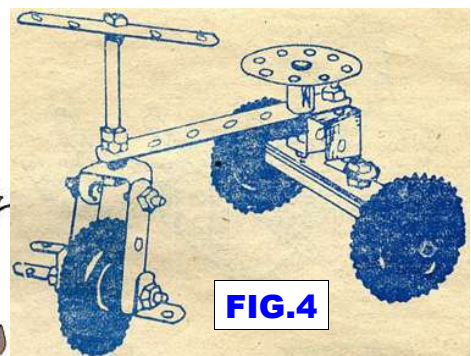


FIG.4



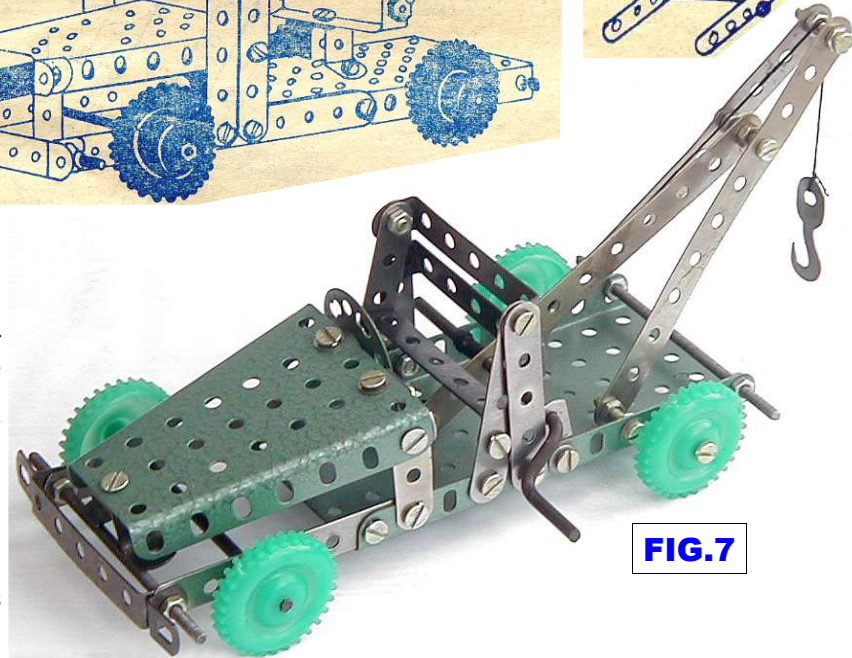
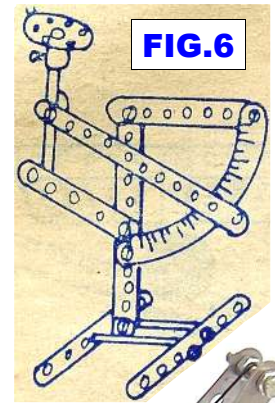
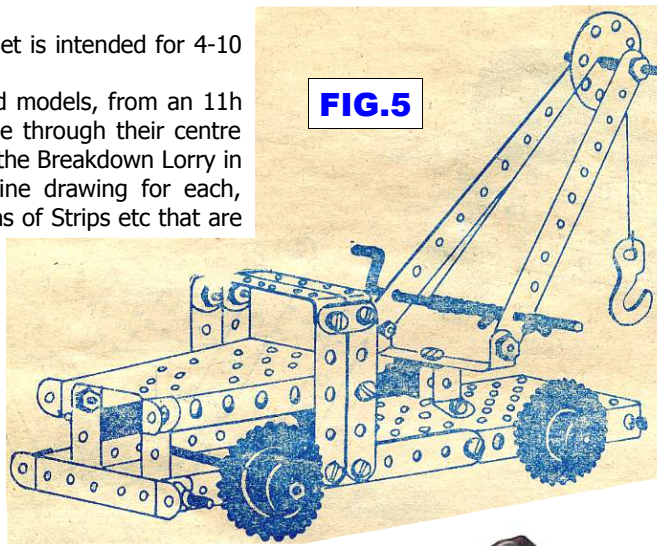
and p3 the Introduction. It says the Set is intended for 4-10 year olds,

The other pages show 50 unnamed models, from an 11h Strip with 3 DAS bolted to its top hole through their centre holes, and equispaced (a Flower?), to the Breakdown Lorry in Fig.5 (60% full-size). There is one line drawing for each, often rather crudely drawn with lengths of Strips etc that are not in the Set.

The first 45 models are very simple furniture & domestic items, simple cranes, trolleys, barrows, etc with a Letter Balance as a highlight (Fig.6, full-size – I wonder how many of the 4-10 year olds worked out how to make it work).

The last 5 models including the Trike in Fig.4 (70% f-s), are a little more ambitious but only the Breakdown Lorry uses most of the parts in the Set. (The Plastic Plates are not used in any of the manual models.) Some of the models seem to use parts which are not in the Set, the Double Bracket in the Trike for instance. But, except for those which need 4 of the 11h Strips, alternative parts could probably be used in most cases.

I made a version of the Breakdown Lorry (right) which needed all the parts in the Set, apart from the Plastic Plates, plus a few extra Nuts. The aim was to have a fixed, braced jib and to provide the driver with somewhere to sit. There was no Pulley for the jib head and as the original's Bush Wheel seemed pointless it was used as a steering wheel, even if a touch oversize.



**PIONIERUL CONSTRUCTOR: S2**

**OSN 44/1336**

**Snippet. 'New' German System: ERKO**

The Ebay photo far right shows the manual cover and the parts offered, with another view of the Pulleys inset in the bottom left corner. And right, the Crane on the cover enlarged.

The main structural parts are A/Gs and they are unusual in having 2 rows of staggered hole in each arm, and in not being perforated over their whole length. The latter an uncommon OS feature which seems to have no advantages, and which in this case leaves the two shorter A/Gs without a centre hole.

There was nothing to indicate the size of the parts, or their maker, but the seller was from Dresden. I wonder in ERKO arose from the maker's name: ERik KO?..? perhaps.

The different parts that can be seen are:

- 4 lengths of A/G.
- A Perforated Plate, with 6 rows of staggered holes, and 8 holes long, like the shortest A/G, but plus the 2 smaller holes at one end.
- A Pulley with boss, and another, slightly larger with 4 face



holes, and perhaps without boss.

- An Axle & a Crank Handle.
- Then there is the Spoked Wheel, and the patterned Plate bottom centre with 2 holes at one end, both foreigners most likely.

The Crane's framework looks to be made of A/Gs plus perhaps a Plate or two, with 4h Pulleys used as wheels and at the jib head, and the other Pulley used to weight the Hook.

**ERKO: S1**

**OSN 44/1336**



**STOKYS Update** These notes are based on the Stokys website in March.

**THE PARTS** Some 440 parts are now listed, over 50% more than in 2004 (see 40/1204). Most of the additions are structural parts, the existing Plates, Girders, Brackets, etc in different sizes, and a few new ones such as 3 & 4h wide Perforated Plates with elongated holes in one outer row. I gave up trying to make a concise list of all the changes, a task not made any easier by some different PNs, so there follows just the points of interest. It is easy to download a PDF of a complete list of the parts & sets from the website's homepage, and I found it easier to do so than to try to find individual parts within the (tidy-minded but unhelpful) system of categories and sub-categories used on the website itself.

**New parts:** • an additional **5h Strip** with round rather than slotted end holes; • the **Tractor Tyres** in Fig.2, R090 & 091, to special order; • a brass **6h Bush Wheel** K030; • a brass square Sliding Shaft, see Fig.3 (it is used in Set BG24); • **Name Plates**, a yellow **T-Shirt**, a red **Hard Hat**, & a wooden, **3-Layer Box** with a carrying handle.

**Parts reintroduced:** • **Rack Strips** Z210 & 211, both 10h long, one with A/G sideplates as before, the other with Flat Girders; • **Track Link** K062, red plastic.

**Deleted parts:** the **Double Spring Clips** K015, 016.

**Other points:** • Some of the **structural parts** are now available to order in lengths of 78 & 150 holes. • **Bogen** P060, listed under Platten in OSN 24 is the Curved Strip, and P061 (in 43/1310) is the same Strip but with only the outer & centre holes. • The **Bolts** are listed with both 6 & 7mm Ø heads. • The **Gears** include a 60t Gear but not a 15t Pinion. • 11 **Double Gears** are listed, with gears from 19 to 170t, all with an 11t pinion.

**THE SETS** • A **Bridge Set** BK01 has reappeared but with no details.

• 3 **Basic Sets** which equate to Sets 3 or 4 in cost are listed but with no details. They are for Mechanik, Elektro, & Fernsteuerung (radio control).

• 11 **new sets**, all of which have parts to make one specific, usually modestly-sized, model. None are motorised. All are in the Price List but only those asterisked in the details below are fully described on the website.

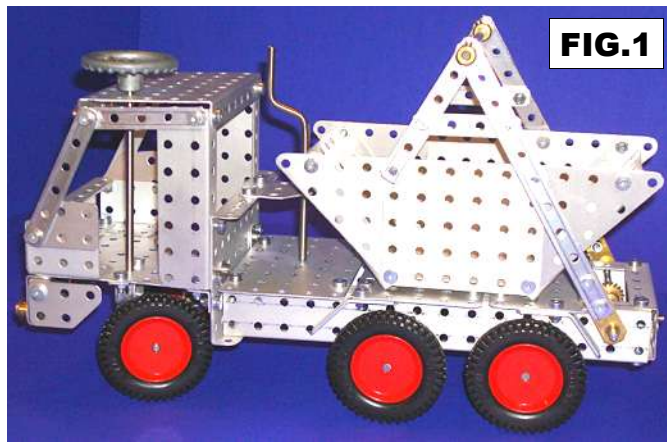
SN12\* The **Lorry with Skip** in Fig.1. Steering in via the Handwheel on top of the cab, and the skip is loaded/unloaded from the Crank Handle behind the cab. The lightness of the parts would help in the success of this feature.

SN 13\* **Crane Lorry**. The basic lorry as SN12 but a simple crane with a 9" jib replaces the skip on the rear platform.

SN14\* **Low Loader**. Again the SN12 lorry but with a 12" long trailer.

SN22 **5-Axle Dumper Lorry**. A little longer than SN12 but with the same size wheels.

SN30\* The **Tractor** in Fig.2. The most elaborate model in the range and perhaps comparable with the old range of Stokys



'supermodels.

SN31\* **Rotary Rake** (Fig.4) to be towed by SN30.

SN32 A **Trailer** for SN30.

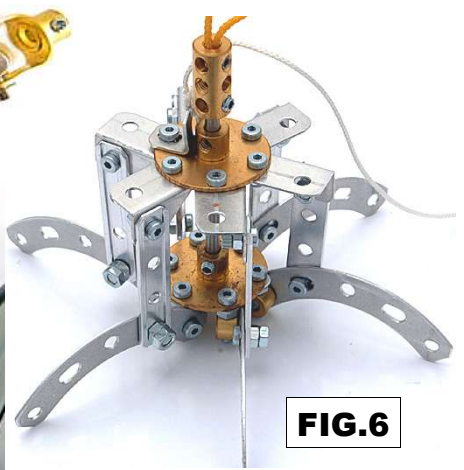
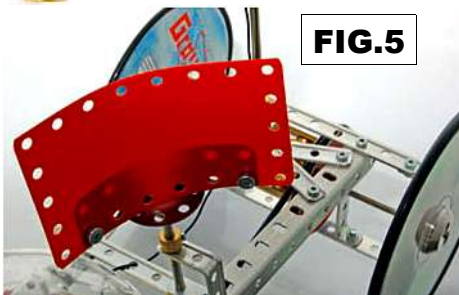
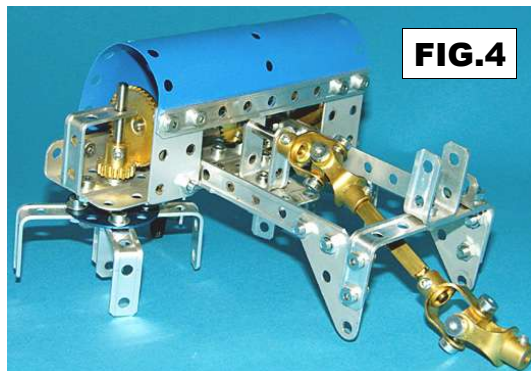
SN40 An '**Astrom**' without planets – probably a simple? Orrery.

SN91 '**Reacer** [sic] **3 rädrig ohne Elektro**'. A 3-Wheel Racer which looks a bit like a drag racer. It has a small front wheel and unusual rear wheels plus a 'sail' on top (Fig.5) – could it be a Sand Yacht?

SN94\* An **Electric Pylon**, 17" high.

SN95 '**KVA-Kran mit 6-fach Greifer**'. It looks like a framework to allow the 6-Arm Grab (Fig.6) to be demonstrated.

• Finally some **sets of parts** which are needed for particular mechanisms. • Two of the **Differential** sets, BG02 & 05, mentioned in OSN 43 continue, & BG05 is said to use the bossed Bevels rather than the shortened type. • A **Winch** BG08; • **Double Gears** BG10; • A **Rack Drive** BG14; • The **6-Arm Grab** BG18; • A **4-Wheel Steering Linkage** BG23; and • The **Sliding Shaft** assembly BG24 (Fig.3).





**Snippets. FALT and FALTERBOT** Accounts of the FALT Sets 0-4 & the No.5 called FALTERBOT were given in 34/1013 & 36/1091. Since then a number of sets have been seen on Ebay, a probable No.0 and several examples of Sets 3 & 4. In what follows the differences from those previously described will be noted.

**The Basics** It will be recalled that Sets 3 & 4 were in wooden boxes, No.3 with a single layer of parts and a sliding lid, and No.4 with 2 layers and a hinged lid. The 'new' sets have the same partitioning as before, and are as shown in the OSN 36 FALTERBOT manual. The colours of the main parts in the earlier sets were: blue Plates, green Strips & Braced Girders, nickel DAS & Brackets, & red Pulleys. Set 3 has 4x 2h Ø Bossed Pulleys & 2 Loose; Set 4 has 4 of each type.

Most FALT manual covers denote the range of sets covered by 'SERIE' followed by the sets numbers, as in Fig.2 below for example. Some though have just the set numbers, and these could be earlier. One example is the 'N. 0-1-2', with a Crane on its grey cover, shown in OSN 34.

Most of the manuals seen so far feature the Loco shown in OSN 34 but all of them are 'Serie 0-4' and it remains to be seen if there is an equivalent Serie 0-2 manual.

Most Serie 0-4 Loco covers have 'IL PICCOLO MECCANICO F.A.L.T.' on them but a few, again possibly earlier ones, have 'Costrurioni F.A.L.T.', the cover shown in OSN 34 for instance.

**A Probable No.0 Set** A set with parts corresponding to a No.0 and with all the main parts – Flanged Plate, Strips, & Pulleys – green, as in the No.0 in OSN 34. The Ebay offer showed the open box & the picture below: the scene, the one



FIG.1

most commonly seen on lid labels, is as the OSN 34 lid, though with more vivid colours, but the '-0- -1- -2-' in the top right corner is a puzzle. It can hardly be a set number so perhaps the picture is of a manual cover of the type mentioned earlier with just the set numbers on it. But if so it is the only example with this scene to appear so far.

**An Early? Manual** The cover below is the only Serie 0-2 known to date. If it isn't an earlier version it could be the



FIG.2

'standard' equivalent to the Serie 0-4 ones with the Loco.

**2 Early? Sets** The No.3 & No.4 sets that have been seen on Ebay have one of two types of lid label. The first, and

FIG.3



probably the earlier, is shown above. It belongs to a No.3 outfit which has a Costrurioni F.A.L.T. manual. The parts include some nickel Strips but these may be suspect because there is a red 5\*11h Flanged Plate as well as a blue one among the parts (and there should be only one such in a No.3).

A No.4 has the same label on its red coloured wooden lid, & an IL PICCOLO MECCANICO F.A.L.T. manual. The parts are as expected except the Wheels. There are the 4 black Tyres in their expected place but the 4 red 2h Ø Pulleys with boss are fitted with white Tyres (or Rubber Rings) seen only in this Set, and therefore suspect. In addition there are 12 greyish metallic 2h Ø Pulleys, which may or may not have bosses, instead of the expected 4 without boss. 4 of them occupy the places of missing Bush Wheels. Also there are 4 larger red Pulleys with light grey Tyres instead of the the expected 4 Flanged Disc Pulleys – they could even be the 1970s MECCANO Road Wheel #187 which has almost exactly the same o.d.

**3 Later? Sets** Below the lid of a No.4, and the two other sets, a No.3 & another No.4 are similar. All have the IL PICCOLO MECCANICO F.A.L.T. manuals. The No.3 is not complete but examples of most of the main parts can be seen. Unexpectedly the 5\*11h Flanged Plate is light green but as



FIG.4

there are a few nickel Strips among the green ones, it may not be genuine. All six 2h Ø Pulleys are present, 4 red & 2 bright, the latter probably without boss.

