43

OTHER SYSTEMS NEWSLETTER

OSN 43 OCTOBER 2010

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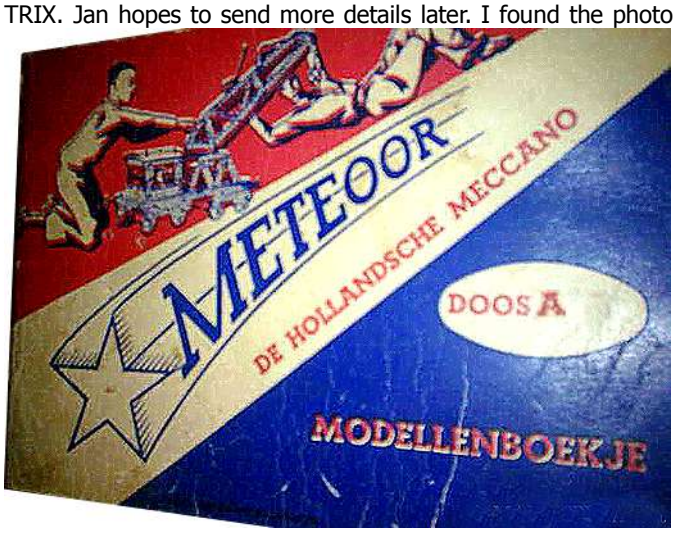
EDITORIAL Nothing particular comes to mind so I will simply take this opportunity to thank all who contribute to OSN. Not all the material received can be used immediately but in the long run virtually everything if of use, and most items prove invaluable.

Shorter NOTES, with thanks to all contributors.

1. **'New' Dutch System, METEOOR** Jan Ringnalda wrote that he has a manual for Set A of this early post-WW2 system and that the parts look similar to TRIX. It was made by 'Hedi' Metaalwarenindustrie, Postbox No. 6019, Rotterdam W. There are 15 different parts in Set A but the highest PN, of the Hook, is 43. The sets were: A, B, C, A1, A2 (= 2x A1), A3 (= 3x A1), and B1, B2, & B3 were promised. The Manual has 58 pages, including 10 unnumbered, with 49 models, many the same as TRIX. Jan hopes to send more details later. I found the photo



of the manual cover below on Marktplaats.

METEOOR: S1 [43/1292]

2. **KIKO & KITOU.** Following the article in 42/1285, Jean-Pierre Guibert sent a copy of remarks on the names and date from Jeannot Buteux et al, Constructorama-France. One Étienne Vial from the Lyon area registered the name KIKONSTRUITOU on 27 June 1947. Obviously it could yield both names and would be pronounced 'Qui construit tout' (= Who built all). However Jeannot continued that sets were often sold well before the name was registered, and also that it was not uncommon for all the elements of a system (parts, manuals, packaging) to have been designed pre-WW2 but because of the war, not to appear on the market until 1946-1948, or even 1948 or 1949.

Jean-Pierre also wrote that he has a KIKO set identical to the one in Fig.2 of OSN 42, and that the pitch of the holes is 12.7mm. In response Jacques Pitrat explained that this is the case for his set too, and that the 12.6mm figure in OSN 42 was a mean value. The pitch for the various parts is 12.5mm for the '5h' long Slotted Strips, 12.65mm for the 7 & 11h Slotted Strips, and 12.7mm for the Strips without slots.

KIKO/KITOU: S3 [43/1292]

3. **Guibert's Encyclopédie.** Readers may recall that a review of the Encyclopédie des Jeux de Construction métalliques by Jean-Pierre Guibert appeared in 37/1108. It was the nearest thing to the now defunct MCS, without as much detail but with the advantage of being in colour and including systems not recorded in MCS. Since then J-P has added many more systems and he recently kindly sent a copy of his latest DVD. The 'cover page' now speaks of over 600 systems against the 300 back in 2007. The main content is divided alphabetically into 16 files and in addition there is an 'Index' rather similar to my Database, and rather easier to sort (by hole pitch, etc), but without the Comments. All in all then J-P is to be congratulated on keeping up the good work. One thing to note though for anyone without WORD, the 16 files are in doc format and though they will open in Open Office the images are displaced to such an extent as to make them unusable – the answer is to download Microsoft's free Word Viewer. The 'Index' is an .xls file and an Excel Viewer is also available but it seems to open satisfactorily using OpenOffice. For more information email jeanpierre1g@aol.com.

Encyclopédie des Jeux de Construction 43/1292

4. **Snippets. More AUTO-CYCLE Junior Sets** 3 Junior sets have been seen on Ebay since the one shown in 35/1045. One has an identical box and the built-up model with it also looks the same, with rounded tips on its slightly tapered wings.

The second set has a label which again looks identical but instead of covering nearly all of the lid, it occupies less than a quarter of its area. Again there was a built-up model with it but it looked like a monoplane version of the 'standard' Biplane in OSN 35, with the tail further back than the other Junior models, and parallel Wings with swept tips (as on all the lid labels). However the Wings differed from the label in not having the chordwise 'ribbing' (always assuming that they were the originals). Going back to the the box: comparing its size with the models it seems that it is comparable to the others and that the label is much smaller.

The third set, with the lid below, is totally different to the others. There were no parts with the box but it is probably safe to assume that they would have been only those needed for the model on the lid. The motorcycle element of it looks rather simpler than known models from the standard sets, with less complicated front forks, and no panel under the top of the frame. The red wheels are new too. The sidecar looks very different to all known varieties: the metal & 'wickerwork' ones in MCS, & the plastic panelled one in 38/1156. Apart from its colour it is much boxier in shape. The box was said to measure 13*25cm and if so it doesn't seem to be the same size as the (very roughly) 20*30cm of the Junior 'Aero' boxes.

AUTO-CYCLE: S7 [43/1292]

5. **MÉCAVION Parts in 1933** Some details of MÉCAVION were given in 40/1199 but with practically no dates, and no complete list of the parts. So an illustrated Parts Price List dated Dec. 1933 now to hand is very welcome, and lists both the 'Classic' & the Baby parts. The maker is as given before and below the details of the parts, rearranged. The Baby parts are the Type 1 in OSN 41, and include the Motor unit (it cost less than the price of a pair of Wings). The Wings etc which were thought to be as the Classic parts have slightly different prices but that might be because of their different finishes. 1933 seems to have been the last year of the Type 1 sets because the 1934 list of sets in MCS that was mentioned in 26/754, has an picture of a Type 2 Baby model with elliptical Wings & a 2-cockpit Fuselage. Oddly the Motor for the Classic sets isn't listed though its Key is.

Nos	Pièce
1 Aile	4.75
1bis -	4.75
2 -	2.50
2bis -	2.50
3 Aileron	2.75
3bis -	2.75
4 Flasque	3.85
5 Cadre	1.20
6 Gouvernail	2.75
7 Flasque	0.70
7bis -	0.70
8 Hélice	1.20
9 Mât	1.35
10 -	1.15
11 Ventre	3.35
12 Dessus AV	3.15
13 - AR	2.80
14 Plan	1.85
15 Aile	4.60
15bis -	4. »
16 Entretoise	0.95
17 Hélice	0.40
18 Mât	1.15
19 Entretoise	0.70
19bis -	0.70
20 Flasque	0.70
20bis -	0.70
21 Bâti	1.25
22 Cadre	0.90
23 -	1.20
24 Cabine AV	2.85
25 - AR	2.50
26 Pare-brise	1.15
27 Nez	2.45
28 Flotteur (a)	2.85
29 - (b)	2.90
30 Capot	1.40
31 -	1.80
32 Essieu	0.45
33 Tournevis	1.75
34 Clé	0.45
35 Roue	1.25
35bis - métal	0.40
36 Tige de 36 m/m	0.40
37 - 21 m/m	0.25
38 - 18 m/m	0.20
39 Axe	0.35
40 Béquille	1.80
41 Axe de béquille	0.45
42 Entretoise de moteur	0.35
43 Clé pr moteur	1.80
44 Bande de roue	0.30
Boîte 10 vis	1.35
- 10 écrous	0.85
- 10 boulons	1.95

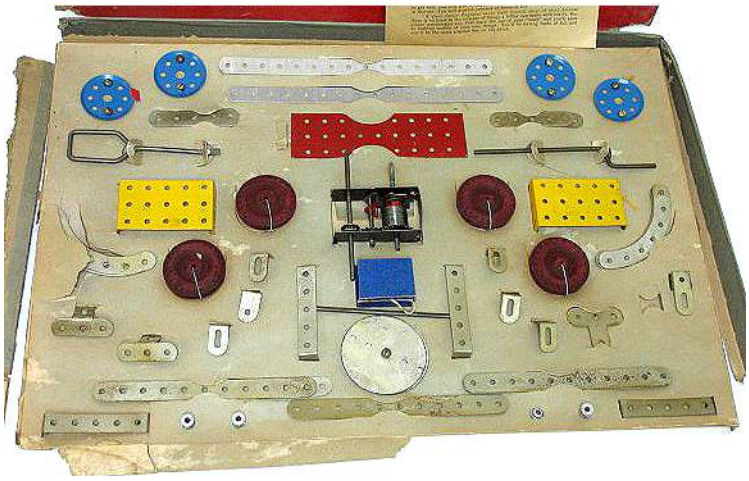
Pièces BABY

Nos	Pièce
100 Aile	2,75
100bis -	2.75
101 Aileron	2.50
101bis -	2.50
102 Gouvernail	2.50
103 Flasque	0.70
103bis -	0.70
104 Fuselage	4.25
105 Cadre	1.20
106 -	0.90
107 Flotteur	4.80
108 Hélice	0.70
109 Plan	1.25
110 Roue	0.45
111 Essieu	0.50
112 Entretoise	0.25
113 Mât	0.90
Moteur Baby	5. »
Assortiment boulons	1.75

MÉCAVION: S6 [43/1293]

6. **Snippet. A JR ENGINEER Special Outfit** An account of the parts & manual from this Set was given in 33/976, and now a boxed set has been seen on Ebay, somewhat the worse for wear but probably complete.

The box is the same size as the one for the '4½' Set and the lid is also the same, see 33/975, except that the bright yellow colour of the name and other details is unfaded.