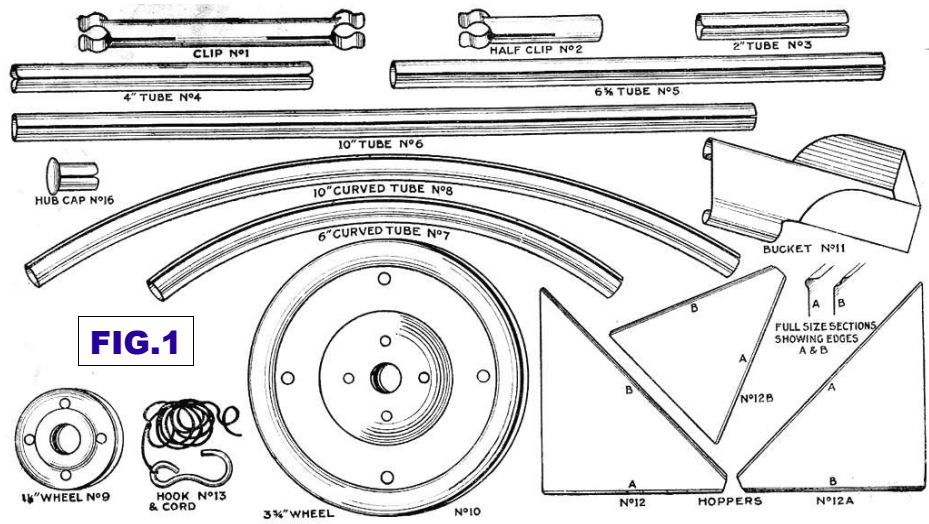
One No.4 has most of its parts apart from 3 of its 2h Ø Pulleys: all those remaining are red but it can't be seen if they are fast or loose. All the circular parts are missing from the second No.4 but otherwise all the parts are as expected.

**The FALTERBOT Sets** In OSN 34 it was assumed that only the No.5 was called FALTERBOT but since then a No.3 has been seen with the same lid label as the No.5. The manual was the IL PICCOLO MECCANICO F.A.L.T. type. The only unusual parts are the Flanged Disc Pulleys which look to be painted off-white, and also 2 matching 2h Ø Loose Pulleys. The latter though could be foreigners because there are also a full complement of 6 red Pulleys in the Set.

Also seen, another No.5, with parts as expected but the only manual shown with the Set is the Serie 0-4 Costrurioni F.A.L.T. type (earlier mooted to be a possible early version of the Loco manual).



**KLIPTIKO** This was a simple UK system based on tubular parts which pushed or clipped together. It was aimed at younger children but large structures were shown for the larger sets and it was popular enough to survive for over a quarter of a century. It often brings forth fond reminiscences from ageing Meccanomen. These notes are an attempt to follow the changes that occurred over the years. They were mainly in the manuals, the colour of the parts & the packaging – the full range of parts was available right from the start, or very soon after, and there were no subsequent changes. Most of what will be presented has been taken from material kindly supplied by David Hobson, or from Ebay photos.



**The Patent** This was No.9628 in the name of Henry Charles Harrison of 'Stoneleigh', Mayfield Road, Moseley, Birmingham. The application date was 24<sup>th</sup> April 1913 and it was accepted on 14<sup>th</sup> Aug. 1913. The parts shown are the straight Tubes & the Clip, and they look like the parts actually produced (see Fig.1).

There was also an American patent, No.1095858, dated May 5<sup>th</sup>, 1914, and a German D.R.G.M, No.562192.

Earlier, in 1909, Harrison had taken out Patent No.3291 which covered similar parts but with square section Tubes, and the Clip had flat end tongues that could either be springy or of soft metal which could be wrapped around another part.

**History** It is thought that KLIPTIKO was introduced in 1913, or possibly for Xmas 1912. It was made by William Bailey; later, by 1925, William Bailey (Birmingham) Ltd. The initial address was 213-215 Brearley St., Birmingham. By 1921 it had changed to Victoria Works, Weaman St., Birmingham, and in a 1925 ad Oak Works, Weaman St. was given. But Victoria Works was used again in 1926. In the late 1920s an additional factory was opened for KLIPTIKO & WENBRIK production and a 1929 ad gives the company's address as Edward Works, Weaman St. The firm ceased to manufacture toys in 1934 and production & marketing passed to KLIPTIKO Ltd., Candlewick House, 116/126 Canon St., London EC4. The last known ad for KLIPTIKO was from June 1939 but a small set called SNAPSTICKS with parts similar in style to KLIPTIKO was advertised by a different company in 1948.

**The Parts** Fig.1 was taken from a 1920s manual. It is possible that the parts needed for the larger Sand Wheels (the Hopper & Curved Tubes) may not have been introduced until 1914. All the parts are shown except a 4ft Cable and a Screw & Nut – parts which were never illustrated. The Cable is a length of very strong spring cord, 3/8" in diameter which was used to simulate a Suspension Bridge cable, as in Fig.7. It is nominally 48" long but the two in one set were 51 & 61". A Screw seen in a No.6 set is 1/8" BSW cheeseheaded, plain steel, & 1" u/h; its Nut, brassed steel, is square, 6.4mm A/F. The Hook in the Set is made of 1.7mm dull zincd wire, and is 1" long o/a. The Curved Tubes are 6 to a circle.

The Tubes & Clips are rolled tubes and are 3/8" Ø. Tubes are joined in-line by pushing each Tube into the slit of the other and twisting until one Tube is completely inside the other. A Tube is joined to a Clip in-line by simply pushing the Tube into a Clip's open end. The Wheels, the small one is actually a pulley, run on the Tubes There is no way of making them fast but a Hub Cap in the end of a Tube prevents them running off.

**The Years to the Mid-1920s**

The first ad known was in a Bonne Marché catalogue, said to be for the New Year 1913, and there was a similar one a year later. 3 sets were listed with 42, 108 & 214 parts, different

quantities to those in the only known, later, Set Contents. A Gamage's 1913 catalogue listed Sets 1-4 sets at 10 1/2d, 2/4 1/2, 4/11, & 9/11 but with no other details. A piece in a July 1914 trade magazine says that a new set had been added, to retail at 7/6. It was said to include 4 Wheels and be capable of over 50 models including a Sand Wheel about 32" high. The full





**FIG.5**

	Set Nos.								Accessory Set Nos.				
	1	2	3	4	03	3½	3A	0	01	02	03A	04	
<b>Prices</b>	1917	2/-	4/-	8/-	16/-	5/6	8/6	12/6	10½d	3/-	4/-	6/-	10/-
	1920	4/-	8/6	17/6	31/6	10/6	17/6	25/-	1/6	6/-	8/6	15/-	21/-
	1921	2/6	6/-	10/6	21/-	7/6	12/6	17/6	1/-	4/-	6/-	10/6	15/-

range of sets with prices was given in ads from Feb. 1917, Oct. 1920, & Dec. 1921 as in the Table above – as will appear Bailey's marketing department was not afraid of a little complexity. The percentage rises in price over the period differed for the various sets but whether this represented any changes to their contents or packaging isn't known.

**Box Labels** Three were used. The one in Fig.2 is something of a mystery and hasn't been seen in any adverts.



**FIG.6**

Of the 3 examples to hand 2 were on the French Ebay but the Bonne Marché ads have a label more like Figs.3 & 4. I place it first because the clothing, left, looks the earliest to me.

The Fig.3 label (it should have a white border) was shown in a 1917 ad and the label in the Bonne Marché ads is nearer to it (with the centre figure's head well into the name banner) than to Fig.4. So presumably Fig.4 was the later of the two though

looking at the clothes I'm not entirely sure.

**The Boxes** All three with the Fig.2 label are black; all later boxes are red.

**The Parts** have a dark, bronze lacquered finish.

**Set Contents** No inventories for the sets are known but some idea of their contents can be gained from the models in the manual described below. Sets 1-3 have only Clips, straight Tubes, & 1 Pulley. Set 4 likewise but plus 2 Cables. Set 03 includes 4 Wheels, also 12 Buckets & a Hopper for the small Sand Wheel (as in Fig.28 but with no coloured parts). Set 3½ has parts to make the medium Sand Wheel including 12x 6" Curved Tubes, 2 Wheels, the Hopper, & 20 Buckets. Set 3A has parts to make the largest Sand Wheel (as in Fig.12) including 12x 10" Curved Tubes, 3 Wheels, the Hopper, & 30 Buckets. Turning to the accessory sets, No.0 (see 10/249) includes 4 Pulleys to mount Cranes etc on wheels. Set 01 includes 4 Wheels & 12 Buckets and with Set 2 has enough parts for the small Sand Wheel. Set 02 includes the same Wheels & Buckets as the 01 and with Set 1 it again allows the small Sand Wheel to be built. Set 03A includes 12 of the 6" Curved Tubes and with Set 3 has enough parts for the small or medium Sand Wheels. Set 04 includes 7 Pulleys, 3 Wheels, 32 Buckets, the Hopper, & 12x 10" Curved Tubes; with Set 4 it allows construction of the large Sand Wheel and Passenger Wheel (see Fig.10). Most of the combinations of sets mentioned also allow at least one other of the manual models to be made, usually a Roundabout.

**A Manual** to hand has the cover in Fig.7 and it is the same as the one with the only set seen from this period that shows a manual cover. It has 16 pages, 204\*137mm, including the covers, and shows 24 models. The only date in it is for the U.S. patent, May 5<sup>th</sup>, 1914.

p2 has photos: the largest 30 bucket Sand Wheel (as in MCS, and at the time almost a 'trademark' model); Mr Bailey, a quite large gentleman, standing on a KLIPTIKO Bridge; and another similar but with a boy on each end tower in addition. p16 has another publicity photo, this time of an extremely long Forth Bridge.

p3 has a list of the 12 sets, as in Fig.8; it also shows

**FIG.7**

THE LATEST INVENTION IN CONSTRUCTIONAL TOYS.

ALL BRITISH MADE

**"KLIPTIKO"**

(REGISTERED)

THE SIMPLEST AND QUICKEST MECHANICAL MODEL BUILDER.

Designed for a child's intelligent enjoyment and affording delightful entertainment for adults.

English Patent No. 9547/14.  
D.R.G. & Co. No. 5042/14.  
U.S. Patent No. 104555.  
Dec. 29, 1914.  
Other Foreign Patents applied for.

"Kliptiko" is simple enough to playfully interest a young child, while its possibilities are extensive enough to provide that intense interest from playing as the child grows up.

A SUSPENSION BRIDGE.

In Sets ranging from No. 1 to No. 4

Accessory No. 0 to No. 4

**THERE IS NO LIMIT TO WHAT CAN BE MADE.**

No trouble is involved in building a Barrage, or Bridge, a Crane, or a symmetrical and graceful Tower. There are no irritating small parts to get into the wrong place, or in the reverse position to that in which they should be. All Constructions are quite rigid and steady, and working models may be operated without slackness or fear of collapse. The Standard Units are the same in each set, making all pieces interchangeable, and allowing one set to be added to another of a lesser or greater price.

Copyright.

which models can be built with which sets. The Combinations account for all the 24 models in the Manual except No.20 MEDIUM SAND WHEEL & No.21 ROUNDABOUT, both Set 3½ models.

Going through the Manual. pp4-5 have 7 Set 1 models from Crane, with Moving Jib and Winding Motion (the model in the Patent) to No.7 Swing. p6 has 3 Set 2 models from No.8 (another) Crane, with Moving Jib and Winding Motion, to No.10 Goods Elevator. On p7, two Set 3 models: No.11 Tower Bridge, with Automatic Elevating Roadway (more or less as Figs.3 & 4, it works by winding Cord onto a Tube manually), &

Combinations of Sets and Accessory Sets,

**FIG.8**

No. 0 is useful to any Set.

No. 01 added to No. 2 will build all Models from No. 1 to No. 10, and Sandwheel No. 16, also Models Nos. 17 and 19.

No. 02 added to No. 1 will build Models Nos.1 to 7, and Models Nos. 16, 17 and 19.

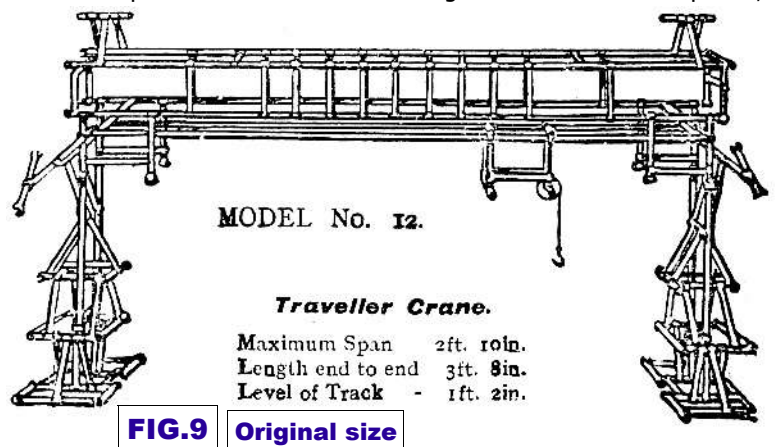
No. 02 added to No. 2 will build all Models mentioned above, also Models No. 18 and many others.

No. 03A added to No. 3 will build Models Nos. 1 to 12, Sandwheels Nos. 16 and 22, also Roundabout No. 23.

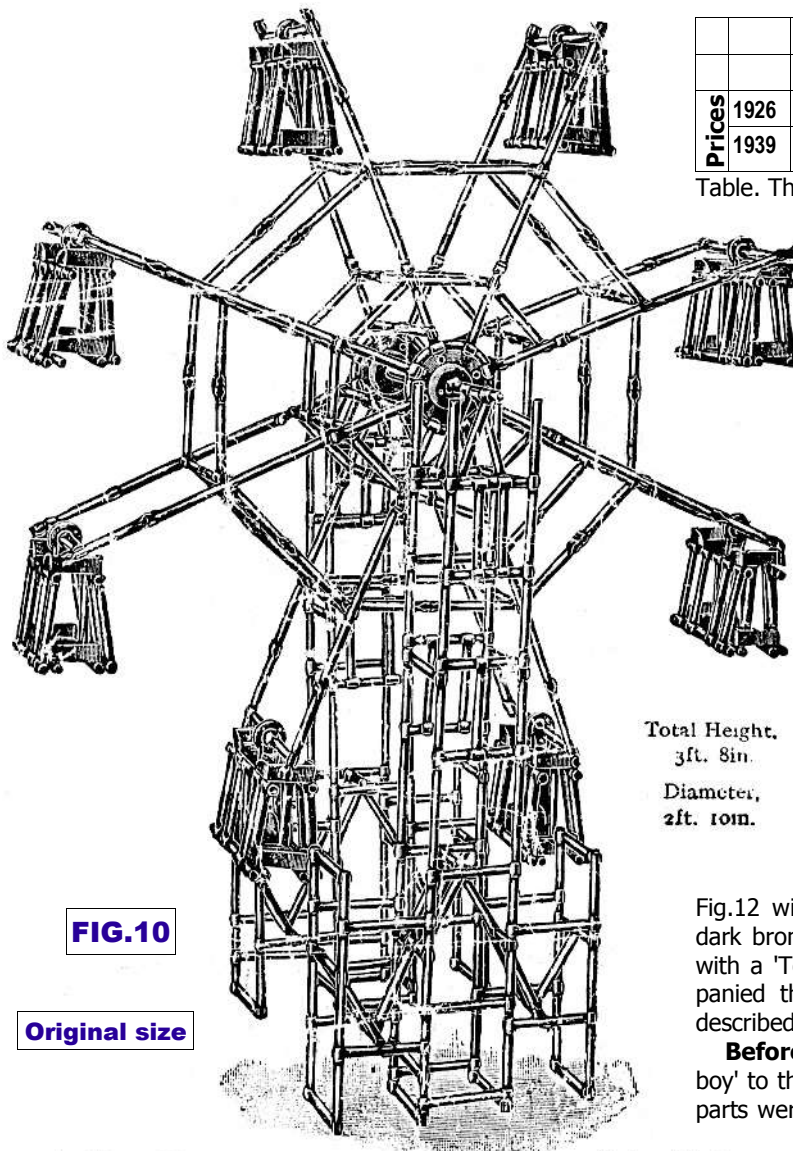
No. 04 added to No. 4 will build Models Nos. 1 to 15, also Sandwheels Nos. 16 and 22, Passenger Wheel No. 24, Roundabout No. 23.

No.12 Traveller Crane (Fig.9). Then 3 No.4 models on p8: No.13 EIFFEL TOWER ('Approximate Height, 5ft. '); No.14 SUSPENSION BRIDGE (5ft 6in long, as in Fig.7); & No.15 HIGH LEVEL BRIDGE (5ft 8in long). p9: No.16, the small SAND WHEEL (Set 03 or 1+02 or 2+01); No.17 DELIVERY WAGON (Set 03 or 1+01 or 02); & No.18 FURNITURE VAN WITH FOLDING DOORS (Sets 2+02). p10: No.19 FURNITURE VAN WITH DOOR TO OPEN (Set 03). p11: No.20 MEDIUM SAND WHEEL (Set 3½, 2ft 4in tall). p12: No.21 ROUNDABOUT (Set 3½). p13: No.22 PERFECTION SAND WHEEL (Set 3A or 3+03A, the largest, 30 Bucket, 3ft high). p14: ROUNDABOUT (Set 3A). p15 PASSENGER WHEEL (Fig.10 overleaf, Sets 4+04).

There is a line drawing, often shaded, for each model, but no parts list and some of the larger model would be a puzzle,







**FIG.10**

**Original size**

MODEL No. 24.

**PASSENGER WHEEL.**

Built with Set No. 4 and Set No. 04.

An imposing and stately Revolving model, which, though quite easy to build embodies the very best principles of Mechanics. When connected with a Band and driven by the Great Sand Wheel gives a grand example of Machinery in Motion.

Total Height, 3ft. 8in.  
Diameter, 2ft. 10in.

		<b>Set Nos.</b>						<b>Accessory Set Nos.</b>						
		1	2	3	4	5	6	6*	0	1A	2A	3A	4A	5A
<b>Prices</b>	1926	2/6	5/-	7/6	12/6	17/6	25/-	30/-	1/-	3/-	3/-	5/6	5/6	8/-
	1939	2/6	5/-	7/6	10/6	21/-	--	30/-	--	3/-	3/-	3/6	11/6	9/6

**FIG.11**

Table. The **Set Contents** were given in 5/101, and apart from Set 0, all the outfits were progressive. Aside from Tubes & Clips the No.1 included 4 Pulleys, & 4 Hub Caps; the 1A a fifth Pulley; the 2A a Hopper, 12 Buckets & 4 Wheels; the 3A, 12x 6" Curved Tubes, 8 Buckets, and 2 Screws & Nuts; the 4A, 12x 10" Curved Tubes, 10 Buckets & 20 Hub Caps; and the 5A, 3 Pulleys, 2 Buckets, 2 Cables, & 3 Hooks. The No.1 contained 29 Clips & 14 tubes; the No.6 228 & 136! The Set 0 contents were 10 Clips, 6 Tubes, 4 Pulleys, & 4 Hub Caps. Since it was classed as an Accessory Set I suppose no models were shown for it and perhaps its main purpose was to attract pocket money. In passing no mention is made in any of the literature of parts being available individually. **Boxes** Sets 1-5 are shown in the manual of the time as partitioned with a single layer of parts. Set 6's presentation cabinet measured about 43\*30\*12cm, and was made of a light wood, varnished, with the label inside the lid and just the name in black on top. The parts in both it and its cardboard counterpart were in the bottom of the box and in a tray. The cardboard **box lids** were grey and most remained so until 1939, but with an occasional brownish example. The **lid label** was at first as in

Fig.12 with a 'green (jumpered) boy'. The parts remained a dark bronze shade, sometimes almost black. A **new manual** with a 'Tower' cover (Fig.18) and many more models accompanied the new sets. Two editions are known and will be described later.

**Before 1929, A New Label** The change from the 'green boy' to the 'orange boy' (Fig.13) was sometime before the red parts were introduced in 1929. I wonder why the change was made.

**1929, Coloured Parts** were introduced in a May 1929 ad. The Pulley, Wheel, & the Curved Tubes were nicely painted red; the Hopper & the Bucket were red outside and brassed inside. The other parts remained as before although they tended to be a lighter shade as the years went on, from almost black to almost as light as brass in some cases late on. It seems though that there could be

variation across the parts in a single set. Much was made in the ad introducing the coloured parts of the joy of seeing them in a Sand Wheel spinning round but for the purchasers of Sets 1 & 2 the only red parts were the Pulleys. The ad also spoke of a Forth Bridge with 'interlaced coloured cantilevers' but it's hard to imagine it without some of the other parts in colour.

**1930? A New Manual** Initially the Tower manual continued to be used with the coloured sets but at some stage a new manual with a full-colour 'Toyscape' cover (Fig.19), full of KLIPTIKO models, was introduced. It was certainly in use when the new label (see below) was introduced and it has been seen with several Ebay sets which have the Orange Boy label & red parts. One Toyscape manual has a PR of '30/B.P. 8/30' and that could indicate that the change was as early as 1930. (None of the known Tower manuals has a PR.)

**1931 The K.K.K.** Perhaps declining sales in the depression years prompted a trade ad in September announcing 'The most original sales creating scheme ever devised'— a national advertising campaign was promised to 'tell the story' of the new wheeze, the K.K.K. The initials were commonly known to stand for Ku Klux Klan, a name which had appeal for youngsters even if their parents may well have disapproved of the

even for Dad.

Among the models are 4 Cranes, 2 Roundabouts, 3 Sand Wheels, & 4 Bridges but no motor vehicles or aeroplanes. The only wheeled models are horse-drawn, 2 Vans & a Wagon.

**From the Mid-1920s to World War 2**

The main changes in this period were to the set structure by the mid 1920s; to the lid label at the same time or possibly earlier, with another change a little later, and again in the mid 1930s; to the finish of the parts with some red in 1929, and multi-coloured in 1939; and to the manuals with a different cover when the new range of sets was introduced, another sometime in the early 1930s, and the introduction of blueprints & a mini-manual in 1939.

**1926? The New Sets** The last ad which mentioned the old set structure was in Dec. 1921, the first to mention the new range, though without any claim that it was new, was in March 1926. There were Sets 1-6 plus a Set 6 in a presentation cabinet; Accessory Sets were a No.0 and linking outfits 1A-5A. Fig.11 shows the prices of the sets in 1926 and they stayed the same until the changes which were made in 1939. For convenience, the 1939 prices are also included in the





FIG.12

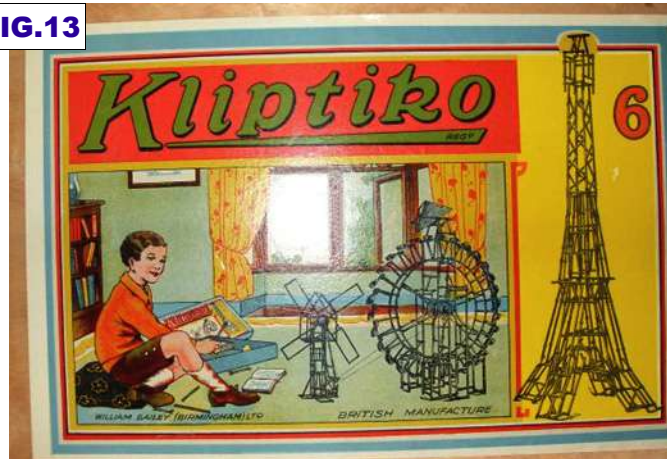


FIG.13



FIG.14

a No.6. These prizes depended on how many points had been accrued – they ranged from a pocket torch for 5 points to a Brownie wireless set for 50. In an ad after Xmas the K.K.K. was described as a 'sweeping success' and it continued to be advertised regularly until Sept. 1932 – but thereafter nothing is known of it.

**1934? A New Label** This was the 'Sunray' design (Fig.14). It isn't sure when it was introduced but it could have been when, or soon after the change of ownership in 1934.

**1939 New Coloured Parts, Lids, Blueprints, & a Juvenile Manual** These were announced/shown in a June 1939, ad and all but the colours can be seen in the 2 sets illustrated in it (Fig.15). The **range of sets** remained the same except that the No.0 and the cardboard boxed No.6 were no longer listed. The prices of Sets 4 & 5 changed a little (Fig.11) but it isn't known if there were any changes to the set contents of any of the sets (I wonder about the Set 1 in Fig.15 because the 2 Buckets at each end of the box were not in the earlier set). In an example of the Juvenile Engineering manual to hand (described later, it is shown in Set 3 of Fig.15) the range of sets is given twice as 1 to 5, so it seems that the No.6 was dropped before production ceased during WW2, possibly because of wartime shortages. **The parts** in the only set seen show the Clips painted green, the two longer Tubes yellow, and the shorter one bronzed. Some of the Clips were also bronzed. But shorter yellow Tubes have been seen in loose lots of parts. The red parts remained the same except that the inside of the Bucket, & possibly the Hopper, was yellow. **The lids** had the same Sunray label but were covered in a patterned paper which can be seen in Fig.15. Fig.17 shows the corner of an actual lid with a torn label. To me the pattern detracts from the impact of the label and when I first saw this lid, before I'd seen the ad, I assumed it was covered in cheap wrapping paper used as a wartime expedient. **Manuals** Each set in Fig.15 has a Toyscape manual and 2 Blueprints can be seen by Set 1. On the right in the Set 3 illustration is the small Juvenile Engineering manual already mentioned. All these will be described later.

I found the **Table** below helpful when I got lost in, or confused by, all of the above.

	Green Boy		Orange Boy		Sunray	
<b>Lid</b>	Grey or sometimes brownish				Patterned	
<b>Parts</b>	Bronze	Bronze	Some Red	Some Red	Multicoloured	
<b>Man'l</b>	Tower prob	Tower	Tower	Toyscape	Toyscape	Toyscape+Blue-*
<b>Date:</b>	1926 (or 1920+)	1929	1930?	1934?	1939 *prints+Juvenile	

FIG.16

**The LATER MANUALS**

**All except the Juvenile edition.** The pages are about 250\*185mm and their numbering includes the covers. With time the various editions had more pages, and more models – from 24 pre-WW1 to 36 for the first known Tower manual, and to 55 in the Toyscape one. Very few models were dropped but their order and numbering were often changed, so too for some, the set said to be needed. An important innovation was the inclusion of a Parts Required list for each model. All the manuals to be described have the maker William Bailey (Birmingham) Ltd on the back

organisation. But in this case K.K.K. stood for Klipitiko Klan, and anyone with a KLIPTIKO set could join the Klan and receive a badge & a diploma, plus the names of 3 other Klan members to write to. Your rank in the Klan depended on the size of your set and various prizes were offered. One, unspecified, if you sent details of a model good enough to be published, and one depending on the number of points you had gained by getting others to join – 1 if they had a No.1 set and going up to 10 for

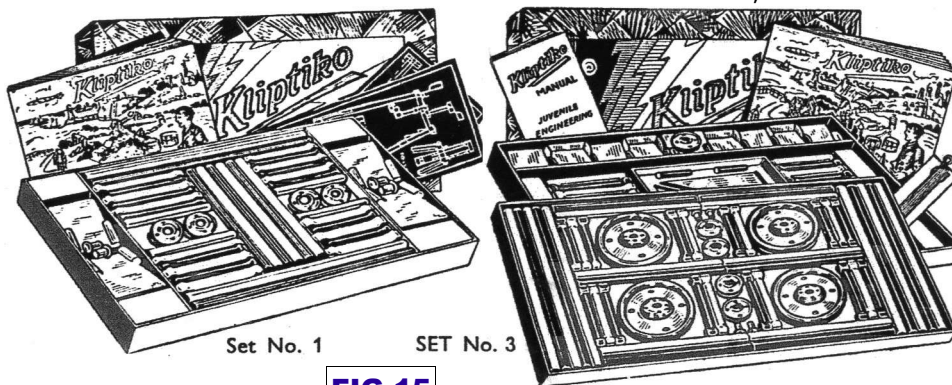
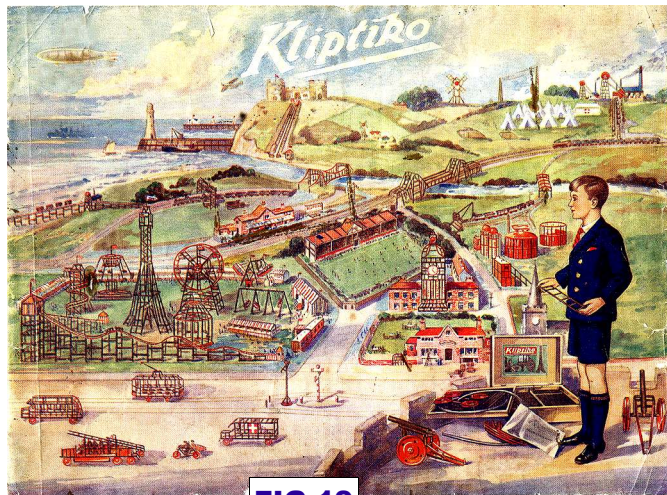
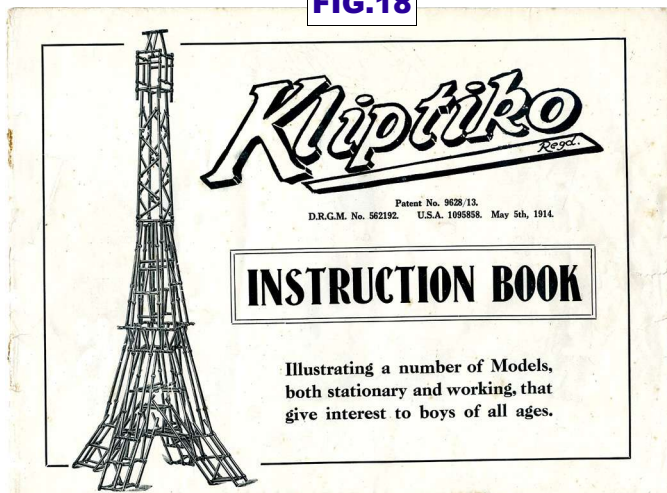


FIG.15

FIG.17





**FIG.18****FIG.19**

cover, and thus ought to date from before the change of maker in 1934. There are certainly other editions and two others with different PRs have been reported, both earlier than the Toyscape manual to be described.

The first 4 pages of all the manuals after the outside cover are the same with: photos of Sets 1-6 on p2 (the lid labels are the Green Boy type and never changed); a list of sets on p3 with prices and which models could be made with which set; the Illustrated Parts on p4; and building Instructions on p5. The last two pages are also the same with the Set Contents on the inside cover, and 14 (extra) small models on the back cover.

**Tower Manual (1)** It has 32 pages, with the cover shown in Fig.18. p6 has small illustrations of 12 of the 36 manual models. The latter comprise: Set 1: 1. SWING on p7 to 7. LUGGAGE BARROW on p9; Set 2: 8. BI-PLANE on p9 to 13. CHAIR on p10; Set 3: 14. DELIVERY WAGON on p11 to 19. A STRONG RELIABLE FURNITURE VAN on p13; Set 4: 20. MEDIUM SAND-WHEEL on p14 to 23. REVOLVING CRANE ON WHEELS (as Fig.26) on p17; Set 5: 24. TRAVELLER CRANE on p18 to 26. LARGE SAND-WHEEL on p20; Set 6: 27. TOWER BRIDGE, with Automatic Elevating Roadway on p21 to 36. TOWER (as in Fig.18) on p30.

Among the new models were two novelties for the smaller sets: one, a See-saw with a teddy bear riding one end and a stuffed toy animal the other; two, Performing Gymnasts – 2 jointed card figures (to be made by the builder and attached to Pulleys) with a pulley drive which caused them to perform at either end of a framework. A fair Set 2 Bi-plane was one concession to the 20<sup>th</sup> century, the other a Tramcar. The latter, and most of the other new models were for Set 6 and included 2 Windmills, a Pit-Head Gear, a Double Elevating Bridge (the drawbridge type), the Crane in Fig.26, and 2 fairground models, a (helter-) Skelter & a Flying Boats (Fig.27). The only major model dropped was the Passenger Wheel, and it never appeared again, or any big wheel model.

**Tower Manual (2)** It has 36 pages, with the same cover and same p6. The models are: Set 1: 1. SWING on p7 to 7. LUGGAGE BARROW on p9; Set 2: 8. BI-PLANE on p9 to 14. SHIP on p11; Set 3: 15. TELPHER LINE on p11 to 23. STAGE COACH on p14; Set 4: 24. SAND-WHEEL on p15 to 29. ROUNDABOUT on p18; Set 5: 30. SUSPENSION BRIDGE on p19 to 32. LARGE SAND-WHEEL on p21; Set 6: 33. TOWER BRIDGE, with Automatic Elevating Roadway on p22 to 48. MOTOR TIP WAGON on p33. p34 has an ad for the linking sets.

The only new model for Sets 1 & 2 was a Ship for the No.2, but new for Set 3 were another Ship, a Stage Coach and a Racing Car (Fig.22). Apart from a (rather odd) No.6 Aeroplane (Fig.29), most of the new models for the larger sets were modern vehicles of one sort or another: a No.4 Ambulance, and for the No.6: a Motor Lorry, a Fire escape, a Motor Bus, a Motor Tip Wagon, and a Pullman Car.

**Toyscape Manual** It has 40 pages, with the cover in Fig.19. The models are: Set 1: 1. SWING on p6 to 8. AEROPLANE on p8; Set 2: 9. BI-PLANE on p8 to 18. REVOLVING CRANE on p11; Set 3: 19. GOODS ELEVATOR on p11 to 26. MOTOR LORRY on p15 (Fig.21); Set 4: 27. SAND-WHEEL on p16 to 33. TRICYCLE on p19; Set 5: 34. TRAVELLER CRANE on p20 to 40. a Roundabout but unnamed on p25 (Fig.20); Set 6: 41. FLYING BOATS on p26 to 55. TOWER on p37. p38 has an ad for the linking sets. p40, the back cover, has the PR 15/B.P. 9/34.