From the parts that can be seen in the box above, the quantities given in OSN 33 are correct subject to the following. • Only 4 of the 11h Strips can definitely be seen but more could be hidden under them – however only 4 are needed in the manual models. • There are 4 Curved Strips. • As in the OSN 33 parts there is only one Steering Bracket (under the righthand stacked pair of Curved Strips), and though the cutout next to it could take another, only one is needed in the manual models.

Other points. • The Wheels look dark red-brown rather than black. • The white Cord poking out of the small parts box matches that noted in OSN 33.

The front of the manual was shown on Ebay and it is identical to the OSN 33 example except that the bottom of the 'Fun and Education' box, blank before, now has 2 lines printed in it. The first is indecipherable but the second is 'Playthings Inc. So this adds to the suggestion in OSN 33 that the Special was produced after a change of maker (despite the Coledi name still being on the lid – old stock being used up?).

JR ENGINEER S5 [43/1293]

7. **Snippet. An early BENCO Brochure.** It was suggested in 26/772 that BENCO was introduced in 1950 but a 4*A4 page brochure seen on Ebay was said to date from 1949. And that is credible because a model building competition was advertised in it with an end date of Easter 1950.

Only Sets A & B were available, price DM5.50 & 11.90, and they had 129 & 282 parts. That compares with the 131 & 282 in later sets (ignoring the Paper Clips in the latter – there is no mention of them in the brochure). 26 parts were advertised in the brochure and though many of their names can't be seen clearly, they are almost certainly all but 2 of the 28 different parts included in Set B later. All the main parts of the later Set B can be seen in the sets & models shown in the brochure, but there is no sign of the small Tyre #32, so that may be one of the 'missing' ones.

BENCO: S1 [43/1293]

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OSN – Your Credit Balance:

was £ after OSN 42

was £ after your remittance of £

is £ after this Issue

Please send at least £ if you wish to receive the next Issue.

8. **Another Russian CONSTRUCTOR Set** Urs Flammer wrote that he has a set with the same packaging as the one described in 41/1251 but that its parts & manual show marked differences. He bought it in Yalta in 1999 and it was made by the Kharkov Bearing Factory, Kharkov, Ukraine.

The chief difference in the parts is that the main ones are a mix of steel & aluminium, with for example the 5*5h Flanged Plate in steel but the 3*3h in aluminium. Minor differences include large holes in the A/B.

The manual is poorly printed in B&W on poor quality paper and has 24 pages plus covers. It has the same cover as the one shown in Fig.8 of 41/1253 except that it is in B&W. It is almost certain that the contents are the same too, with 20 models from МОТОЦИКЛ (Motorcycle) to КАТЕР (the Ship in Fig.9 in OSN 41), and the same Illustrated Parts/Set Contents page.

Anomalies in the Set are that 31 models are still claimed on the box but the contents as given in the Manual are for a smaller set based on the same parts (the same contents as the black plastic box set in 41/1253).

For reference these Contents are as follows (a '?' indicates difficulty in reading the original), and apart from the quantities of N&B they are the same as those given for the smaller set in the KONSTRUKTOR [3] manual described in 22/648 (many of the models are the same too – it will be recalled from OSN 41 that CONSTRUCTOR is thought to have followed KONSTRUKTOR [3]). **Strips**: 8,4,4,6,8,8,5,5?,4 of 18,14,10,9, 7,5,4,3,2h. **DAS**: 12,2,2 of 1*5*1, 1*2*1, 2*3*2h. **Brackets**: 10 A/B; 3 of 2h high D/B; 1 Reversed A/B; 2 Double Bent Strip; 2 of 2*2h Corner Bracket. **A/Gs**: 4,4,2 of 18,9,5h. **Trunnion**: 2. **Flanged Plates**: 4,2 of 5*5, 3*3h. **Perf. Plates**: 2,2,4,4 of 2*18, 2*8, 3*9, 3*5h. **Pulleys**: 5? with boss; 1 small, no boss. **Tyre**: 4. **Pulley Disc**: 4. **Disc**, 5h Ø: 2. **Collar**: 4. **Axles**: 2,2 of 75,110mm. **Crank Handle**: 1. **Screwed Rods**: 3,1,2 of 30,60,75mm. **Hook**: 1. **Cord**: 2m. **Paper Clip**: 13?. **Bolt**, M4: 70? **Nut**: 80. **Set Screw**, M3: ? **Tools**: 1 each, Screwdriver & Spanner.

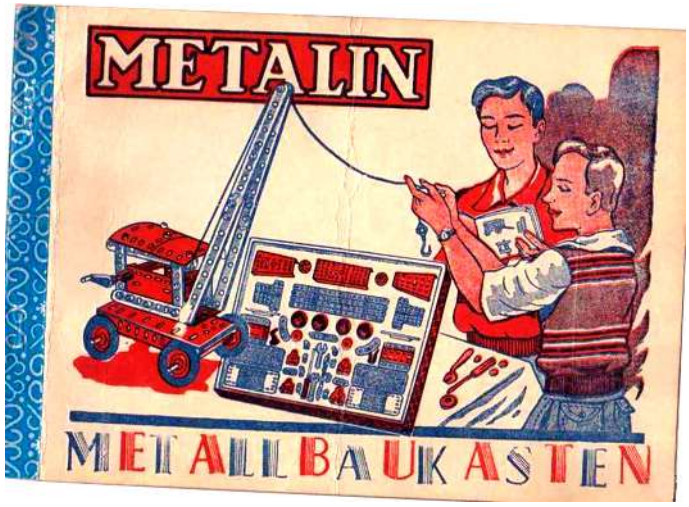
The OSN 41 outfit was bought from the German Ebay and so could have been an export version of Urs' somewhat 'mixed-up' example. Perhaps the steel parts were old stock from an earlier product and likewise the manual. The OSN 41 set is really a rather smart, well produced article, but it cost rather more than the 4 dollars Urs paid for his set in Yalta.

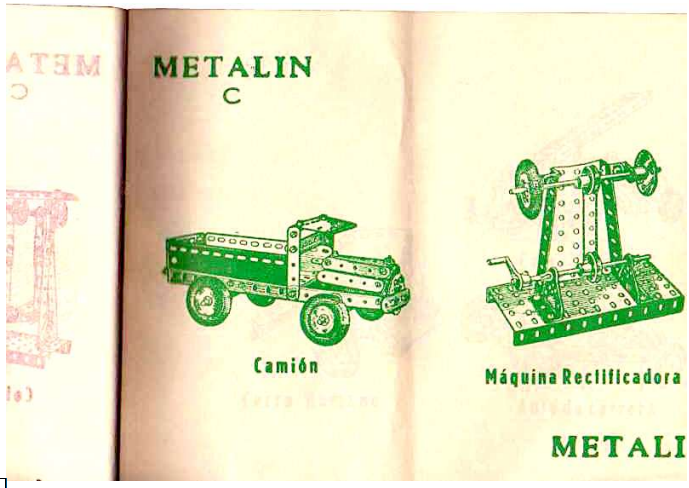
CONSTRUCTOR [5] S4 [43/1294]

9. '**POLYLONG' Grows Up a Little** The Bremen firm Happy People continues to list a variety of small sets to make typical small 'Polylong' models (see 37/1123) but now also includes sets for the slightly more ambitious models shown here. The 1/20-scale R/C SUV is made from 151 parts and has the usual steering & forward/reverse functions. The Crane set has 454 parts with hoisting by a 3v (2x AA batteries) Motor. It has manual slewing but no luffing. It's good to see the Curved Strips in the base but no sign of the 'Polylong' range including A/Gs or long Strips.

POLYLONG S16 [43/1294]

10. **Snippet. 'New' System: METALIN** All that is known of this system are the Ebay photos below of the manual. It was said to have 24 pages, 26.5*19cm. The 'C' under METALIN on the model page might be the set size. The METALLBAUKASTEN on the cover suggests that it is German but the model names are in Spanish and the item was being sold from Chile. Despite the Spanish names the models do have a German connection because the illustrations are identical to those in a 1952 MÄRKLIN manual (the Lorry was also in 1949 edition but as a mirror image). Not all the parts in the box look like MÄRKLIN, the 4h wide Flanged Plate for instance, but that could be artistic licence.





4 possibilities to explain the above come to mind. The system was: • an export version of an as yet unknown German system with models copied from MÄRKLIN, and to keep costs down the manual cover was left unchanged. • an entirely local product, again with copied MÄRKLIN models, and parts with (hopefully) enough resemblance to MÄRKLIN to make the models credible. Why METALLBAUKASTEN on the cover? Perhaps to add an aura of German quality to the product. • a local MÄRKLIN copy sold under licence from Märklin – unlikely but import restrictions, if there were any, could be a factor. • a Märklin export product, but most unlikely given the generally poor presentation, including the manual models without the Parts List in the German manual.

METALIN: S1 [43/1294]

11. **Snippet. Another ARWILL Set** This example looks virtually identical to the outfit described in 41/1230 except for the colours of the parts. Those that were black are now blue (including the Spanner) except that the black Screwdriver is red. The Bolts are as 29/856 and the Nuts are hexagonal with a dull finish. The only other differences are that the box lid is red, and the backing card is fawn with no printing on it. The models are in the same Leaflet as in the OSN 41 outfit. So that's the third ARWILL colour scheme – the red/green parts were shown in OSN 29.

ARWILL S4 [43/1294]

Snippet. The German MEKANIK-Zusatzkasten Z

There was speculation in 17/476 as to whether this add-on Gears outfit, Z, from the mid-1950s, with its unique square-bore sliding Pinion, was ever actually produced. The answer is yes: since the advent of Ebay 4 examples have been spotted, all largely complete.