The only new model for Set 1 is a strange looking Aeroplane; for Set 2 another Gymnast who performs when the model is pulled along, and a tidy looking Revolving Crane. New for Set 3, another Ship, a 12 Bucket Water Wheel (with a rotor like the small Sand Wheel), and a very fair Motor Lorry (Fig.21); for Set 4, only a reasonable Tricycle; for Set 5 the unnamed Roundabout with an attractive decorative top facade (Fig.20); and for Set 6 a fairly attractive Clock Tower.

**Other Manuals** It seems very probable that there was a manual, yet to be seen, for the sets available, possibly three, when the system was launched.

Two other Toyscape manuals have been reported, one of 40 pages with 55 models and a PR of 30/B.P. 8/30; the second with a PR of 20/B.P. 9/32.

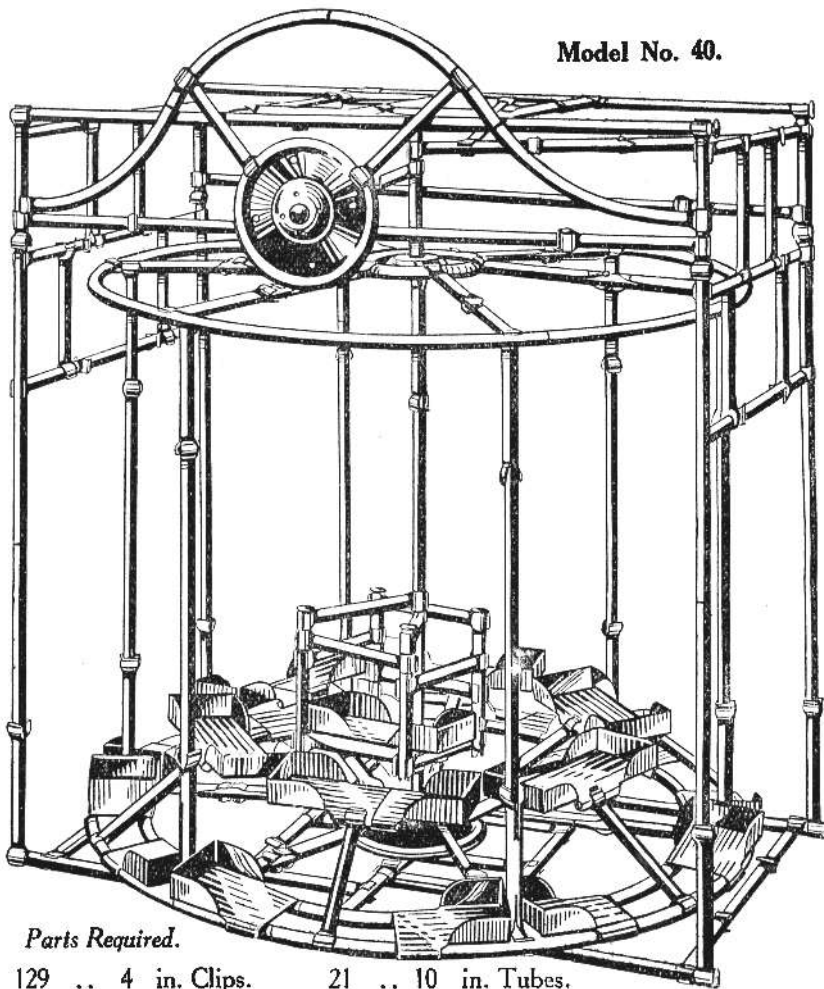
A 36 page Dutch Tower manual was mentioned in 20/587 and it is now known that it matches the Tower (2) edition above. A French manual was mentioned in 18/523 but with no details.

**The Juvenile Manual & Blueprints** An example of this manual, with some inside pages missing, and 6 double-sided Blueprints came with a mix of loose coloured & bronzed parts, the remains of a No.3 set. At the time I thought that the manual was probably a wartime or early postwar expedient when paper was in short supply. But as shown in Fig.15, it and the Blueprints were introduced before WW2.

The **Manual** has 32 pages, 90\*153mm, plus covers. The front is as in Fig.15 plus 'For Boys from 4 to 10 years of age' across the bottom. The other covers are blank. pp1-2 have an introduction with mention that 'Kliptiko parts are sold in outfits numbered 1 to 5', and that linking sets allow a No.1 to be built up into a No.5. Some of the parts are illustrated on pp3-6 (but not all that would be in a No.5) together with how to join them. pp7-12 & 23-26 are missing – on the remaining pages are models from Bedstead to Pullman Car. They have no Model Nos., nor Parts Lists, and include manual models (some with minor changes from those in the manuals proper) plus some from the small models on the back cover of said manuals. They are a mix of large & small models in no particular order, with no indication of which set is needed for any of them. Some of the models are Set 6 models in the regular manuals and would need many more parts than in Set 5. Some of the models refer to 'blue prints' followed by a number from 101 to 114 (they are not in sequence and so there could be more on the missing pages).

The **Blueprints** to hand are Nos.101-112 with one model





Model No. 40.

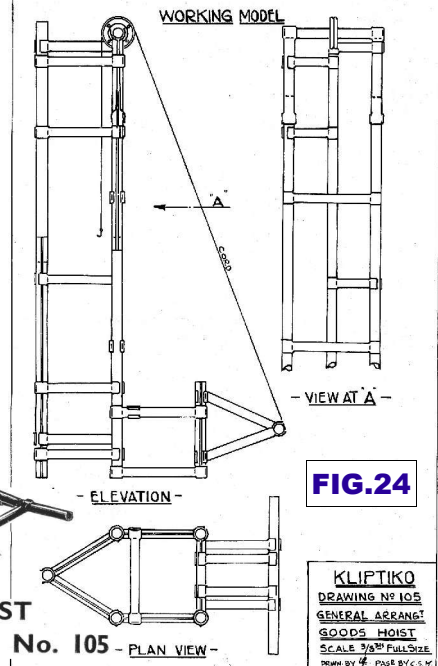
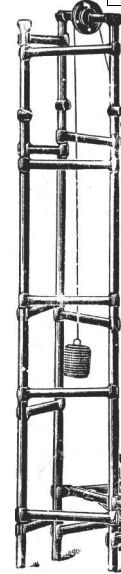
Parts Required.

- |                        |                          |
|------------------------|--------------------------|
| 129 .. 4 in. Clips.    | 21 .. 10 in. Tubes.      |
| 3 .. Half Clips.       | 10 .. 6 in. Bent Tubes.  |
| 12 .. 2 in. Tubes.     | 12 .. 10 in. Bent Tubes. |
| 12 .. 4 in. Tubes.     | 1 .. 1 1/2 in. Wheel.    |
| 19 .. 6 3/8 in. Tubes. | 26 .. Buckets.           |

FIG.20

Original size

FIG.23



GOODS HOIST

See blue print No. 105

Original size

FIG.24

KLIPTIKO  
DRAWING NO 105  
GENERAL ARRANG.  
GOODS HOIST  
SCALE 3/8" FULL SIZE  
DRAWN BY G. PAGE BY C.S.M.

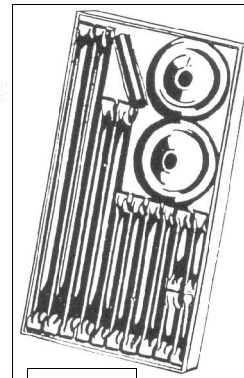
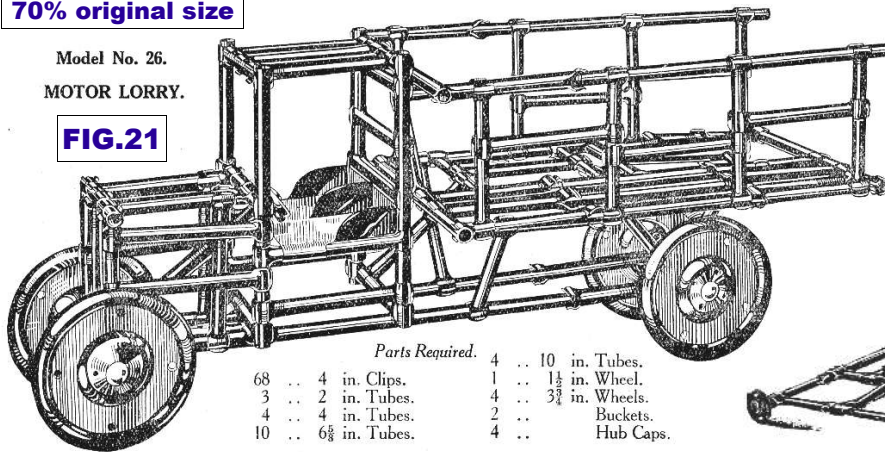


FIG.25

70% original size

Model No. 26.  
MOTOR LORRY.

FIG.21



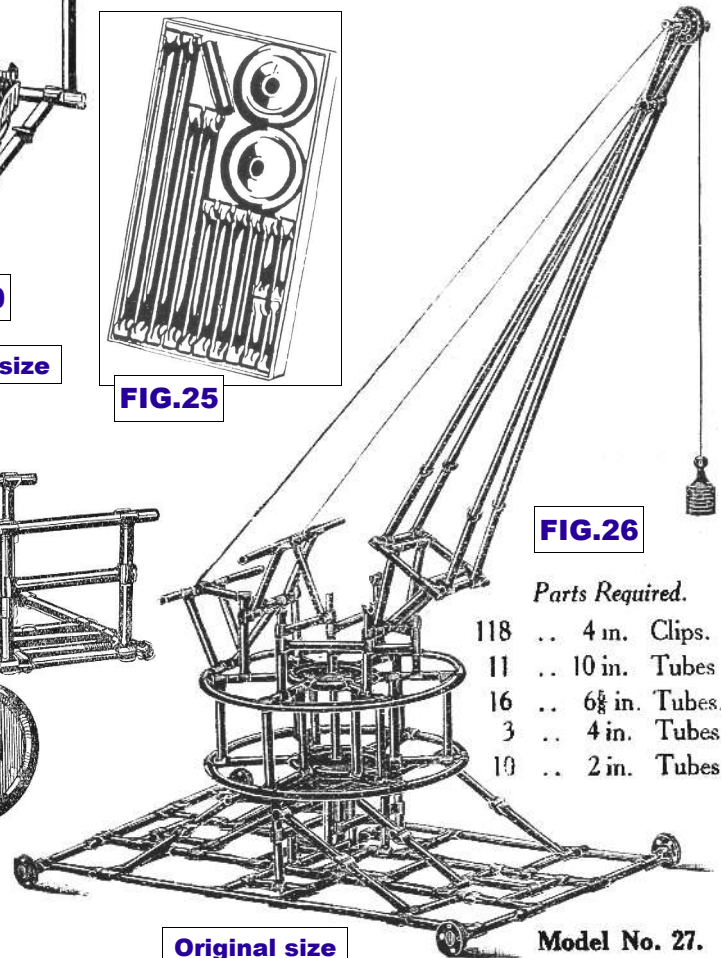
Parts Required.

- |                        |                        |
|------------------------|------------------------|
| 68 .. 4 in. Clips.     | 4 .. 10 in. Tubes.     |
| 3 .. 2 in. Tubes.      | 1 .. 1 1/2 in. Wheel.  |
| 4 .. 4 in. Tubes.      | 4 .. 3 3/4 in. Wheels. |
| 10 .. 6 3/8 in. Tubes. | 2 .. Buckets.          |
|                        | 4 .. Hub Caps.         |

FIG.26

Parts Required.

- |                        |
|------------------------|
| 118 .. 4 in. Clips.    |
| 11 .. 10 in. Tubes     |
| 16 .. 6 3/8 in. Tubes. |
| 3 .. 4 in. Tubes       |
| 19 .. 2 in. Tubes      |

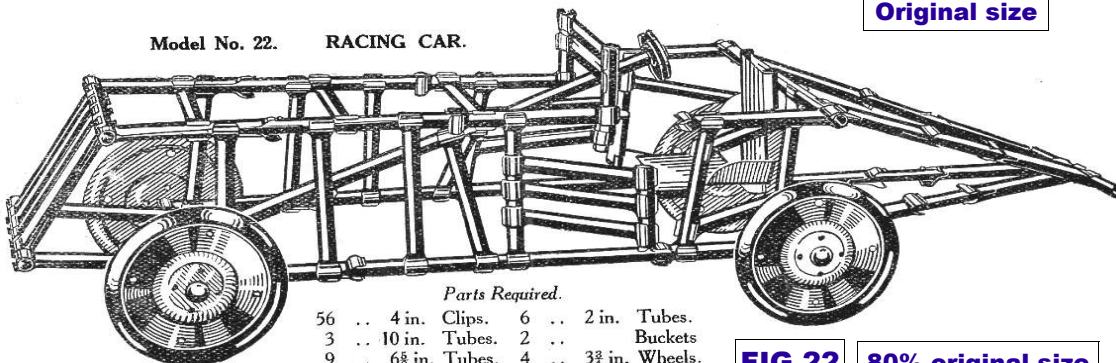


Original size

Model No. 27.  
REVOLVING CRANE  
ON WHEELS.

- |                        |
|------------------------|
| 12 .. 6 in. Bent Tubes |
| 2 .. 3 3/4 in. Wheels. |
| 5 .. 1 1/2 in. Wheels. |
| 4 .. Hub Caps.         |
| 1 .. Hook.             |
| 1 .. Cord.             |

Model No. 22. RACING CAR.



Parts Required.

- |                       |                        |
|-----------------------|------------------------|
| 56 .. 4 in. Clips.    | 6 .. 2 in. Tubes.      |
| 3 .. 10 in. Tubes.    | 2 .. Buckets           |
| 9 .. 6 3/8 in. Tubes. | 4 .. 3 3/4 in. Wheels. |
| 2 .. 4 in. Tubes.     | 4 .. Hub Caps.         |

FIG.22

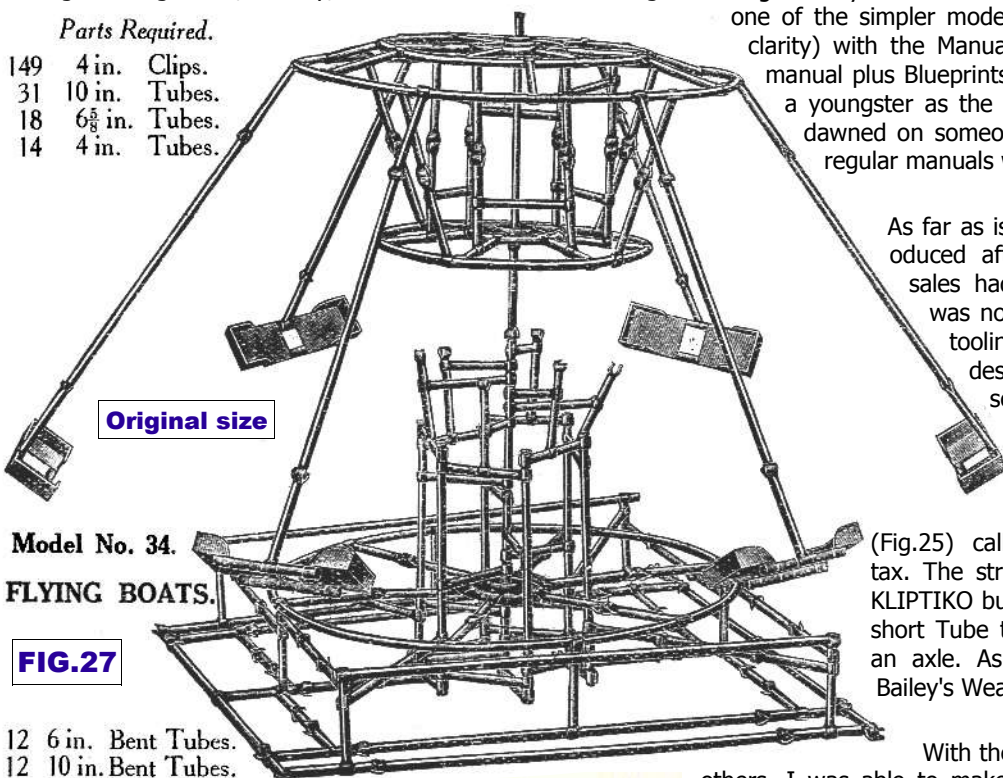
80% original size



on each side of the 6 sheets. They are 277\*155mm except that 111-112 is double-sized. The models are shown as engineering drawings with, usually, 2 or more views in first angle

**Parts Required.**

- 149 4 in. Clips.
- 31 10 in. Tubes.
- 18 6 5/8 in. Tubes.
- 14 4 in. Tubes.



Original size

Model No. 34.  
FLYING BOATS.

FIG.27

- 12 6 in. Bent Tubes.
- 12 10 in. Bent Tubes.
- 3 3 3/4 in. Wheels.
- 1 1 1/2 in. Wheel.
- 12 Buckets.

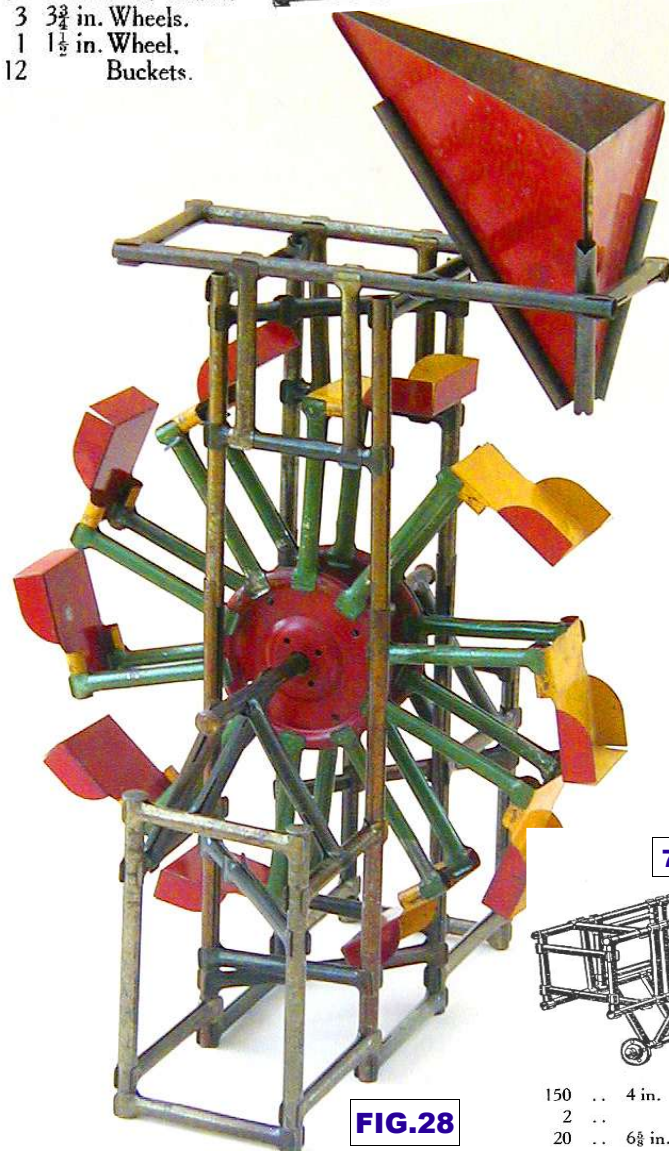


FIG.28

projection, plus sectional views as needed, all to a scale of 3/8 or 1/4 full-size. They are quite well done but what would an average 4-10 year old make of them? Fig.24 is an example of one of the simpler models (as a B&W negative for better clarity) with the Manual version alongside. The Juvenile manual plus Blueprints would not be nearly as useful to a youngster as the regular manual, and perhaps this dawned on someone late in the day and hence the regular manuals with the 1939 sets (Fig.15).

**After WW2**

As far as is known KLIPTIKO was not reintroduced after the war, so perhaps prewar sales had declined to the point where it was not felt worthwhile, especially if the tooling and/or stocks had been destroyed by bombing. However something of KLIPTIKO may have lived on for a little while. An ad in January 1948 from Champion Products Ltd., 190 Ashted Row, Birmingham 7 shows a set (Fig.25) called **SNAPSTICKS**, at 5/11+2/-tax. The structural parts in it look similar to KLIPTIKO but the Clips are in 4 lengths with a short Tube to perhaps join them and provide an axle. Ashted Row is about a mile from Bailey's Weaman Street.

**Using the Parts**

With the remaining No.3 parts, plus a few others, I was able to make the small Sand Wheel left. The framework built up really quickly and this aspect of KLIPTIKO would have been an attractive feature for the young builder. It was adequately rigid but could be knocked out of shape fairly easily. It was equally easy to knock it back into shape but adding two diagonal cross braces was worthwhile. As would often be the case this bracing needed Half Clips and I was surprised to see that there were none in Sets 1-3, and only 6 in Set 6. The wheel too was quickly built and reasonably easy to true up. It ran without problem, and rather impressively, until I tired of refilling the Hopper. There was no way of locating the wheel sideways within the framework but it stayed centred once the stream of sand was turning it.

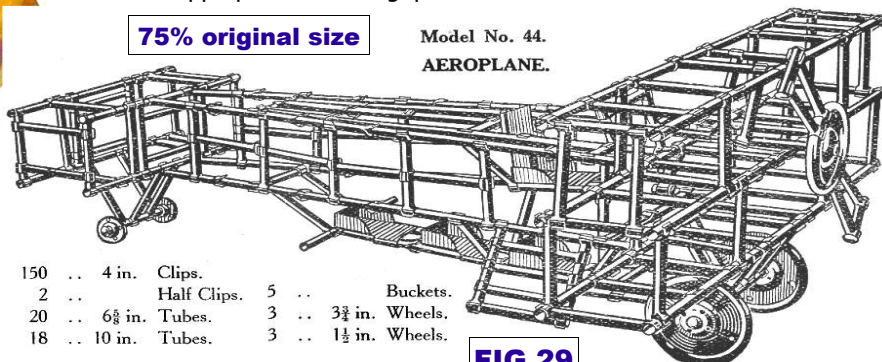
I also made a simple Crane and that too was successful except that there was no way of making a ratchet or brake for the winding spindle, or of making a satisfactory winding handle. So to prevent the load running away the fork ends of the Clips which provided the bearings for the winding spindle had to grip it fairly tightly and then it was quite difficult to turn. In some models a winding handle is made using a Clip on the spindle and a Tube in its other end. I tried this but it was too large for my small model and in any case the fork ends tended to slip. Some care was needed in both models to bend the Clip ends to give an appropriate level of grip.



PS I forgot to include the only photo to hand of a linking set. It is from the red parts/Tower manual period.

75% original size

Model No. 44.  
AEROPLANE.



- 150 .. 4 in. Clips.
- 2 .. Half Clips.
- 20 .. 6 5/8 in. Tubes.
- 18 .. 10 in. Tubes.
- 5 .. Buckets.
- 3 .. 3 3/4 in. Wheels.
- 3 .. 1 1/2 in. Wheels.

FIG.29



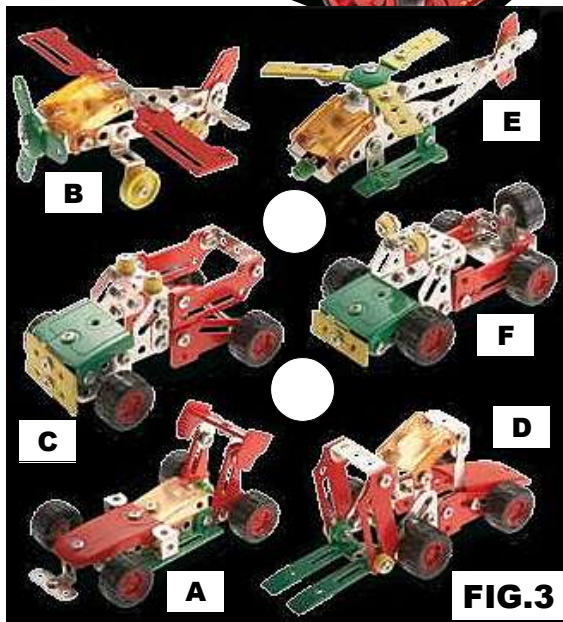
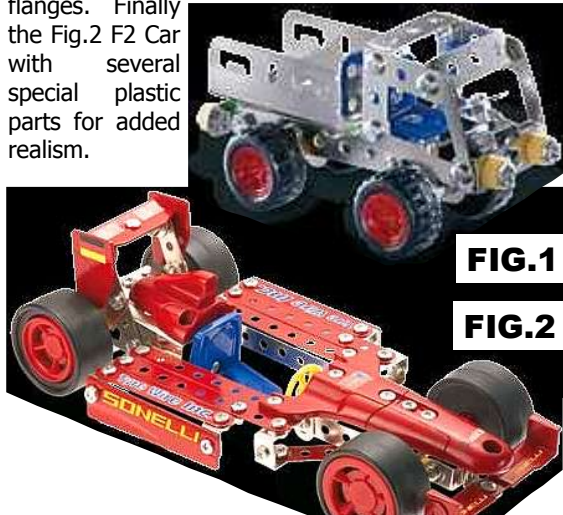
**Snippets. 'POLYLONG' News** The genuine POLYLONG website wouldn't open when I tried it several times over a period of days recently.

In the two columns to the right are typical lids showing the 'POLYLONG' names which have appeared since the last round-up in 41/1256, or have not been noted before. Another 13 to be added to the 41 already recorded.

One is called STINLESS [sic] STEEL, and in two of the others (BRICKS & ERECT-IT SET) 'Stainless Steel' appears near the system name. I wonder if this means that the metal parts are made of stainless steel. It often doesn't have quite the same 'quality' look as nickel but is probably cheaper these days.

The only innovations in the models are in the range from HappyPeople. The two larger models mentioned in 43/1294 are still in their range, and others include the HAPPY METAL set in the column to the right for a model with sound effects, and several of about the same size fitted with a Friction Motor.

Their new sets which caught my eye are one to make the 6 models in Fig.3. They are about 8cm long and look to contain many new parts. A small model from another set is shown in Fig.1. The Cab Side has been seen in other models, the Crane in OSN 43 for instance, but not the load platform, a Flanged Plate possibly with unusual piercing in the flanges. Finally the Fig.2 F2 Car with several special plastic parts for added realism.



BRAINS ASSEMBLED.



BRICKS.



BUILT-UP TOYS. The parts include plastic figures.



CONSTRUCTION SET.



ERECT-IT SET.



HAPPY METAL, a name now used on HAPPYPEOPLE sets.



INTELLECTUAL METAL TOYS.



METAL DIY MODEL followed by the model's name.



METAL ELEMENT.



METALLBAUKASTEN in tiny letters followed by the model's name



METALL-BAUSET.



METAL SHOP.



STAINLESS STEEL.



**New System: CONSTRUCTOR AUKRI** This French system seems to have been a take on Gilbert's NEW WHEEL TOY. There was only one set and two examples are known, one belonging to Jacques Pitrat, the other to Jean-Pierre Guibert. Both have kindly sent details and the main differences are the lid labels & the colours of the metal parts. There are also slight variations in the dimensions of certain parts. What follows is basically Jacques' description of his set with, in square brackets, significant differences in Jean-Pierre's outfit, plus extra information from him. Minor dimensional differences have not been noted, for instance that the thickness of the sheet metal parts varies by .1mm, or that the Long Axle is 10mm longer in one set.

**The SET** The name AUKRI derives from the initial letters of the maker's name: Aubin-Krier, 40 avenue Yver, Auxerre (a town 150km south-east of Paris). AUKRI has nothing to do with the CONSTRUCTOR made at Paray-le-Monial. There is no mention of date but the set has a 1930's look to it. It could though have been made after WW2, or even in the 50's, but certainly no later – the firm's 3 digit phone number was no longer in use in the 60's.

AUKRI models were designed for use by children of from 3 to 10, and its inventor certainly knew of Gilbert's system. The Set is similar to the latter's largest No.9007 outfit, and can build the Hand Racer & the Sled. The main difference is that in AUKRI a Crankshaft replaces the Racer's large Gear & Pinion.

The box is wooden, 48\*26\*6¾cm, with a hinged lid & no compartments. The lid label is shown in Fig.1 [Fig.2, with the Fig.3 label on the underside]. If there was a manual, it is missing, so I've no list of parts. However my set seems almost

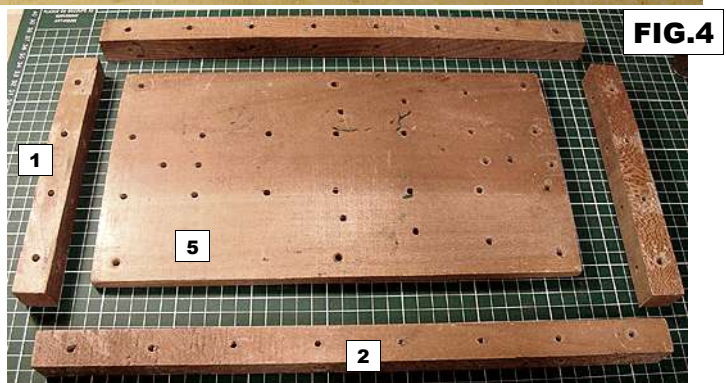
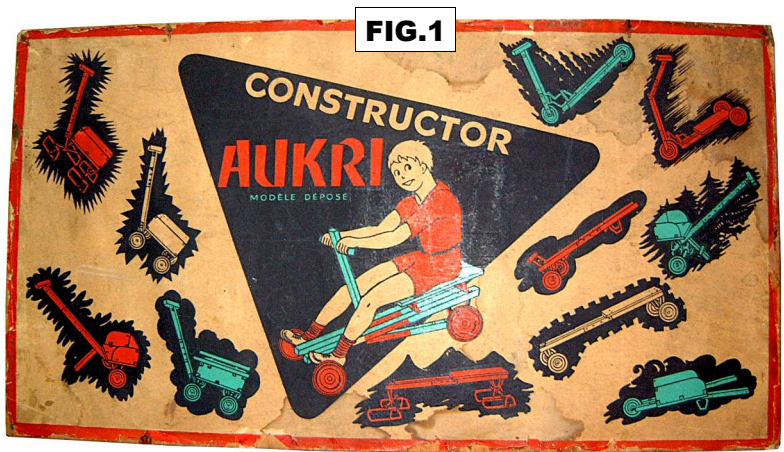
complete, except for the Bolts which are missing. [The Fixings & Wheels are missing.]

**The PARTS** No AUKRI part names or PNs are known so in the following list I will where possible give the names & PNs of similar NEW WHEEL TOY parts, with the quantities in curly brackets.

The **Wooden parts** (Fig.4) are in their natural state. The holes are 4mm Ø. [Those for Bolts are 5mm with smaller ones for Wood Screws.] • **Short Wood Piece** N-1, 200\*24\*24mm with 2x 4 holes. {3} • **Long Wood Piece**

N-2, 400\*24\*24mm with 2x8 holes. {6} • **Wood Seat** N-5, 330\*174\*11.5mm with 29 holes irregularly spaced. {1}

**Metal parts** (see Fig.5 & 6). Except the Erector Angle, N-27, the strip parts are 20mm wide & 3.0mm [2mm] thick, with some slight variations around these values. All are painted red, the axle parts too. [Most are blue-grey but some, starred in what follows, are turquoise green, and the axle parts are unpainted.] The Plates are light blue [cream] & .7mm thick. The holes for the Split Pins (Cotter Pins in the U.S.) are 3.0mm Ø; except where stated the other holes are 5.0mm. Many of the holes are at 50mm pitch. • **Wheel** N-7, white with a rubber tyre, diameter 130mm. The Wheels have a centre bush and on one side of one Wheel it has narrow diametrically opposed slots in the bush's wall where it protrudes (by 2mm) from the Wheel's face. {4} • **Angle Bracket** N-11 [\*], with a hole in one arm & 2, at about 12½mm pitch, in the other. {6} • **Runner** N-16, 21cm long o/a. It has a hole in its lug & 2 at the other end. It is used for the Sled. {4} • **Long Axle** N-17, 10mm Ø, 360mm long, with 2 holes at each end for Split Pins



to locate the Wheels. {2} • **Short Axle** N-20, 10mm Ø, 84mm long with a hole at each end for Split Pins. {1} • **Pivot Axle** N-22, see Fig.6 & #7 in Fig.3, 25mm long with 5mm end spigots. {1} • **Lower Universal Joint** N-24 [\*], with 3 sections of 2, 6, 12.5cm, with a hole in the first, and 3 in the last. {2} • **Hinge to Universal Joint** N-26, is a 1\*2\*1h DAS,



52mm wide [7mm lug holes for a 6mm Axle]. {1} • **Erector Angle** N-27. Each face is 25\*25mm & 1.0mm thick with a 6.5\*4.5mm oval hole. [Nickelled.] {12} • **Universal Bracket** N-28 72mm across the base & 38mm across the top {7} • **Lock Collar** N-29 (Fig.6), like a larger ERECTOR P37 Collar. The side holes are 10.5mm Ø & the middle threaded hole 4.5mm. [The Set Screw is 6mm Ø, & 1mm pitch.] {3} • **Bearing Bracket** N-30, with an 11mm hole on each side & a 7mm in the middle. {4} • **Upper Universal Joint** N-31 [\*] (see #7 in Fig.3) with 5 sections 2,6,8,5,2cm long, one 7mm hole at each end & 2x 5mm holes in the 8cm section. {1} • **Loop Bracket** N-34, length 12.5cm. {6} • **Tie Bar** N-35 [\*], a 2-hole Strip. {2} • **Splice Strap** N-41, a 4-hole Strip {6 [8]} • **Short Metal Side** N-40, 150\*102mm. {4} • **Corner Piece** N-46, 101\*76mm. {1 [2]} • **Long Metal Side** N-47, 330\*102mm, 6 holes at various pitches. {2}

Naturally, the Gilbert parts for the Racer's gearing are not included: N-8, N-9, N-10, N-15, N-18, N-33, N-48.