The MEKANIK manuals to hand show the parts in the standard sets, and separately, the additional gear parts which, as will be seen, made up most of the Z outfit. But before going on to the details it is worth noting the Gears which were included in the standard sets, and they are shown below. Parts

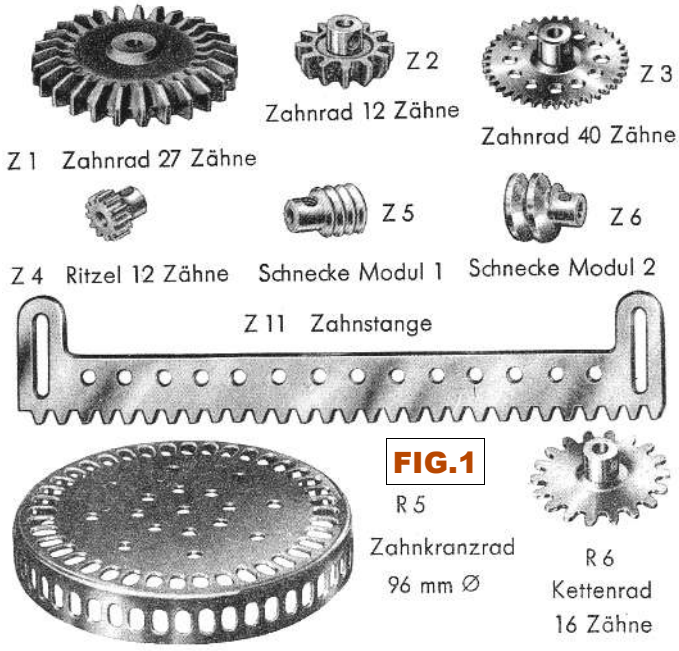


FIG.1

Z3, Z4, & Z5 are Mod. 1; all the others are Mod. 2 and the Sprocket R6 can be used with them, including meshing with the 48 slots in the flange, or the 40 in outer ring of the face of the Flanged Plate R5. Gears Z1 & Z2 are plastic with a boss moulded in, and one face is bevelled so that they can run together at right angles. The plastic is usually green but in some of the earlier sets (when the system was called MECANIC) they are yellow, or a light grey/fawn. All the other parts except the brass Pinion Z4, are steel, and all are nickelled apart from R5 (painted) & Z6 (plain steel). Bosses are nickelled steel, 10mm Ø (9mm for the Pinion) and double-tapped M4 (the same thread as the N&B). Z1, Z3, Z4, & R6 are 58.3, 41.8, 13.9, & 40.0mm Ø respectively.

Fig.2 is the Set's lid, typical of MEKANIK; Fig.3 the Z Set as shown in a leaflet, and Fig.4 an actual example (with one incorrect part in it, see later).

Before discussing the 'gear' parts, notice the 'K' parts in Fig.5. In the Ebay set they are the red plastic parts, 5 Dredger Bucket & 3 Rollers, plus the folded length of dark grey Conveyor Belting. As far as I know these parts were never referred to in the manuals but were included in an illustrated spare parts price list to hand. Each end of the Rollers has a spigot and it is longer at one end of one Roller to carry a driving part. In one of the Sets the Rollers are bright metal. The colour of the Belting varies, with dark blue in one set and dark green in another.

The 'gear' parts are shown in Fig.6, with one of each in the Set except possibly more of each Corner Plate, though the photos seem to show only one. Taking into account the standard Gear Z3 there are 3 of each size of Gear Wheel, one with the normal boss, one with no boss but an integral 12t pinion, and one with both pinion & boss. Other parts are for use with the innovative square-bore, sliding 12t Pinion Z18: 2 lengths of Shaft for it to slide on, and a Bracket X13 to move it along the Shaft. The new Sprockets are R8 & R9 and complement the standard R6. Finally a small transparent packet containing some N&B, and perhaps other small parts. The 'error' in Fig.6 is that another 12t Pinion has replaced one

FIG.2

FIG.3

FIG.4

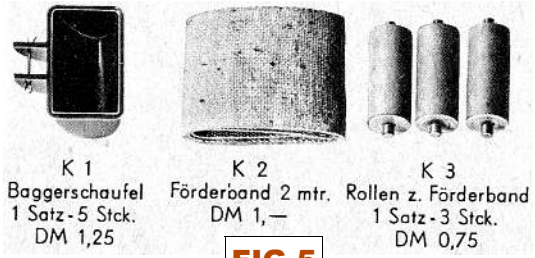


FIG.5

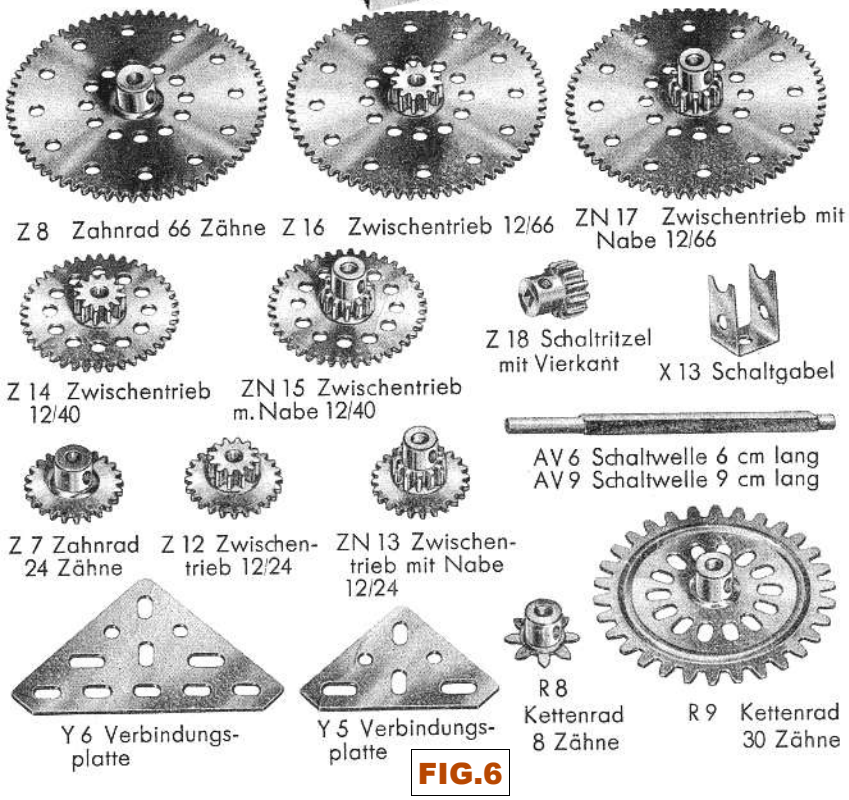


FIG.6

of the 24t Gears – unless of course the Set's inventory was changed at some stage (there are all three of the 24t's in the other Ebay sets).

The only literature with the Ebay sets was a single sheet with one of them. The one side that was shown is identical to a sheet to hand and has the photo of the open set (Fig.3) and lid (as Fig.2 but without the yellow 'Z' circle), together with 2 models to show the use of the Fig.5 parts. One, right, is a simple hand driven Conveyor Belt using the 3 Rollers in the Set. There is no indication of how the Belting is to be joined. The second model (Fig.10) uses 10 of the Buckets and is driven by the MEKANIK 5-speed, 6 volt Geared Motor. Neither model uses any of the Z parts. Both, and the other models on this page, are two-thirds their original size.

On the back of the Sheet are the models in Figs.8 & 9, without title or explanation. Presumably they are meant to demonstrate the use of the parts, but if so they hardly seem to exploit their full possibilities, using the Combination Gears in a useful Gearbox for example. One feature shown are right-angle drives with the smallest Sprocket, R8, meshing with the 12h ring of holes in the 40 & 66t Gears, and in the 14 slotted holes in the 30t Sprocket. Incidentally, no less than 5 each of the 8t Sprockets & 40t Gears are used in the Fig.10 model, which meant buying 4 extra of the Sprockets, and, unless one had the largest standard outfit (Nr.24), 2 extra 40t Gears. Given this it seems unlikely that the Sheet was intended as a model leaflet, and so it may have been a flyer. In that case some models needing only the parts in the Z plus those in a medium size standard set would have been well worthwhile.