**Non-Wheel Toy parts:** • **Bent Axle** (A in Fig.5), 6.0mm Ø, 8\*2cm with a Split Pin hole at the end of the longer arm. {1} • **Crankshaft with Connecting Link** (B), the shaft is 10mm Ø, 360mm o/a, with 2 Split Pin holes at each end as in the Long Axle. On one end there is a third hole between them, near to the outer hole and spaced so that the Wheel can be locked to the Shaft by a Pin through it (instead of the outer hole) which engages in the slots in the Wheel's bush already mentioned. [There is no third hole – at one end the holes are spaced so one of the Pins engages the slots.] The Link is the same as the Loop Bracket; it cannot be removed from the crank. [The Link is light green]. {1}

**Fixings** All the Bolts & Split Pins (N-37) are missing. Various sized nuts were found including 8 hexagonal, 21mm A/F with a threaded hole 10mm Ø, but some or all may be foreigners. Also 2 nickelled bolts, length 75mm, 4.0mm Ø, with hexagonal nuts. [The Fixings needed are Bolts, Long & Short, with Nuts: thread: 5mm Ø x .9mm pitch (a pre-ISO French standard – Ed); Washers; Split Pins; & 5mm Wood Screws. A **Spanner** is shown in Fig.6.]

**Instructions** No manual is known. I have only a leaflet (Fig.7) which was distributed by the maker at the 'Foire de Lyon'. The front shows 12 models (not the 13 claimed) made with the set. The Strips are red, the Wheels red instead of white. The models are the same as those for the Gilbert set; the latter's simple Hobby Horse & Snow Shovel are missing although they could easily be made with the AUKRI set. Some of the system's qualities are described on the other side of the Leaflet. Nothing is said of a manual but an instruction sheet (planche de construction) is mentioned, said to allow easy assembly of the different models, no doubt the one already mentioned (Fig.3). It shows how to assemble the parts, but does not describe any particular model. Perhaps this Sheet & the pictures of the models were thought sufficient. Jean-Pierre made the Cyclorameur (Racer) right using substitute Wheels and N&B.

**Verdict** This system is well made, the parts are strong.

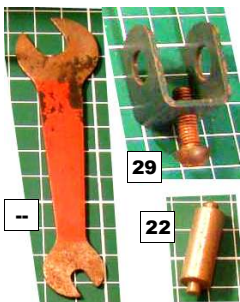
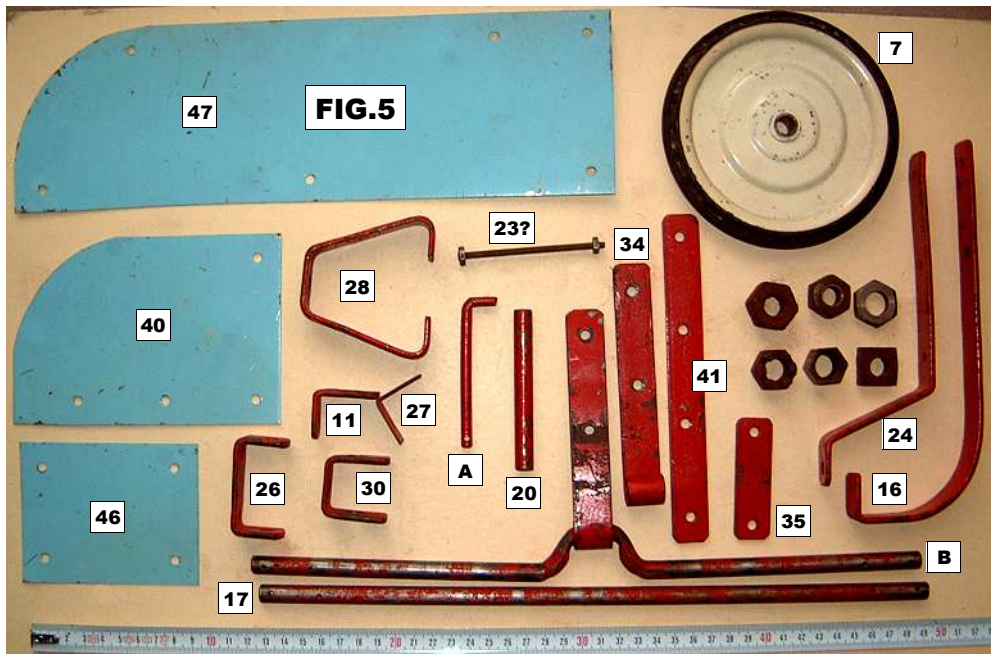


FIG.6

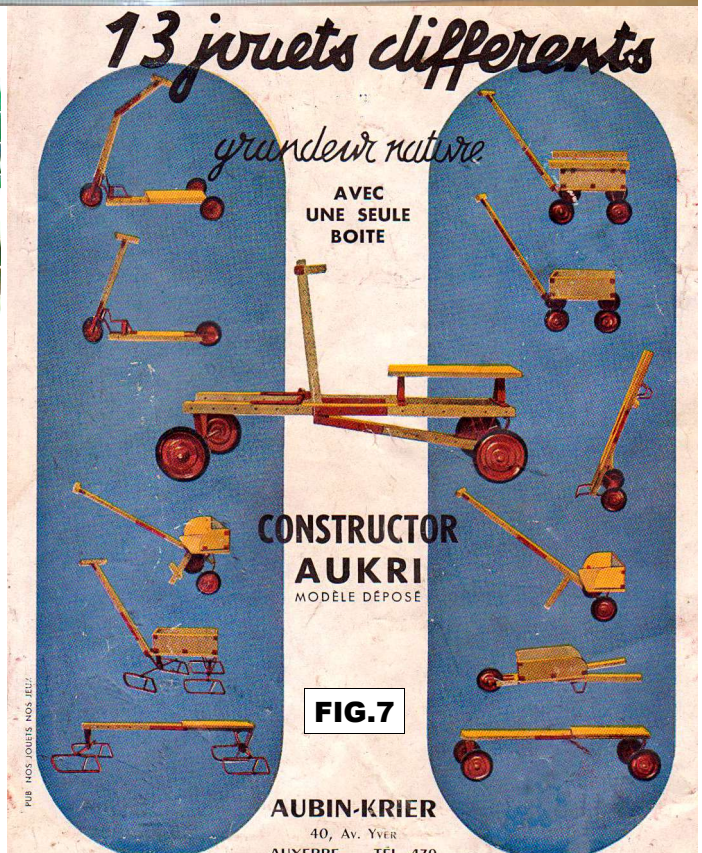


FIG.7

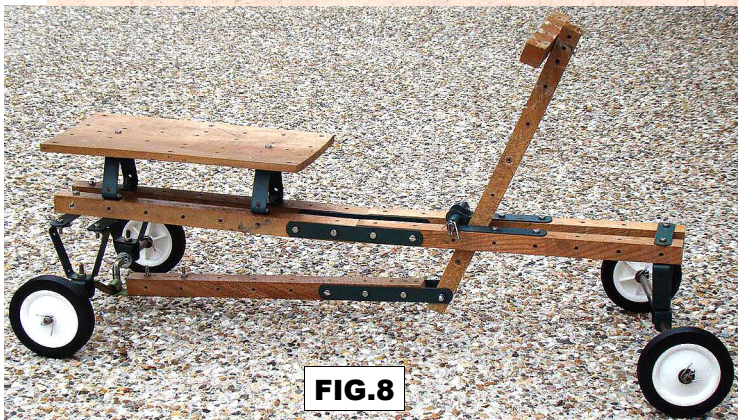


FIG.8

However, its interest is lessened by being essentially only a copy of the Gilbert NEW WHEEL TOY.



**A METALLBAUKASTEN [6] Set** Snippets about this small system appeared in 43/1300 and earlier, but now Jean-Pierre Guibert has kindly sent photos and notes on his Nr.301/302 set – the only size known.

**The Box** The box, **FIG.1**

297\*228\*27mm, is as in 38/1153 with a wooden frame and cardboard bottom and sliding lid. The logo is shown right. Jean-Pierre gave a nice translation on the 'Früh übt sich' slogan on the lid – 'Get a head start'.



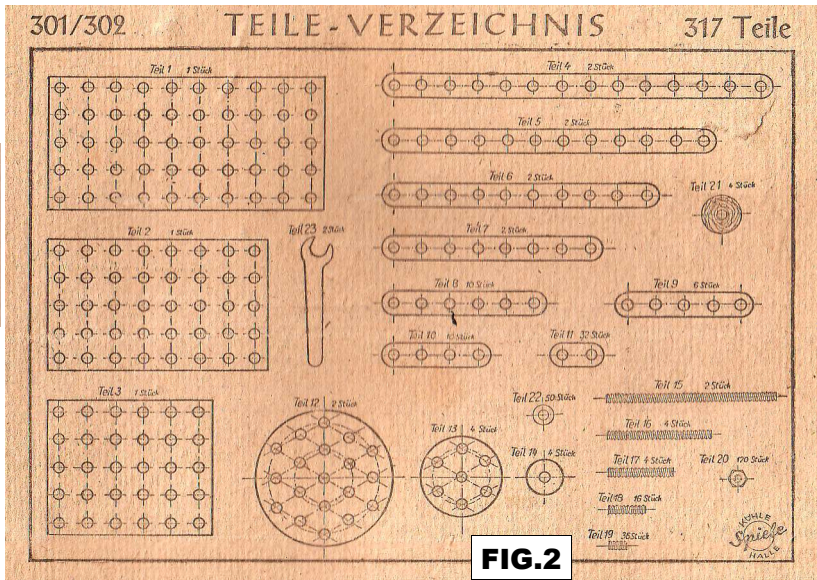
**The Parts** with their quantities are shown on the underside of the lid (right) and are listed below with their number in curly brackets. Except for the wooden Wheel and black steel Spanner, all are aluminium. Holes are 5mm Ø at 15mm pitch and the thread is M5 (actually 4.9mm Ø).

- #1-3 Perforated Plates, 5\*10,8,6h. {1,1,1}
- The 5\*9h mentioned in OSN 43 was a mistake.
- #4-11 Strips, 14,12,10,8,6,5,4,2h long and 13mm wide. {2,2,2,2,10,6,10,32}
- #12-14 Screwed Rods which scale at approximately 9,6,3½,2,1cm long. {2,4,4,16,36}
- #20 hexagonal Nut. {120}
- #21 Wheel, wooden. {4}
- #22 Washer. {50}
- #23 Spanner. {2}

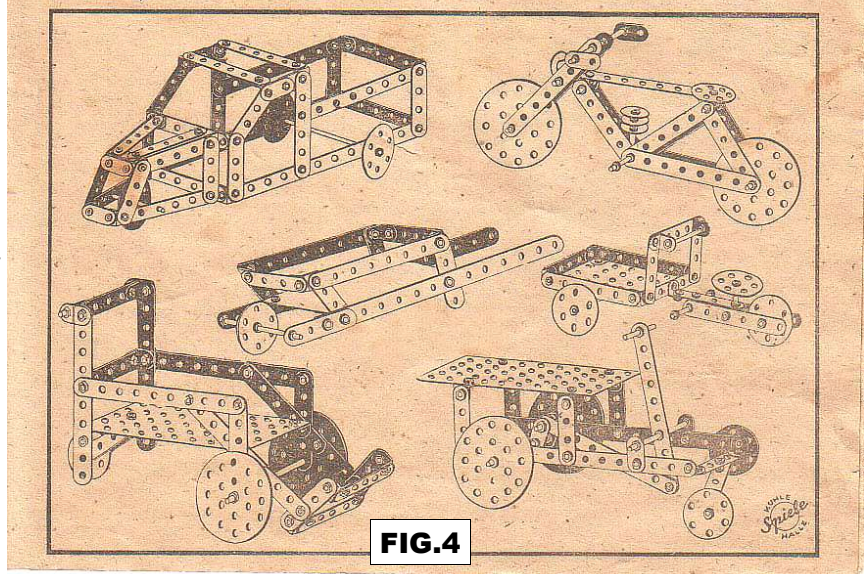
No A/Bs or Bolts are mentioned. Some A/Bs can be seen in the models and in Ebay sets – the latter have 2 round holes and most likely the (large) quantity of 2h Strips includes A/Bs. No Bolts are apparent in the models either, with the Screwed Rods used to hold the parts



**FIG.3**



**FIG.2**



**FIG.4**

together. That would account for the number of Nuts provided. But some Bolts, about 1cm long, can be seen in the photos of one of the 3 Ebay sets to hand.

**The Manual**, with the Set, 150\*102mm, is the Bauvorlagen type as in 39/1166 and has 8 folded pages including the front left. One of the models pages is shown above.

**OSN 44/1349**

**METALLBAUKASTEN [6]: S4**

**Snippet. A No.1 FERMO Set** FERMO was the post-WW2 German system with the main parts triangular, and coloured black in most known sets. The outfit described in 27/784 had no label, or else it had come off without leaving a trace, and lid tops were not shown in the photos for the two Ebay sets mentioned in 41/1230. There was also no indication that any of the sets had a number. But Jacques Pitrat has alerted me to another set on Ebay which had the label right, occupying about 40% of the lid. Its box was black, like the OSN 27 example, and was the same size. The parts too were identical, except that the Pulleys were black instead of aluminium, and they had the same layout on, again, a blue backing card. As can be seen the label shows the set to be a No.1, so was any other size of FERMO ever produced? The front of the present set's manual was shown and appears to be identical to the one in the OSN 27 outfit.



**OSN 44/1349**

**FERMO: S3**



**The NUTS & BOLTS Dockside Crane** Two models a little more sophisticated than the usual 'POLYLONG' offerings were noted in 43/1294 and right, the box lid of another. It contains well over 600 parts and comes from a company called FIA Toys of Garstang, Lancs. Their website, [www.fiatoys.com](http://www.fiatoys.com), shows a range of sets with one or two 'better' models, and another larger model, a Hammerhead Crane, with 'over 500 parts'. Before last Xmas the Dockside Crane was being sold by both Amazon & The Entertainer toy shops at £12.49.

The box (much larger than it need be) is 51½\*34\*8cm and on the lid is 'Engineer designed in the UK for budding young engineers' and 'Designed for easy building & instant play'. The parts include 74 Strips & DAS from 3 to 15h long; 19 Plates; 43 Brackets; and over 200 N&B. All the circular parts except a 50mm Disc are plastic.

Paul Goodman told me about the Set and he kindly agreed to send me his comments, as follows.

'The finished model is quite impressive and looks very like the photo on the box lid. The top of the jib, at its lowest, is about 52cm above the 'ground'. The luffing range is only about 10cm but within that the hook rises just 1cm – so not bad for a simple model. The turntable works better than I expected but the model will overbalance if the jib is turned to the side in its extended position. As a final 'plus', the N&B are of good quality, meshing easily (unlike my experience with modern MERKUR sets), and this did help to make assembly that much more enjoyable.

Turning to the negatives. • The Screwdriver is too small to provide adequate purchase and the Nuts too large for the Spanner. If the sequence of assembly steps was followed long tweezers & pliers were need to reach items inside the cab. • The longer Strips in a new set were bent/distorted and had to be put through my strip roller. This was not down to the packaging (quite typical with parts in polythene bags, placed in the usual styrofoam insert, inside the box). Some of the DAS had to be bent back into shape as well. • The plastic used for the Flanged Wheels is poor quality and will probably not withstand much use. Also, every Wheel appeared to have been removed from a sprue and required trimming to remove flash around the axle hole & on the rim. • The design of the bogie/wheel assemblies allows the Wheels to float so before the model could be run on rails (STOKYS A/Gs) a MECCANO Spacer & Washer was needed on each axle. • The structure is adequate but a few more DAS in the base (and possibly a couple more in the jib) would add rigidity. • No provision is made for a hoisting/lowering brake but this was easily resolved by adjusting the Bolt used in the Wheel Disc as a winding handle to protrude far enough to be inserted in a hole in the cab side when the winding drum Rod is slid 'inwards'. • The luffing mechanism is very neat, but with one drawback – with the parts provided it doesn't work! It has a long Bolt turning in a Nut situated on the inside back face of a small D/B, and said Nut is meant to be jammed and prevented from turning by a Bolt through each of the Brackets lugs. Sadly, the Nuts provided are, at 2mm, too thick. Eventually a suitably doctored MÄRKLIN Nut was used.

So far as the instruction leaflet is concerned, I will let you be the judge of its legibility and suitability for a 6-12 year old (or someone my age with varifocal lenses!). I found myself referring regularly to the large illustration on the box.

Despite the various problems this kit would be good value at KIA's price of £20, and at £12.49 it is a real bargain. It compares very favourably with the competition.'

The Instructions really are dire. They consist of rather faint, low contrast B&W photos on both sides of a folded A3 sheet of good quality art paper and apart from the illustrated parts (with PNs & quantities) on the back page, the model is to be made following 15 steps, each with a list of the parts needed and the usual exploded view. The main problem is that after the first 3 steps these views are much too small and even blown-up to twice their area are still not that easy to follow. Right, Step 4, exactly as per the original.