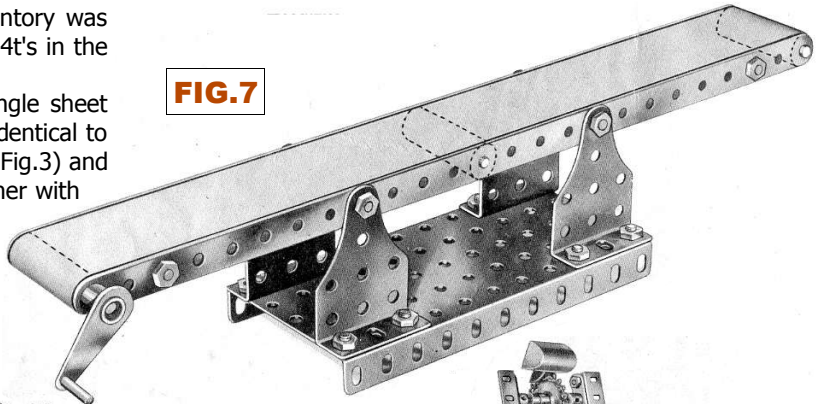


FIG.7

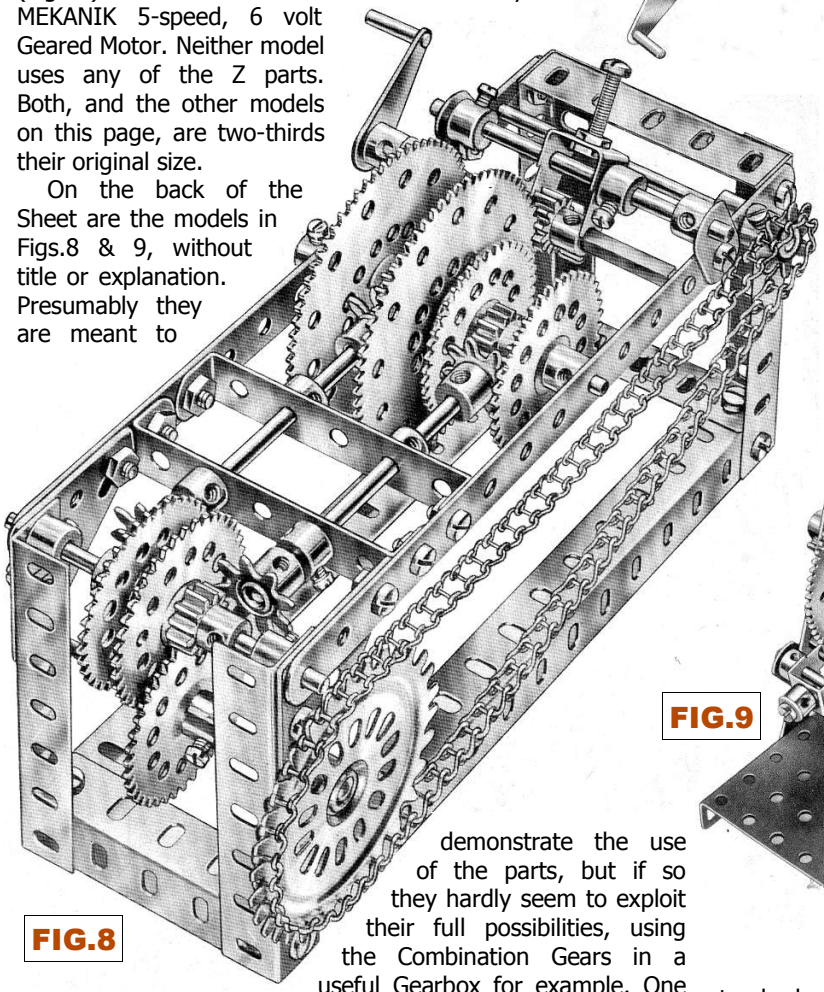


FIG.8

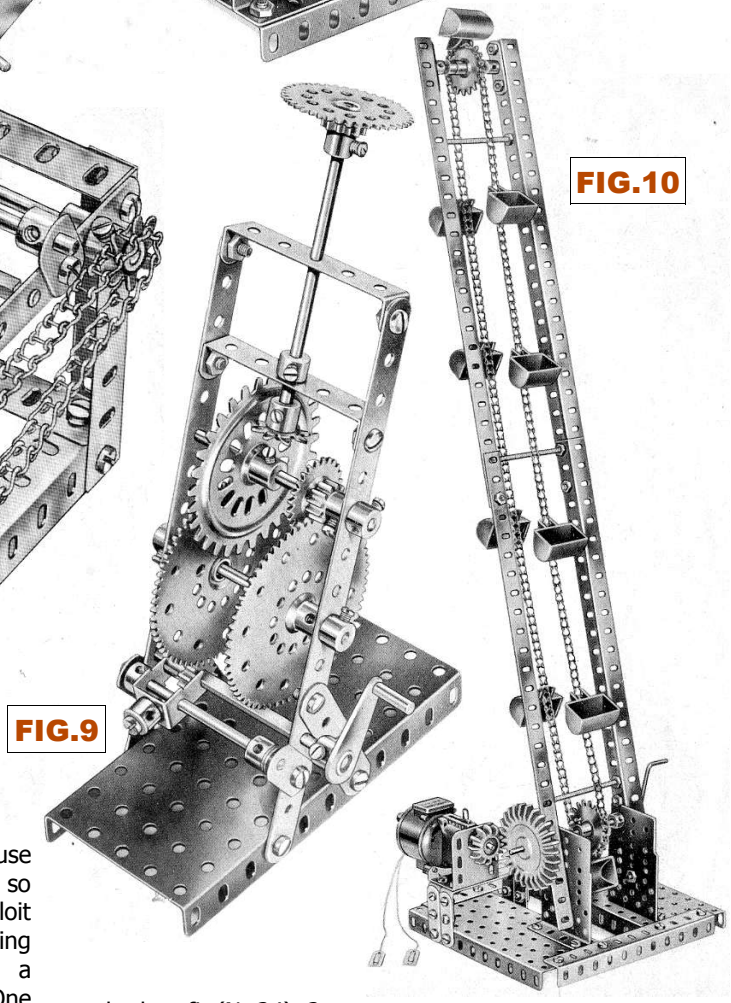


FIG.10

FIG.9

MEKANIK [1]: S2 **OSN 43/1296**

Snippet. STABILUS The model from the only set then available in this small German system (which uses Eitech/Polylong type parts) was shown in 32/941. Since then the range has increased to 8 sets and they can be seen on the same site as before: www.Blechspielzeug laden.de. They are priced at between €1.50 (for a Tool Set containing a red-handled Screwdriver and a Spanner with a moulded plastic nut carrier around the ring end) and €15 (for the 143 part Xmas Tree in OSN 32), but most sets cost €5 and have 28–57 parts. One of them makes the Rocking Horse right but each of the others is a fair example of an aero or vehicle 'simpicity' model.

The Xmas Tree set is packed in a cardboard box; the Rocking Horse in a 'PE Beutel' (polyethylene bag?); the others in a tin, 9.5* 6*2cm, as in the Ebay photo below. Unfortunately the top of the lid isn't shown anywhere.

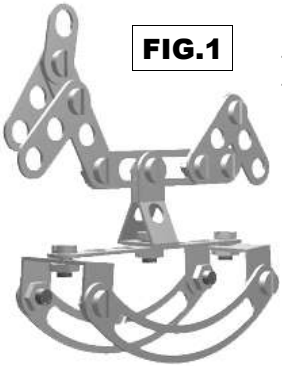


FIG.1

FIG.2

STABILUS: S1 **OSN 43/1296**

'New' System: PHILOPTIC Jean-Pierre Guibert kindly sent notes on this French optical system, which probably dates from the 1950s into the early 1960s.

FIG.1

It was made by Gold-Lebey (Goldstein & Lebey) of Levallois (in the northern outskirts of Paris), a firm with interests in photographic, radio, & electrical measuring equipment. The sets were B, C, D, & E, with linking sets BA, CA, & DA. Set E was packed in 2 wooden boxes (as right with the nameplate in Fig.1) with the trays from Set BA & B in one (Fig.4), and CA & DA in the other (Fig.5).


FIG.2

Some idea of the system's 60 parts (12 of which glass: lenses etc) can be gained from the Illustrated Parts in Figs.6 & 7. Their finish is either black or plain aluminium.

Their were 2 booklets (right) about A5 in size: a Manuel with the building instructions, and an Album with illustrations to be used with the instructions.

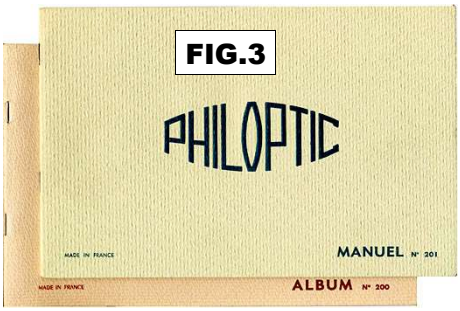


FIG.3

The Manuel has 40 pages and there were 4 editions, Nos.201-4, in French, English, German, & Spanish. A list of contents is given on p40, as follows:

p1, AVANT-PROPOS.

p2, Chap.I, COMPOSITION DE PHILOPTIC: • p6, Nomenclature des pièces détachées; • p8, Nomenclature des pièces diverses; • p9, Tableau des montages et instruments.

p10, Chap.II, ELEMENTS OPTIQUE, Album Figs.1-19.

p20, Chap.III, PRESCRIPTIONS GENERALES DE MONTAGE.

p23, Chap.IV, MONTAGES ELEMENTAIRES: • p24, Lenses, Album Figs.20-24; • p25, Prisms, Album Figs. 25 & 26.

p26, Chap.V, PHILOTIC INSTRUMENTS: • 1st Group, p28, Loupes, Album Figs.27-29; • 2nd Group, p29, Lunettes astronomiques, Album Figs.30-34; • 3rd Group, p31, Lunettes de Galilée, Album Figs.35-36; • 4th Group, p31, Lunettes à prismes, Album Figs.37-39; • 5th Group, p32, Lunettes à véhicules, Album Figs. 40-44; • 6th Group, p33, Téléloupes, Album Figs. 45-51; • 7th Group, p34, Microscopes, Album Figs.52-55; • 8th Group, p37, Périscopes et rétroviseurs, Album Figs.56-64.

The Album, No.200, has 72 unnumbered pages with 6 pages devoted to explanat-ions of the paths of light rays through lenses etc. The text is given in each of the 4 languages and there is a parts list for each model. The illustration of the Lunettes à Prismes below has been rearranged and the parts list omitted. The balloons show the part numbers (the 'M' numbers relate to the Chap.III Basic Assemblies). Similarly the Microscope on the next page but in this case the light rays from the Object focused to create the Image are also shown.

Jean-Pierre remarked that PHIL-OPTIC, a system for the construction and study of optics, is more 'serious' than Kosmos' OPTICUS & PHOTOMAN, and could bear comparison with CONSTRUMENTS. But he added that it is perhaps less 'fun', and more suited to educational use, though it might be appreciated by a lad fascinated by optics.

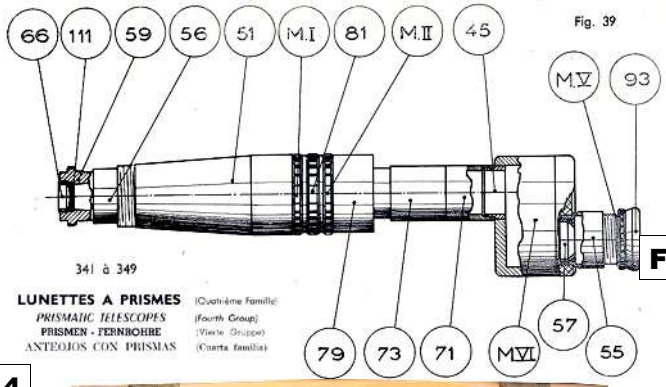


FIG.8


FIG.4

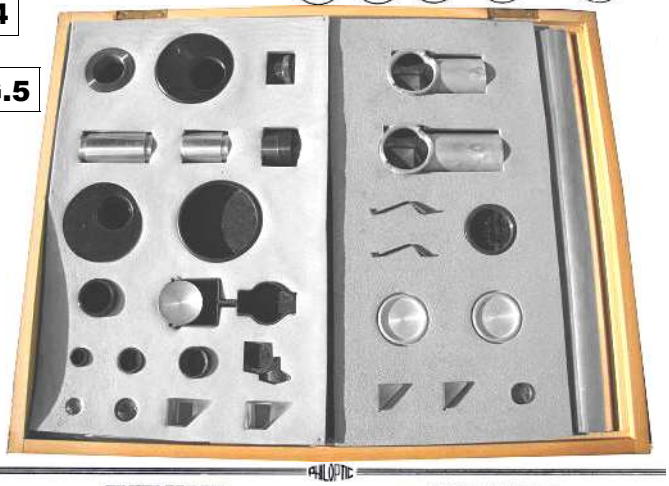


FIG.5

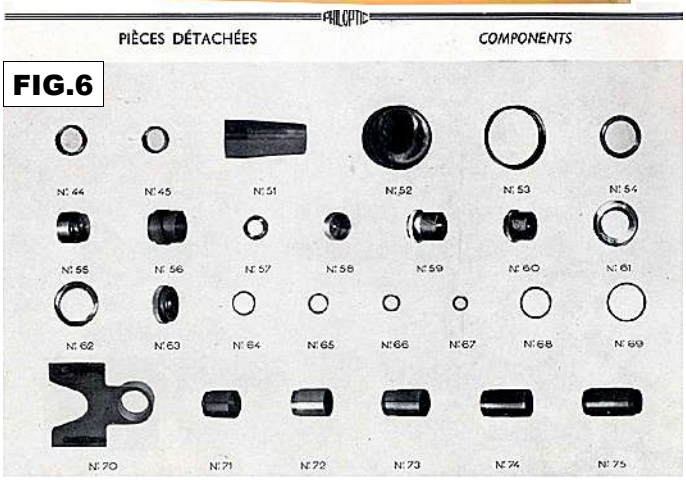


FIG.6

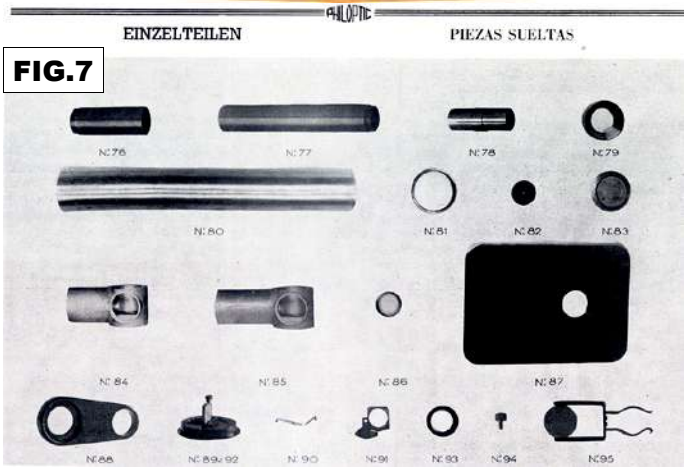


FIG.7

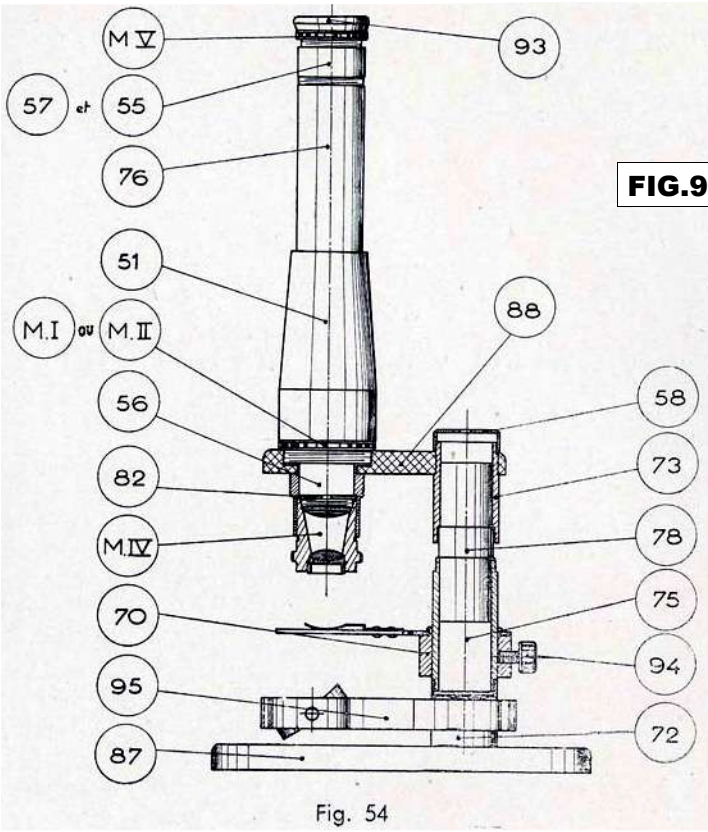


Fig. 54

FIG.9

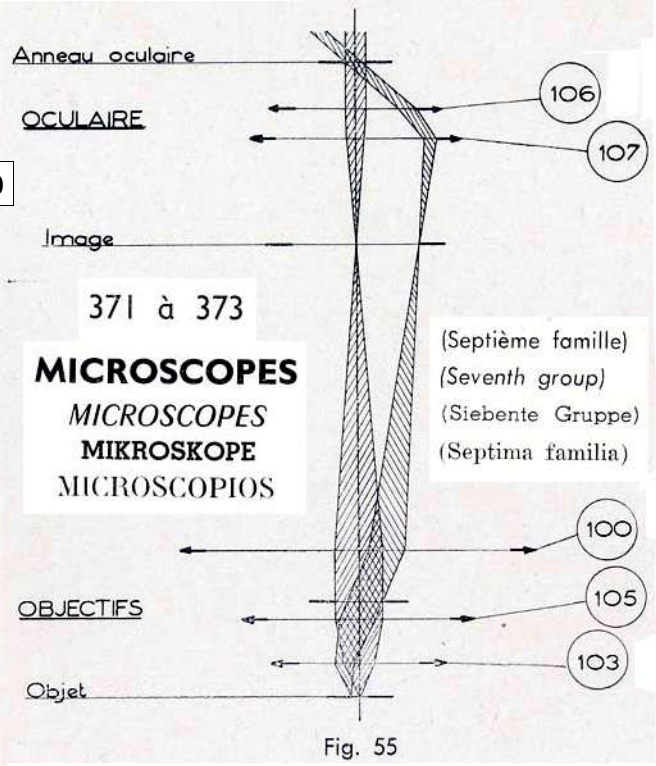


Fig. 55

Looking through a CONSTRUMENTS manual one can see the 'fun' element with a wider range of instruments, often with practical applications, but there is little or nothing by way of theoretical explanations.

PHILOPTIC: S2 **OSN 43/1298**

Snippet. 'New' System:
Der KINDER-KONSTRUKTEUR Metallbaukasten

'Kinder' of course means Children. Right, the Ebay photos of the set. The words along the bottom of the lid are '3 HAHNEMANN SCHMALKALDEN 102' & 'C1-lll-684'. Hahnemann was said to be the maker and Schmalkalden is a town 50km SW of Erfurt in what was East Germany. But there is no positive indication that the set came from the DDR era although the Cyrillics on the matchbox could be a pointer.

The different parts listed for the models on the lid are as follows: 4,6,7,8,10,14h Strips; 5*1, 4*1, 3*2h DAS; Brackets (Verbinungswinkel – a 2&2h A/B can be seen and Flat Brackets seem to be needed); 5*10h Flanged Plate; Pulley; 5h Ø Disc; Bolts, Long & Short; and Nut. 8, 20 of the Bolts, and 47 Nuts are needed for the Crane. Also 4 of the Flanged Plates. No Axles or Screwed Rods are used, the Pulleys run on the Long Bolts, 2 such are used for the handlebars, and the winding drum is a DAS (or perhaps two) with Bolts in their lugs journalled in the side Plates.

The parts in the box don't altogether match those in the models, the Flanged Plate has a centre cutout and is 11h long; and the Disc has more holes. And even after discounting the oversize Axles and the bossed Pulleys, the scope of the parts in the box (the Gears, the 3 types of Flanged Plate plus the 3*7h Perforated and 3*5h Triangular Plates from their centres, the Bearing Strip (2h long M212a – one can be seen bolted to a 5h Ø Disc) seems out of keeping with the one's expectations from the lid.

So, if the parts were not to be KINDER what system are they? They look to be aluminium but apart from that they might at a glance be STABIL. On closer inspection though there are, quite apart from the Gear, other small differences: the Bearing Strip is necked between the bearing and the hole next to it, and the bottom row of 3 holes in the Triangular Plate are elongated. These differences can't be seen in any of the STABIL-like systems that I'm aware of and so if the parts are not KINDER there may be another system waiting to be discovered – Russian perhaps in view of the matchbox. And one other thing, the box was said to measure 22.5*15.5* 1.5cm and by scaling that gives the hole pitch as only about 8mm. The figure as calculated was 7.8mm, which would match TRIX, but that would be stretching even my credulity.

KINDER-KONSTRUKTEUR: S1 **OSN 43/1298**

The DUX Eisenbahn Outfits

Although the examples given in Hornby's original patent were largely railway items they were not subsequently pursued in any systematic way. later a few other makers ventured to tackle the subject but in the main they were less than comprehensive, and most did not last for very long. The first was STABIL in about 1912 with sets to make Gauge 1 size Goods Wagons (see 23/676) but these were discontinued during WW1. PRIMUS in about 1914 made a better showing with standard sets from which Gauge 1 Stations, Coaches, Wagons, etc could be made (see 23/676) – and post WW1 there was even a PRIMUS C/W Loco (5/100) though it wasn't perhaps their finest innovation. The next foray was METALCRAFT's theme sets in the 1930s for a range of 12 Goods Wagons for Gauge 0 (23/677, 24/691 & 31/908), but no coaches, no loco, and no buildings. Nothing then until after WW2 with KÖSTER and DUX sets for models to be used with Gauge 0 track. By this time there were electric motors small enough to make a powered Gauge 0 Loco possible but sadly by that time Gauge H0 was rapidly becoming the most popular standard. Köster showed 3 sets at a fair in 1948 with No.80 for Goods Wagons and an unpowered Loco (23/678). The other sets may have been No.81, said to be for Signals, Bridges, Stations etc, and No.82, said to include an electric motor to power the Loco, but it is unclear if either of these sets was produced commercially.

Finally 3 DUX Railway Building Sets, Nos.120, 121 and 122z. They were mentioned in 20/561 but now Urs Flammer has kindly sent scans of the pages from a manual which covers all the sets, and photos of two of his models. Sets 120 & 121 can be used on their own to make a Loco and a Coach respectively, but 121z needs parts from the (smallest) standard set, No.101 to make either a slightly different Coach, or a Goods Van. No precise dates are known for these sets but, from the Manual's PR, they may have been as late as the early 1960s.