I am fond of multi-jib cranes and when Paul told me about the FIA set I decided to build a MUSALA version with the parts

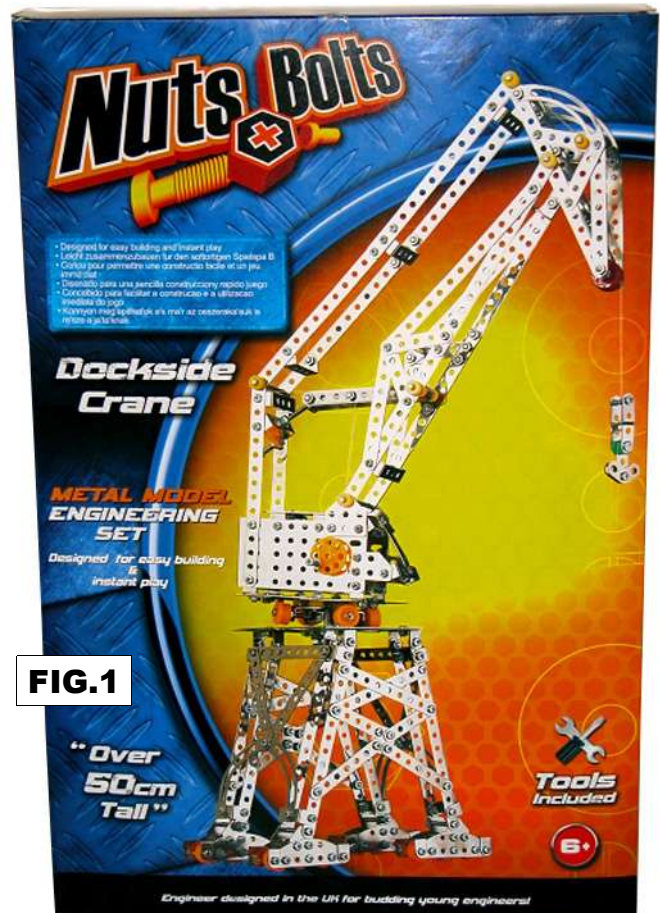


FIG.1

described elsewhere in this Issue. A counterweight was added to overcome the tendency to topple. The jib geometry was retained but the luffing control allowed a full range of movement – over twice that in the original. The downside was that the height of the Hook fell rather drastically over the increased range. It was then found that level luffing within 2cm or so over the whole range could be achieved if the pivot point of the top jib was moved 2 holes backwards, and the lower pivot point of the main jib was moved forward by 1, or preferably, 2 holes.

Congratulations are due to whoever designed the Crane on producing an eye-catching model, and to FIA and the retailers for selling the Set at such a low price. It should 'fly off the shelves' but what will the 6+ years old it is recommended for make of it? I suspect that, sadly, unless a dedicated dad intervenes, many will end up in car boot sales. One wonders how much the set would have cost if adequate instructions had been provided and improvements made to overcome the more serious of the various problems that Paul found.

4

129x2	139x1	134x1	126x2
130x2	116x8	108x2	107x2
105x1	148x30	152x2	154x1
147x39	217x1	124x1	

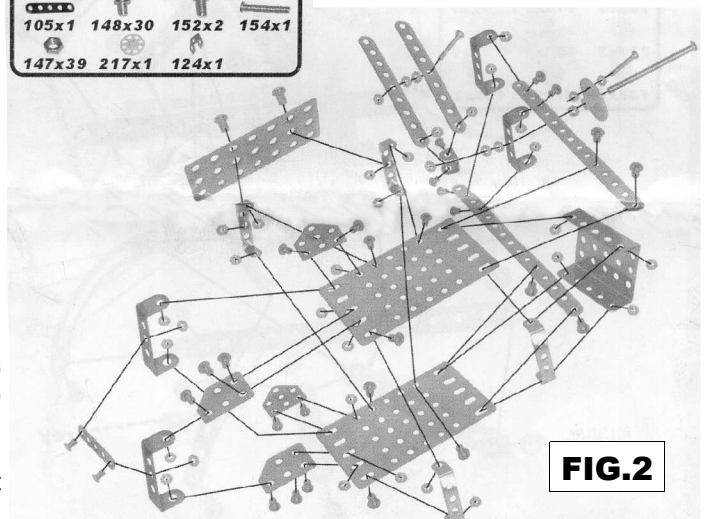


FIG.2

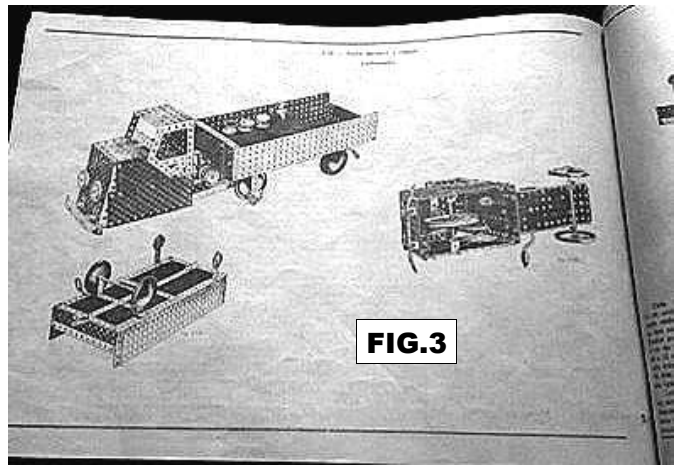


**Snippet. 'New' System: MECÂNICA RECREATIVA**

Two sets of this name were offered in one lot on the Argentine Ebay but the words are Portuguese (meaning Mechanical



**FIG.1**



**FIG.3**

Recreation) and the maker was given as Fabrica Bonsucesso of Rio de Janeiro.

One box is shown top left; the second is slightly smaller with a similar label that almost covers the lid. The parts from the two, or what remains of them, were mixed together and most types are shown far left with the remainder inset. They are obviously a copy of MECCANO (even to the brass grip on the Crank Handle) though there is no confirmation that the hole pitch, thread, etc are identical.



**FIG.2**

One page (above) of the manual was shown and the photos on it are those of Liverpool's 6.13, Mechanical Horse and Trailer, from the years 1937-47, though without the original's 4<sup>th</sup> view, notes & list of parts. The next model in the MECCANO manual is Sydney Harbour Bridge and one can just see the tip of its left end on the next page.

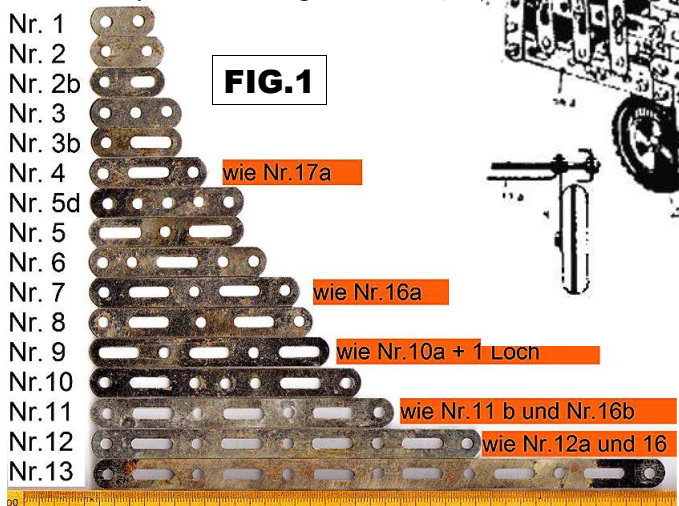
Given the models in the manual and the red/green colour scheme of the parts, the system most likely appeared after rather than before WW2.

**OSN 44/1351**

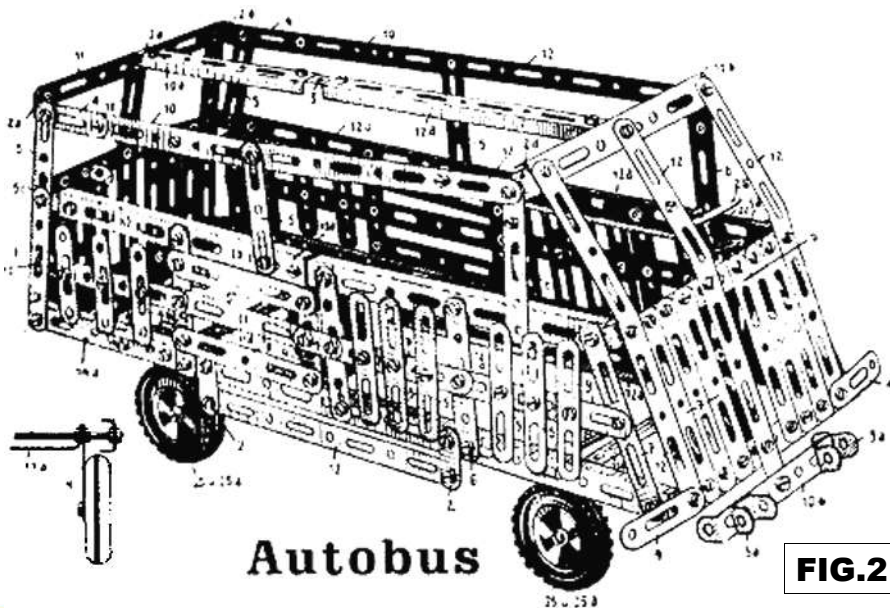
**MECÂNICA RECREATIVA: S1**

**A STATO-BAU Nr.49 Outfit** The Contents of Set 49 were given in 37/1121 and illustrations of the various parts were shown in 40/1209-10; now Jürgen Kahlfeldt has kindly sent details of an actual set.

**The Box** It measures 527\*364\*23mm, and is in the same style as the Nr.48 in OSN 40 but with partitioning that gives 5 narrow compartments along the bottom, 2



**FIG.1**



**FIG.2**

along the left, and 4 along the right side. The N&B etc are in 3 of the round, blue-lidded boxes, 2 as in the Nr.48 but one smaller, about 5cm Ø.

**The Parts** Their piercing is not always obvious from the illustrations and Jürgen sent a photo (Fig.1) to clarify matters.

**OSN 44/1351**

**STATO-BAU: S6**



The **PNs on orange** are for both Plates & Angle/'U' Girders. The **Plate #16a** is the centre cutout of the Flanged Plate #16. **The other parts** in the sets look as expected except that • the smaller **23mm Pulley #25** is like the 35mm in having 4 face holes; • the **90mm Screwed Rod** has a short 2.7mm Ø smooth centre as well as the 50mm (this is as in the Nr.48 – the 90mm was omitted in error in OSN 40). **The Tyres** are 43 & 56mm Ø when fitted to their Pulleys, and are 9½ & 11½mm wide. The smaller one has STATO-BAU moulded into both side walls but the larger one is unmarked.

**The Manual** with the Set is for Sets 47-48 only but it differs from the version described in OSN 40 in having 6 extra pages with one Nr.48 model on each. The first on p14 is the Torkran shown in 37/1122 and the last, on p19, an unremarkable Big Wheel, Riesenrad, with cars to be made from cardboard. The other models are an attractive Passenger

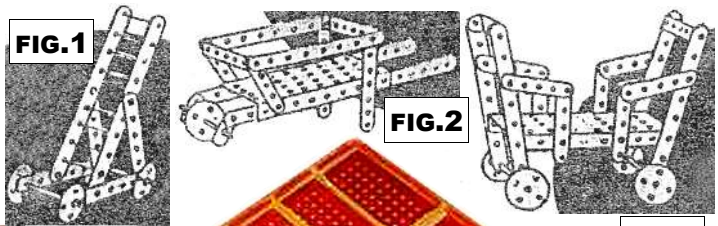
Steamer (though without a funnel); a Breakdown Lorry with parallelogram linkage steering & a fair crane; the Autobus in Fig.2 – it is suggested that the openings be clad in transparent sheet; and a skeletal Aeroplane with 2 engines & a tricycle undercarriage. These models extend the scope of the Nr.47 which had previously been confined to structures plus the Tramcar shown in OSN 40. These extra models show the advantages & disadvantages of the slotted parts from the point of view of appearance.

**One other point on the Brochure described in 35/1060** It should have been said of the that as well as the sets being listed with either nickelled or coloured parts, Sets 47, 47a & 48 were also available with the parts in packets (Tüten) packed in a cardboard box, with 10, 5 & 15 of them respectively in the 3 sets. No coloured parts or Tüten are known so far.

**STATO-BAU: S7**

**OSN 44/1352**

**Snippet. An EL INVENTOR No.10 Set** 2 ads shown in MCS for this post-WW2 Argentine system were from its exclusive distributor, Compania Tecnica Movilizadora of Buenos Aires. They show some simple models (including Figs.1-3 right) and list Sets 0-7 & No.10. The No.0 cost \$1.95, the No.7 \$25.30, and the No.10 \$98. Also from MCS: the holes are 4.2mm Ø at 12.7mm pitch.



The Ebay photos of the lid above and the trays & manual cover right were said to be of a complete No.10 from the 1950s. As a reference the MECCANO cardboard Spoked Wheel in the top tray is 3.2" Ø. The width of the manual is about 60% that of the lid.

What can be seen of the models on the label & manual cover remind one of MECCANO but those in the ads less so. One unusual part in them is a 4h Wheel Disc or Bush Wheel, and in the Set a flat 3\*3h 'T' Bracket in the top left corner of the top tray. It doesn't look green like comparable Brackets though.



**EL INVENTOR: S1**

**OSN 44/1352**

**DER KINDER-KONSTRUKTEUR** Jean-Pierre Guibert wrote that he has the set described in 43/1298 and kindly sent the photo right. The parts, 36 different types in all, are aluminium and are small-scale with holes of 3.2mm Ø at 7.5mm pitch. The thread is M3. The photo shows parts not visible in OSN 43: the smaller diameter Gear, the two sizes of Loose Pulley, the 3\*2h Curved Plate (to the right of the 5\*11h Flanged Plate), and various Brackets including an A/B, 2h deep D/B, Reversed A/B, & Double Bent Strip. The Strips that can be seen are 3, 4, 5, 7, 11 & 15 holes long. The coloured Pulleys & Tyres that were in the box shown in OSN 43 are not part of the system.



**KINDER-KONSTRUKTEUR: S2**

**OSN 44/1352**



### Three **МУСАЛА (MUSALA) No.4**

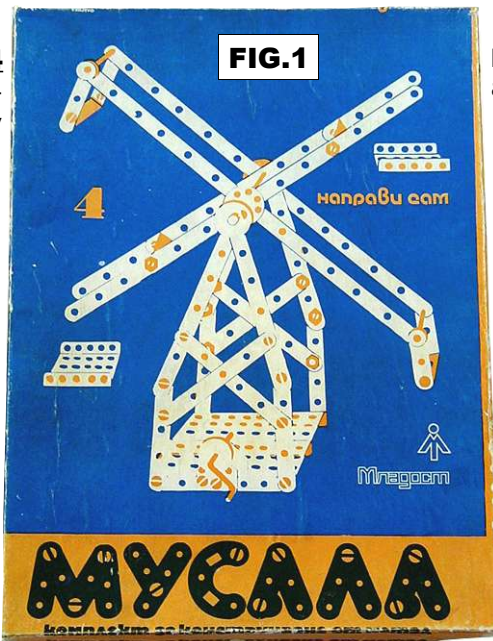
**SETS** MUSALA was a Bulgarian system which was clearly inspired by MERKUR, witness the Illustrated Parts, the manual models, and, with the exception of the Pulleys, the parts themselves. However there is one important difference, the holes are a little larger and the N&B are M4 rather than M3.5.

The account is based mainly on a set, near complete; details of a similar outfit, kindly sent by David Hobson, virtually complete but without a manual; & the loose parts, less the metal Pulleys, from another No.4.

**The Sets** Both sets have similar boxes, 27\*36\*2¾cm, and the parts sit in a formed cream plastic tray. The N&B and some small parts are in circular recesses covered by white lids, MERKUR fashion. My set has the box lid in Fig.1 and David's is the same except that the logo & name at bottom right is replaced by the circular logo on the manual cover (Figs.4 & 5).

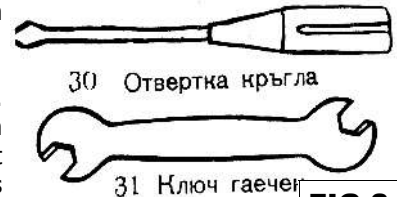
The quantities of parts in the No.4 match those in the MERKUR No.4 exactly except that 4 extra Axle Stops replace the 4 Collars in the Czech set, and a Driving Band the two 22mm lengths of Spring Cord.