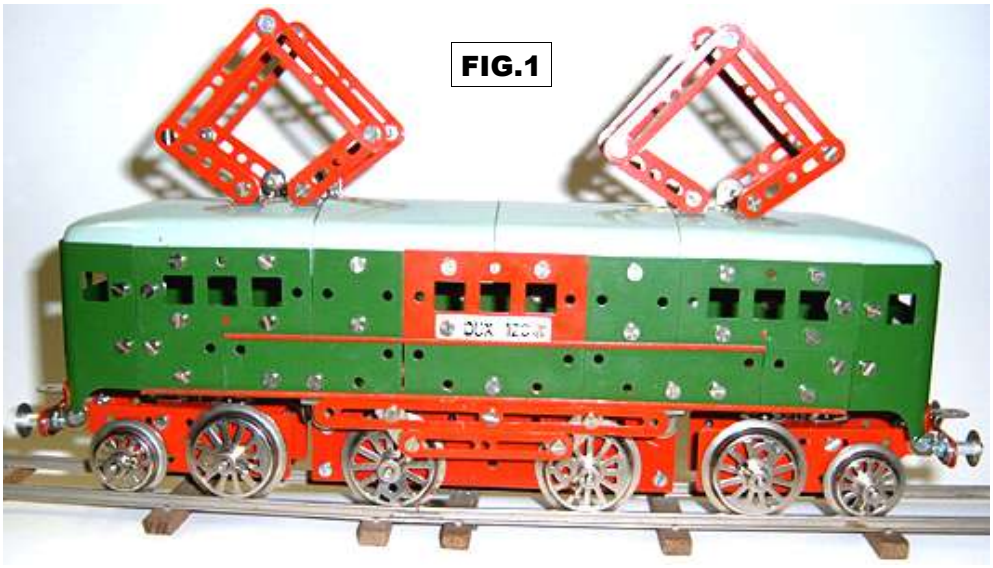


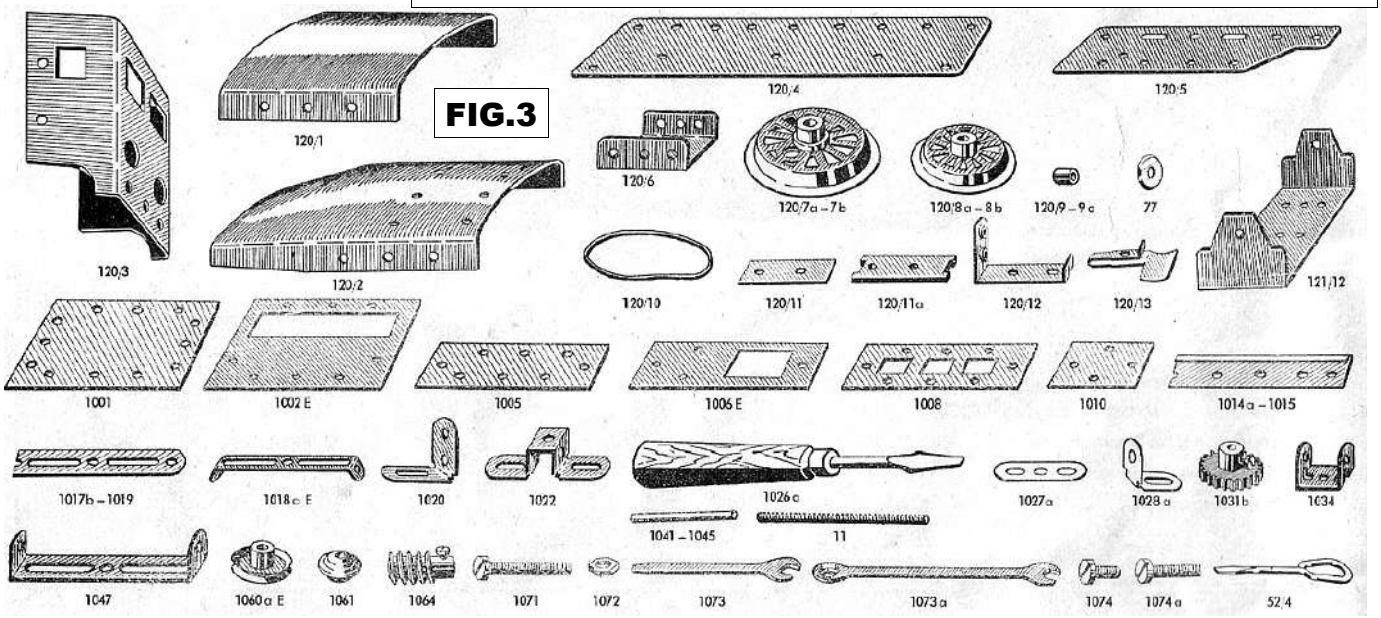
FIG.1

The manual, in B&W, has 8 sides including the cover (Fig.4). All the text is in German, French, Spanish, Portuguese, & English. p2 has a short introduction, including a recommendation that the Loco be powered by the DUX No.54 Motor using

FIG.2

No.	120	121	122z		No.	120	121	122z	
120/1	2	4	4	roof sheet	1014 b	2	–	–	beam 180 mm
120/2	2	–	–	roof closing sheet	1015	–	–	4	beam 120 mm
120/3	2	–	–	face sheet	1017 b	2	–	–	stay 120 mm
120/4	2	–	–	carriage plate	1018	14	2	–	stay 60 mm
120/5	4	–	–	plate for turning trestle	1018 a E	2	–	–	stay 60 mm bent
120/6	4	–	–	angular traverse	1019	8	4	–	stay 40 mm
120/7a	4	–	–	driving wheel, insulated	1020	4	–	–	connection angle iron
120/7b	4	–	–	driving wheel, uninsulated	1022	2	–	–	bearing stand
120/8a	2	2	2	normal wheel, insulated	1026 a	1	1	–	screw driver
120/8b	2	2	2	normal wheel, uninsulated	1027 a	16	2	–	fish plate
120,9	6	–	–	separating roll	1028 a	20	32	–	angle iron
120/9a	6	–	–	separating roll	1031 b	2	–	–	spur gear 22 teeth
120/10	1	–	–	rubber-band for drive	1034	2	–	–	channel iron
120/11	1	–	–	counter-isolation for brush contact	1041 b	6	2	2	smooth shaft 60 mm
120/11a	1	–	–	isolation for brush contact	1045	1	–	–	smooth shaft 145 mm
120/12	1	–	–	angular support for brush contact	1047	4	–	–	big angle iron
120/13	1	–	–	contact spring	1060 a E	1	–	–	sheave 19 mm
121/12	–	2	2	support for bearing the axle	1061	2	–	–	setting ring
11	2	–	–	thread pin	1064	2	–	–	worm
77	4	4	4	buffer disc	1071	2	–	–	screw 23 mm
1001	–	4	–	square plate 60 x 60 mm	1072	165	100	–	hexagonal nut 5 mm
1002 E	–	4	4	square window 60 x 60 mm	1073	1	1	–	wrench
1005	6	2	–	rectangular plate 60 x 30 mm	1073 a	1	1	–	wrench with nut lead
1006 E	–	6	4	rectangular window 60 x 30 mm	1074	155	80	–	screw 5 mm
1008	4	2	–	rectangular plate with opening	1074 a	4	6	–	screw 12 mm
1010	12	4	2	square plate 30 x 30 mm	52/4	1	–	–	screw driver
1014 a	4	6	–	beam 240 mm	120/121	1	1	1	Model book

FIG.3



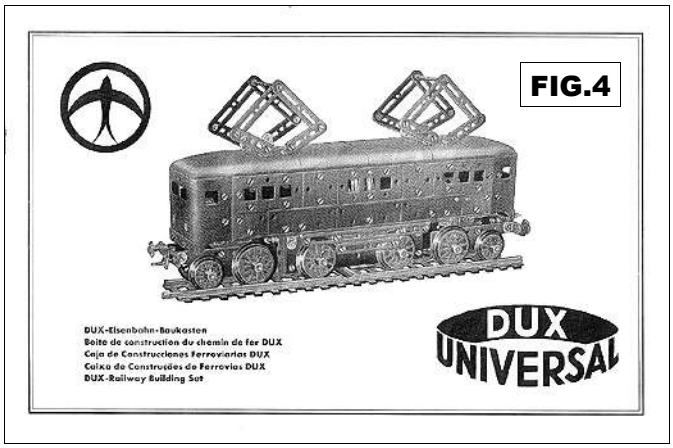


FIG.4

the No.55 Transformer; the Illustrated Parts (Fig.3); and the Set Contents. The latter are shown in Fig.2 with the English names from a list of the parts on p3 added. Of the 54 parts 27 are in the standard or Gear Sets, and a few of the 'specials' are modified standard parts. The Motor & Transformer are not included in the Loco set.

each end, through a slotted hole in the Strip at the Double Bent Strip end.

p6 has a Coach made from Set 121. It is basically the same as Urs' in Fig.7 except for the window panels. The chassis (Fig.6) is made from Plates edged with Strips with A/Bs to allow the side & end Panels to be attached. Each wheel unit is pivoted by a Bolt lock-nutted through its centre hole.

p7 has Urs's Coach made with Sets 101+122z. Apart from the Side Panels it differs from the Set 121 model in the Plates used in the chassis, the Brackets used to attach the Panels, and the way the coupling is mounted. Also on this page an ad for the Transformer – it has a knob on top giving 3 voltages for forward and 3 for reverse

p8 has an ad for the Motor: 20V/12W; the PR: G 1161 W; and the 101+122z Goods Van in Fig.8. Again the chassis differs only in the Plates & Brackets used.

Nothing is said in the manual of the possibility of making other rolling stock, but this would certainly be possible using the parts in the Sets supplemented if necessary by other standard DUX parts.

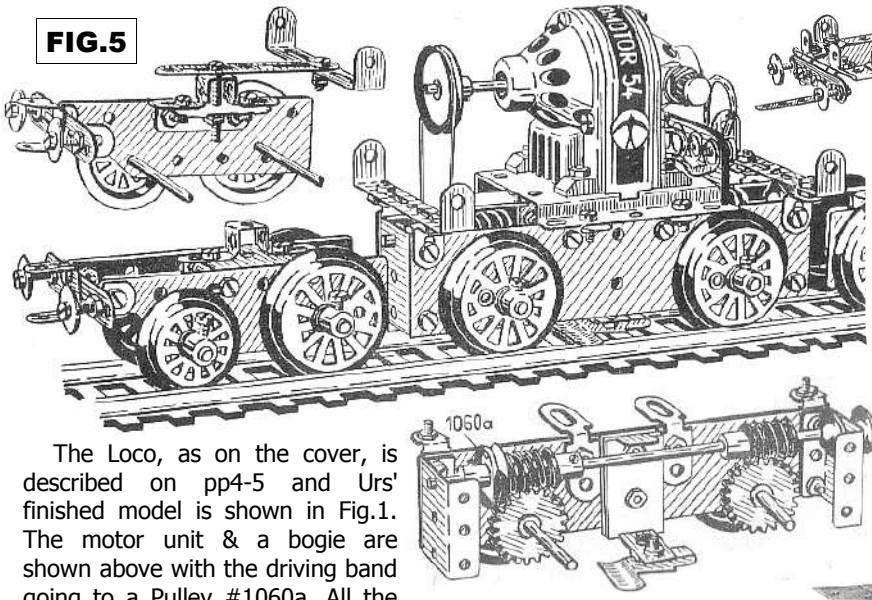


FIG.5

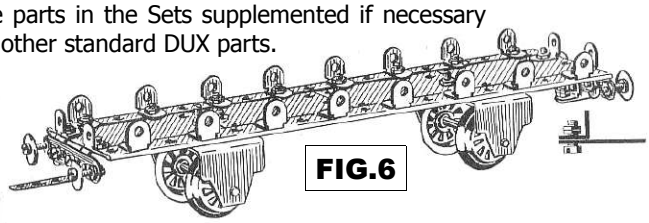


FIG.6


FIG.7

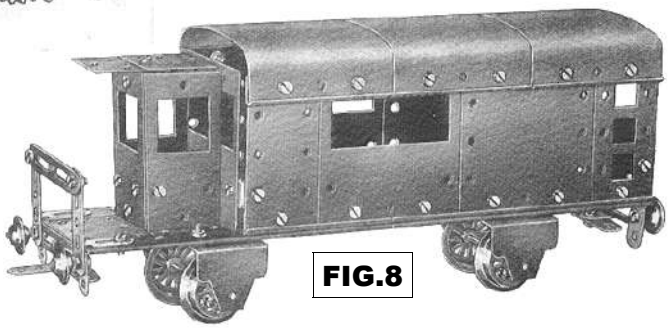


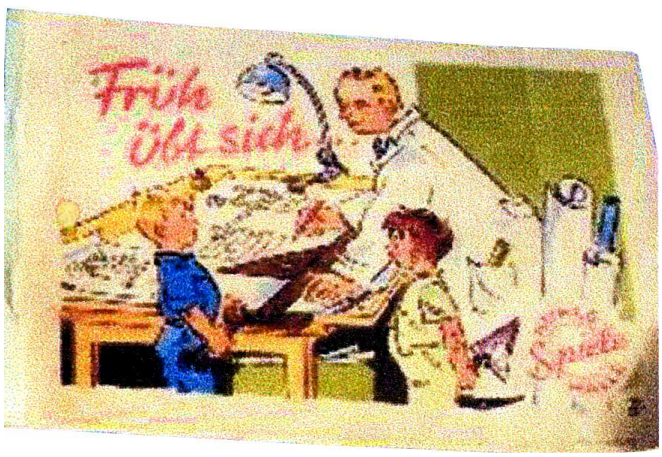
FIG.8

The Loco, as on the cover, is described on pp4-5 and Urs' finished model is shown in Fig.1. The motor unit & a bogie are shown above with the driving band going to a Pulley #1060a. All the Wheels on one side of the Loco have insulated bosses (#120/7a & 120/8a), and the springy pick-up Shoe #120/13 is also insulated using the Strip #120/11a with the Mounting Bracket #120/12. The Shoe can be turned through 180° to contact either an outer or the centre rail of 2- or 3-rail track. The complete body shell is bolted to the two DAS on the motor unit, and the Double Bent Strip on each bogie is linked to the centre hole of another DAS across the bottom of the body shell by a horizontal Strip, as top left in Fig.5. It is lock-nutted at

DUX-UNIVERSAL: S4 **OSN 43/1300**

Snippet. More on METALLBAUKASTEN [6] Yet another Nr.301/302 set (see 39/11663) has been offered on Ebay. It was in the same wooden box with card lid as before, and most of the parts mentioned earlier could be seen except the 5h Ø Disc. They included a 6*8h Perf. Plate (the 6*9h mentioned in OSN 39 was a mistake, it should have read 6*8h). One 'new' part is a 14h Strip. 6 Wheels (or Pulleys) could be seen, 4 which looked identical to those in the 38/1153 set, and 2 which were brown, and a little smaller in diameter.

With the set were the manual right with the same slogan as on the lid, and the Bauvorlagen document that was with the OSN 39 outfit. Both carry the 'Spiele' circular logo: bottom right on the manual cover and bottom left for the Bauvorlagen – its very top can just be seen in the bottom left corner of the OSN 39 photo.



METALLBAUKASTEN [6]: S3 **OSN 43/1300**

'New' System: NSF NSF are the initials of the maker of this post-WW2 Dutch system, Nederlandse Seintoestellen Fabriek (Dutch Signal Equipment Factory) of Hilversum, and Jan Ringnalda kindly sent details of a manual, plus notes on the parts which he obtained from an ex-NSF employee. He also sent photos of a set, courtesy its owner, Charles Spierdijk.

Many of the parts have a MECCANO look to them but with a fair number of variations and originals, plus one or two MÄRKLIN-style Brackets. But the hole pitch is 12.5mm rather than ½", and the thread is M4.

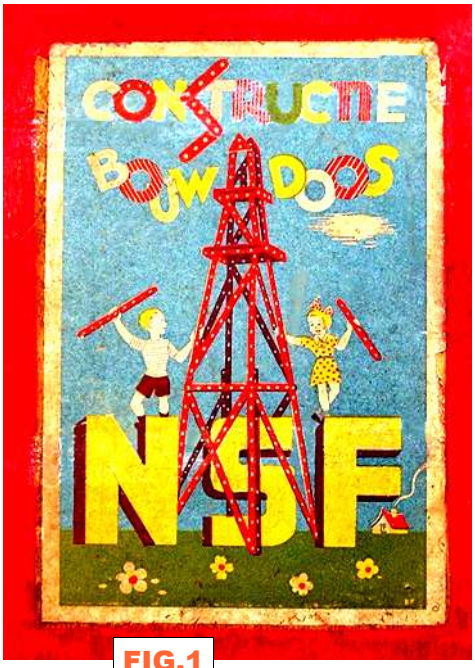


FIG.1

The PARTS Apart from bare metal parts (Wheels, Gears, brassware, etc) all are painted green except for the 5x9 & 5x11h Flanged Plates, and the Flanged Sector Plate in red. Holes are typically 4.8mm Ø. Except as stated Pulleys & Wheels are aluminium with double-tapped (M4) brass bosses, 4.05mm bore. The Gears are Brass.

Fig.2 below is taken from the manual and shows the PNs of most

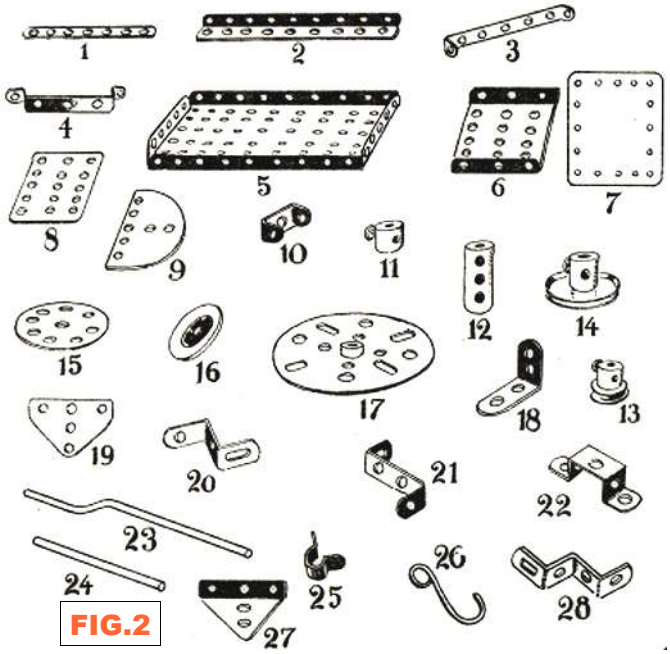


FIG.2

of the types of part – variations in size are usually denoted by a reference to the number of holes after a slash (/), as in the list below (with my names). Daggered parts are shown in Figs.3A-F, 4 & 5, not all exactly to scale, and include some which are differently pierced to those in Fig.2.

The quantities of parts in curly brackets are those specified for the models in the manual. Where a second figure is given it is the number needed for the last 2 models (these, as will appear, were on a loose sheet in the manual and the extra parts could have been added after an upgrade to the set). The quantities of Pulleys are unclear; no Gears are used in any of the models, and no PNs are known for them.