**The Parts** Apart from the Pulleys & Tools the parts look similar to MERKUR but are easy to identify by their larger holes (MERKUR are 3.9mm) and their colour. A selection is shown in Fig.2 and all are listed below with the quantities in curly brackets. The details relate to the parts in my No.4 with variations in the other parts noted. **Finish.** All the parts are nickelled except the Flanged Plates and Strips of 8 holes or longer, which are painted olive green; the A/Gs either olive or red-orange; and the Loose Pulley of blue plastic. **Quality.** The parts are not quite so well made as MERKUR but are of acceptable quality except that some of the Axles have slight bends in them and all are too loose in the bosses. It will be seen though that there is some variation in the size of the holes and slots between the 3 samples. **Holes** are 4.1mm Ø except as stated, at 10.0mm pitch. Slotted holes have large radius ends. **Bosses** are nickelled steel, 8mm Ø (9mm for #20), 4.1mm bore (some 3.9-4.2), single-tapped M3. The **Set Screw:** 5.2mm Ø cheesehead, 6mm u/h. David's are similar

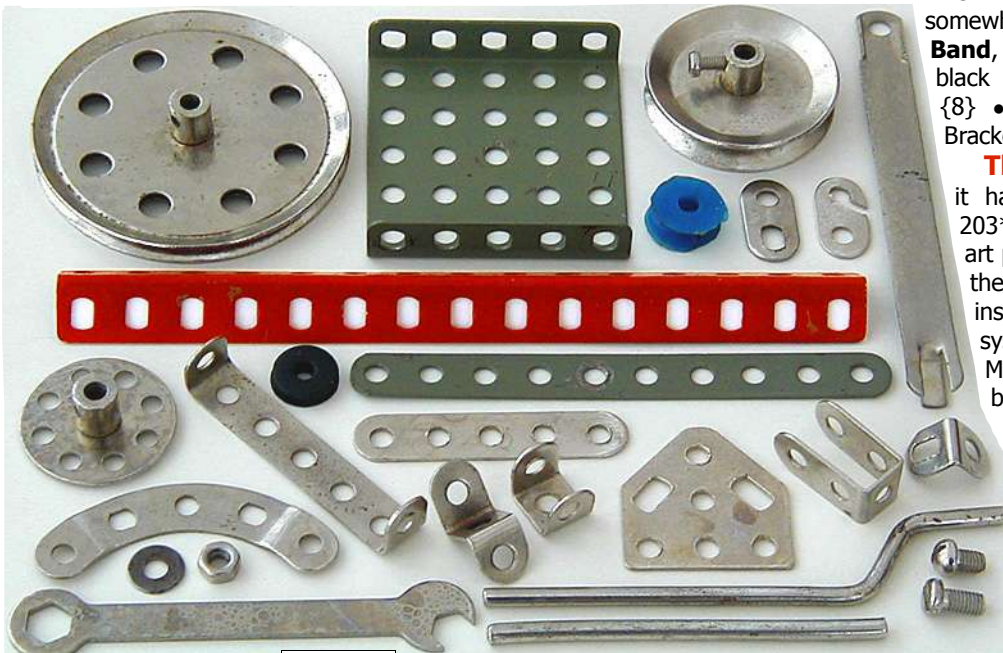


but round-headed; in the loose parts they are 5.3mm Ø countersunk, 8mm long o/a.

- #1 **A/B** with a 4.1mm hole & 5.9mm slot (David's: 3.9 & slightly oval). {8}
- #2 **Flat Bracket:** holes as A/B, 20mm long o/a. {6}
- #3-8 **Strips** 3,5,6,10,15,25h: 10.0-10.3mm wide. {8,10,6,8,4,4}
- #9 **Curved Strip** with 4.8mm slots. {4}
- #10 **A/G**, 15h: holes are 4.4mm Ø, the slots 5.9mm long. Those in the loose parts match but are olive green. David's are also olive green but have 4.9mm holes instead of the slots. {4}
- #11 **D/B:** 11½mm wide with 4.0mm holes. {1}
- #12 **2h D/B:** 10¾mm wide. {1}
- #13 **DAS:** David's have 4.4mm holes. {2}
- #14 **Reversed A/B** with no slotted hole. {2}
- #15 **Flanged Plate** 5\*5h with 4.5mm holes, & 5.4mm slots in the flanges. {2}
- #16 **Flanged Plate** 5\*10h with 4.1mm holes, & 4.9mm holes in the flanges. {2} [In Guibert's Encyclopédie the colour of the Flanged Plates is given as red.]
- #17 & 18 **Flat Trunnion & Trunnion** with 7.7mm slots. {2,2}
- #19 **Pulley:** 23mm Ø, 4¾mm wide. {4}
- #20 **Bush Wheel:** 28mm Ø with 4.0mm holes at 10mm radii.
- #21 **Pulley:** 38mm Ø, 7¾mm wide. {2}
- #22 **Pulley:** 62mm Ø, 5¼mm wide, with 5.7mm holes at 20mm radii. {2}
- #23 **Loose Pulley:** 14½mm Ø, 5mm wide, badly moulded in blue plastic.
- #24 **Nut & Bolt:** the Nut is hexagonal, 6.9mm A/F & 3-3¼mm thick; the Bolt is roundheaded, 6.7mm Ø & 6mm u/h {33}
- #25 **Nut & Bolt:** Nut as #24; Bolt is cheeseheaded, 6.7mm Ø & 8mm u/h (David's similar but roundheaded; likewise in the loose parts). {12}
- #26-28 **Axles** 30, 70, 120mm long, 3.6mm Ø but one 3.4 (3.4 in David's & the loose parts). Some are not straight and all are very loose in the bosses. {2,2,3}
- #29 **Crank Handle**, 3.4mm Ø, 94mm long o/a (98mm nominal). {1}
- #30 **Screwdriver:** shown as right but not seen.
- #31 **Spanner:** shown as right but the actual part as Fig.2 – at 80mm it is slightly too long to fit the recess in the tray. {1 but 2 in my set}
- #32 **Cord:** thin green twine in David's set.
- #33 **Nut Holder**, 100mm long. {1}
- #34 **Washer**, 10mm Ø, .5mm thick, somewhat dished. {8}
- #35 **Driving Band**, not seen. {1}
- #36 **Axle Stop:** black rubber 12mm Ø, 2¼-4mm thick. {8}
- #37 **Hook:** based on the Flat Bracket with a 2mm wide slot. {1}.



**FIG.3**



**FIG.2**

**The Manual** Including the covers it has 32 unnumbered paper pages 203\*158mm printed in Bulgarian on art paper. Fig.4 is the front cover with the logo enlarged in Fig.5. On its inside is an introduction to the system. p3 is the title page, МУСАЛА 4, and p4 has general building instructions. pp5-10 have the illustrated parts interspersed with constructional details. All except the Tools, & the 38mm Pulley (shown without face holes), match their MERKUR counterparts, though redrawn. Next 20 models including the Big Wheel on the cover. Nearly all



are one to a page from Въжена (Inclined Hoist) to Гимнастик (Gymnast). All are based on MERKUR No.4 models, a few changed appreciably but usually only slightly. Sadly in a few cases the changes prevent the model from working as intended. All the 38mm



FIG.4



FIG.5

Pulleys are shown without face holes but all the 62mm are the original MERKUR pattern. Some Collars are replaced by Axle Stops, some are not. One oddity, all the Pulleys used as road wheels are shown fitted with rubber rings though there are none in the Set, nor in the MERKUR set or manual

models. There is a good halftone for each model, mostly clearer & more attractive than the MERKUR line drawings, plus a parts list. C3 has the Set Contents and C4 some details of the maker.

There is a fair range of models including some novelties & several machine tools, but none of the models do justice to the number & range of parts in the Set. For example only one uses the A/Gs (Fig.7). Fig.6 is one of the more interesting models, shown here at the original size. The MERKUR version has guide cords for the lift & a way of raising & lowering it, though it's hard to see how it works. The MERKUR version of Fig.7 has the appropriate driving bands, also a Collar inside the frame on the 62mm Pulley shaft with an 8mm Bolt in it to cause the 'tup' to rise & drop.

ДЪРЖАВНО СТОПАНСКО ОБЕДИНЕНИЕ

FIG.8



Младост

A B&W photocopy of another manual is identical except that the front cover has the logo left (as in MCS), the same one as on the box lid but for the additional line of text above it.

**History** MUSALA was made by the firm Vasil Petleshkov of Bratsigovo, a small town in the south of the country. It was the company which also made MLADOST (theme sets, see 25/720); RODOPI (TRIX-style parts, see 26/751) and ELEKTROMEKHANICHEN KONSTRUKTOR (one model sets, motorised, see 36/1099).

David's box has a label on its underside which includes 2 dates: '30.12.1977' after 'Permission from', and '1984' rubber stamped after 'Produced'. My set has the same label with the same 'Permission' date but the 'Produced' date is too blurred to read. The equivalent label on the RODOPI box had no Produced date and the same Permission date, which makes one wonder what the latter really signifies. The other two Petleshkov systems are thought to be later, an Ebay ELEKTROMEKHANICHEN KON set was said to be from 1990.

The words above & below the Fig.8 'figure' translate as 'State Economic Association' & 'Youth'; those around the Fig.5

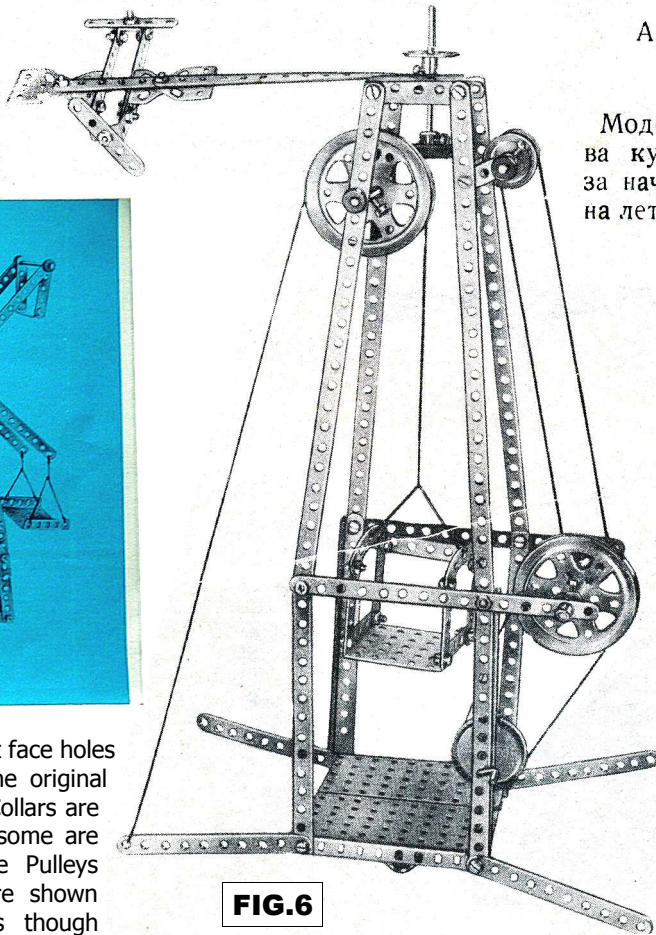


FIG.6

Асансьор със самолет

Модела представлява кула със самолет за начално обучение на летци.

ном. броя

1	2
2	3
4	8
6	5
7	4
8	4
9	2
10	3
11	1
12	1
15	2
16	2
17	2
18	2
19	3
21	1
22	2
24	33
27	3
28	1
29	1
35	1
36	6

Трансмисия с чулк ном. броя

1	2
3	4
4	6
5	4
10	4
13	2
15	2
16	2
19	3
21	1
22	1
24	33
27	1
29	1
35	1
36	5

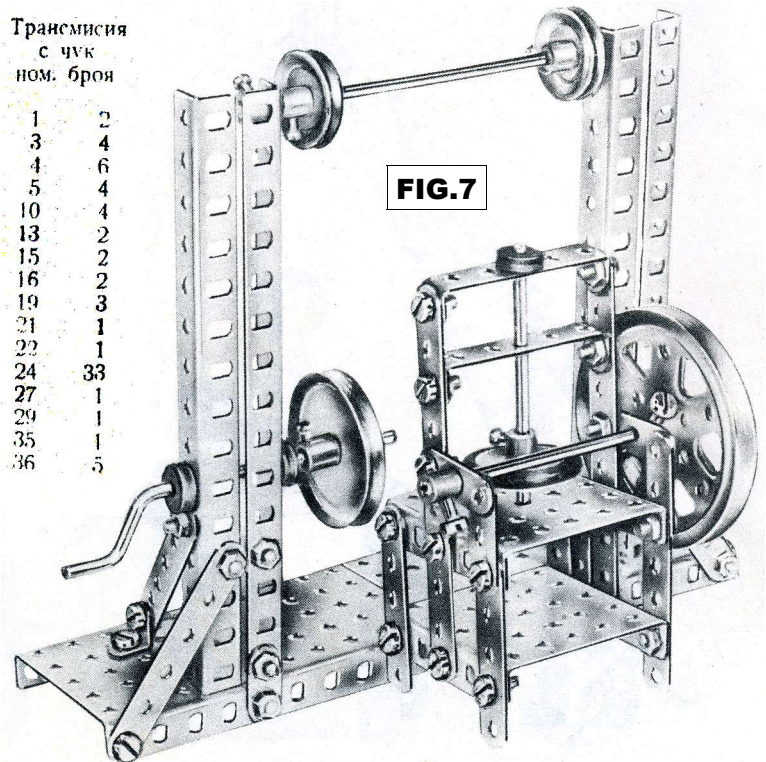


FIG.7

one as 'DSO Youth Factory Vasil Petleshkov Bratsigovo'. The Fig.8 figure is in the MLADOST & RODOPI material; the ELEK KON has no logo at all. What was the sequence of the various logos? It's hard to fathom and nothing credible comes to mind.

There is no mention of any other set in the manual.

**Using the Parts** Apart from the poor fit of the Axles in the bosses two other difficulties were found. One was the thickness of the Nuts which often made it impossible to have them both on the inside faces of the A/B. The other problem was that there were very small variations in the hole pitch of some of the longer Strips and the clearance of the Bolts in the holes was not sufficient to accommodate this.



**Two Smaller MUSALA SETS** Up to the present all the known MUSALA sets have been No.4's, but now Urs Flammer has kindly sent photos & details of his two sets, a No.3 and, surprisingly, a No.3A, the first time a linking set has been recorded. They look substantially complete but have no manuals with them.

**The No.3** is shown right. The box is 34\*24\*2cm and the lid is in the same style as the No.4's described in the previous pages. So too the tray for the parts. As before the contents look to closely match the equivalent MERKUR outfit, and the only major parts missing are the 5\*10h Flanged Plate & the Screwdriver. One oddity, the number of Axles. The expected 120mm is in a recess to the right of the long Strips; in addition there should be 1x 30mm & 2x 70mm but there are many more of them in the Flanged Plate recess. Finally on the parts, the most noticeable difference from the No.4's is the colour of the 5\*5h Flanged Plate & the Flat Trunnion.

**The No.3A** The box is 36\*27\*2cm and the lid is shown right. The words at the top translate as: 'Metal Construction Set'; 'You Build It'; & 'State Economic Association' (as on one of the No.4 manuals). The words bottom right mean 'Factory Popem Bratsigovo'. So the same town as before and Popem was said in MCS to be the name of RODOPI's manufacturer. It was speculated in 26/751 that it might be the name of V. Petleshkov's company.

The parts are again in a moulded plastic tray and again match the corresponding MERKUR set in content. Two differences from the No.4's stand out: all the metal parts are nickelled (the 14mm Loose Pulley is plastic, but red), and the 62mm Pulley is the MERKUR spoked pattern. This part can be seen in one corner of the box (Fig.4). These differences point to the set being earlier than any of the others and another



FIG.1



FIG.2



FIG.3



FIG.4

pointer is that there are the correct number of 2 Collars in the set (in the square recess in Fig.3). Other smaller points. The Spanner is the type shown in the No.4 manual and fits nicely into the recess in the tray. The Axle Stops in Fig.3 may be faced with black rubber, like some seen in MERKUR sets. Mystery parts are some or all of the Cord (there is none in the MERKUR set) and the 'hook' next to the Collars in Fig.3 – the flat '2-hole' type can be seen in Fig.4.

OSN 44/1355

MUSALA: S3

**A 'New' Bulgarian System** Thanks again to Urs Flammer for the photos below of his No.2 set. The box is 42\*30\*2cm and the logo is as on the MUSALA outfits. The system was obviously MECCANO inspired with the models on the lid copies from Meccano's 1970-77 manual. The hole pitch is 12.7mm, accurate in the Plates but very irregular in the Strips. The thread is M4 & the Axles are 4mm Ø. The only means of identifying the Set are the words on the lid. They mean Metal Construction Set and trans-

literate as KOMPLEKT ZAKONSTRUIRANE OT METAL – so that, at least for the moment, will have to be the system's name. The set contents are probably as Meccano's No.2 & so the main parts missing are a 5\*11h Flanged Plate, a Bush Wheel, 4 Pulleys with Tyres, 2x 5\*3h Plastic Plates, & a Screwdriver. The recess in the tray above the latter probably housed the Axles. The cutouts in the Trunnions are MECCANO pattern, partially hidden below by the Angled type sitting on top of the Flat one.



FIG.1



FIG.2