Strips #1/25, 1/19, to 1/3: 25,19,15,11,9,7‡,6,5,4, 3h {6-8,4-8,4, 4-8,4-8,4,8,8,4,4} The 3h‡ is also known in unpainted brass. **Fishplate** #1/2‡ {4}. **A/Gs** #2/25, /9‡, /6 {4-6,4-6,4-6}. **A/B** #2/1‡ {6-10}. **DAS**: #3/3, /5‡, /7, /9, /11 (the holes in the base) {2,2,2,2,2}. **3h Double Bent Strip** #4/5, see Fig.2 {2}. **Flanged Plates**: #5/5x9h‡, /5x11h {1-2,1-2}. **Flanged Plates**: #6/3x5h‡, /5x7h‡ {1,1}. **Flanged Sector Plate** #6/3x9‡ {0-1}. **Girder Bracket** #6/2x3 [sic]‡ (no slotted holes) {0-1}. **Flexible Plates**, aluminium: #7/3x5‡, /3x7, /3x9, /5x5, /5x7, /5x9, /5x11h {2,2,2,2,2,2,2}. They are thin enough to be easily curved. **Perforated Plates**: #8/5x3‡, /5x5, /5x9, /5x11, /5x17h {1,2,1-2,1, 1}. **Semi-circular Plate** #9‡ {1}. **D/B** #10‡ {2}. **Collar** #11‡ {2}. **Coupling** #12‡ {1-2}. **Pulleys, Loose**: #13: 13‡ & 25mm‡ Ø; 24mm Ø, nickelled‡. **Pulleys, Fast**: #13: 16‡, 25‡, & 62mm‡ Ø (the 16mm has an integral boss, and there is also a version made of copper‡). **Wheels** #14: 34‡ & 62mm‡ Ø, no boss {4-6, 0?}; 62mm Ø with boss‡ {4}. The Wheels are thick discs like the Pulleys, but with rounded edges. **Wheel Disc** #15. **Wheel with Rubber Ring** #16 {4}. A whitish Rubber Ring can be seen in the top left compartment of Fig.6; it fits the 25mm Pulley and light brown examples are also known. The black Rings next to the white one in Fig.6 are smaller and they are thought not to be NSF. **Face Plate** with, without‡ boss #17 {1,1}. **A/B**: #18/1, /2: 1x2‡ & 2x2h‡ {2.2}. **Flat Trunnion** #19‡ {4-6}. **Rev.A/B**: #20, 2-hole #21‡ {2,2}. **Double Bent Strip** #22‡ {2-4}. In the manual it is sometimes called #4/3. **Crank Handle** #23 {1}. It has 90° bends and scales at about 11cm o/a. **Axle Rods**, 3.95mm Ø with square ends: #24/2.5, /4, /8, /10, /11.5, /16cm {2, 3,2,1,2,1}. **Spring Clip** #25‡. It is above the 24mm nickel Loose Pulley below, with tiny wings. **Hook** #26 {1}. **Trunnion** #27‡

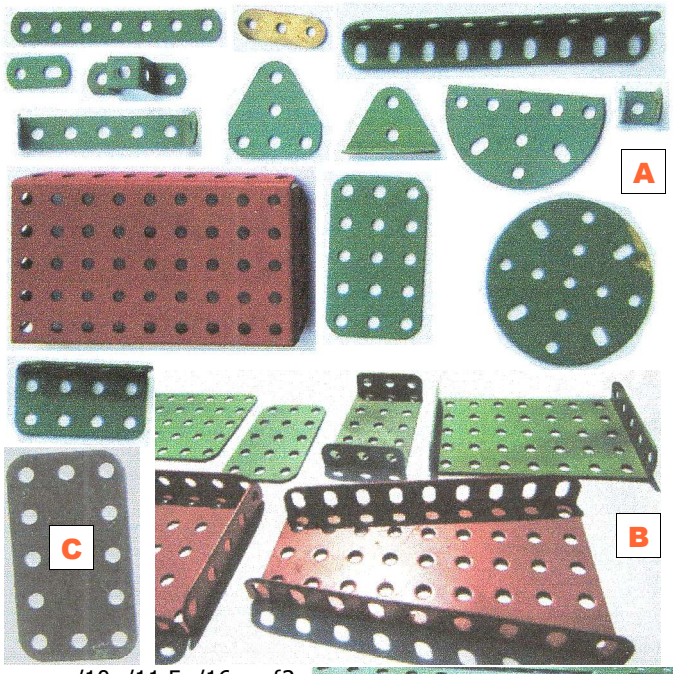


FIG.3

{4-6}. **Double Rev. A/B** #28 {2}. **N&B**, no PNs. The hex Nut & 4 lengths of cheese-headed Bolts can be seen in Fig.3D. **Tools**: Screwdriver‡ and Spanner‡. **Gears**: 50‡, 38‡, & 25t‡. With the 25 & 50t meshing at 2h centres the Mod. would be 0.67, or a DP of 38, the nominal MECCANO value. **Worm**‡.


FIG.4


FIG.5


FIG.6

The SET Charles' box (Fig.6) is wooden and it measures 270* 60*85mm, including the 30mm deep lid. The outside is red and the label (Fig.1) is approximately 21x15cm.

There is no indication as to whether there were other sets. However a set seen on Marktplaats was also in a wooden box but longer and narrower with 7 compartments. It had no lid so may be suspect, though it did have a manual with it. Most of the types of part in Charles' box could be seen in it, though not perhaps so many of them.

The MANUAL About A5 in size, in portrait format, with spiral binding, the cover is identical to the lid label. Inside are 20 pages, numbered after the first one. However pp17-20 are simply a folded A4 sheet, not bound in any way.

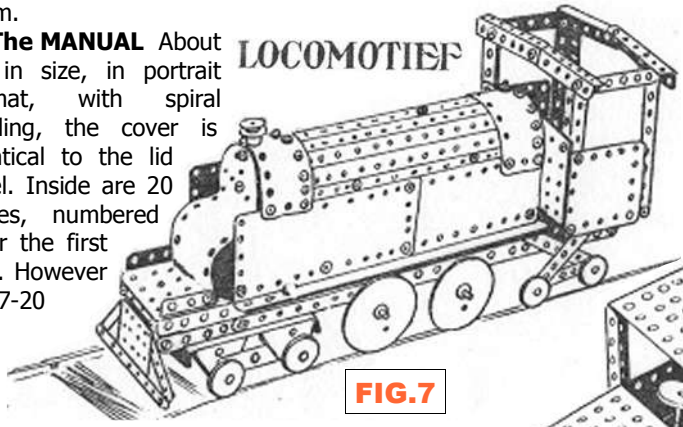


FIG.7

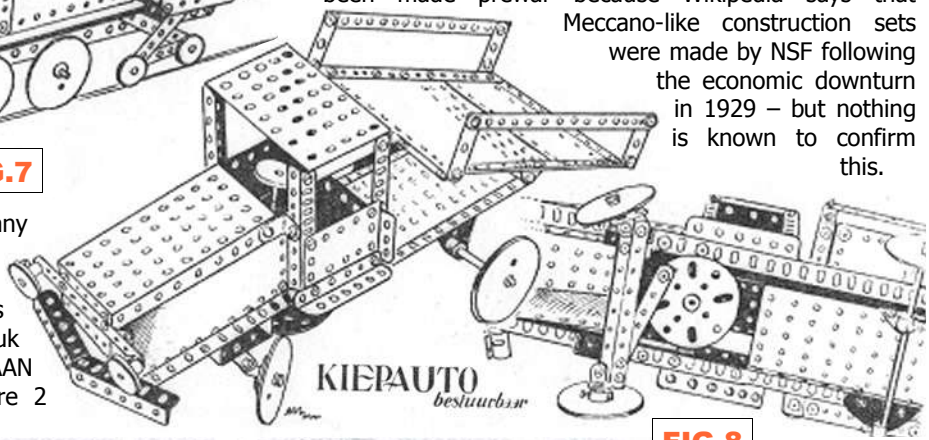


FIG.8

p1 has an Introduction, and p2 the Illustrated Parts. pp3-16 have 14 models from MOLEN met draaibaar bovenstuk (Windmill with revolving head) to HUSKRAAN zwenkbaar (Swivelling Crane). There are 2 models on the loose pages: ZWENKBARE KRAAN (Slewing Crane), and TRANSPORTBAAN (Aerial Ropeway, Fig.9).

The models include 5 Cranes, 3 Lorries, 3 Aircraft, the Radio Mast on the label, a Loco (Fig.7) and a Lifting Bridge. There is a single line drawing for each plus a parts list, some building instructions, an additional view for the Lorry in Fig.8, and some sketches of details for the last two. With limited fuselage & wing plating the Aircraft look rather skeletal; the other models look quite reasonable though the only apparent mechanical feature of note is the steering fitted to the Lorry in Fig.8.

The full instructions are shown in Fig.9 but only the drawings for the other models. All the drawings are the original size but the text is reduced to 60%.

REMARKS NSF was certainly produced after WW2 and so was the Manual (2 of the aircraft models it are called Dakota, a name not used before the war, and B48, a bomber dating from the late 1940s). It may also have been made prewar because Wikipedia says that Meccano-like construction sets were made by NSF following the economic downturn in 1929 – but nothing is known to confirm this.

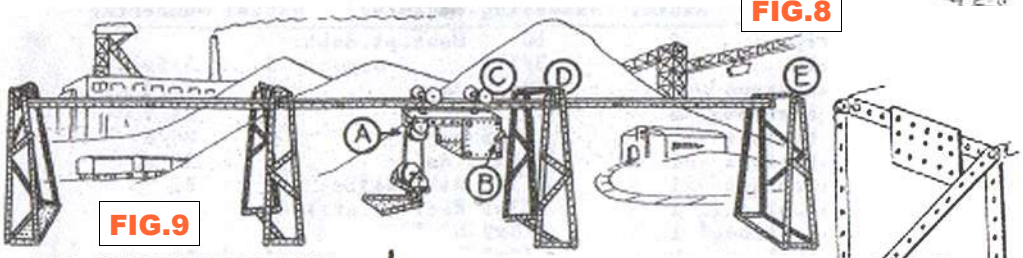
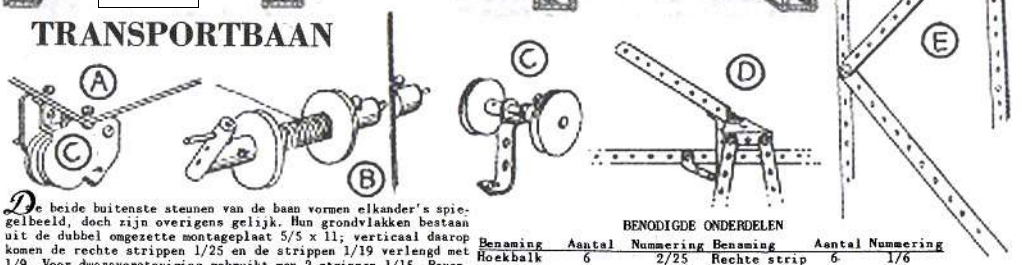


FIG.9

TRANSPORTBAAN



De beide buitenste steunen van de baan vormen elkander's spiegelbeeld, doch zijn overigens gelijk. Hun grondvlakken bestaan uit de dubbel omgezette montageplaat 5/5 x 11; verticaal daarop komen de rechte strippen 1/25 en de strippen 1/19 verlengd met 1/9. Voor dwarsversteviging gebruikt men 2 strippen 1/15. Bovenaan verbindt men de beide zijden door hoekbalk 2/9, verlengd met hoekbalk 2/6.

De beide middelste steunen zijn eveneens aan elkaar gelijk. Het grondvlak bestaat uit twee hoekbalken 2/6, verbonden door een strip 3/11.

Verticaal worden weer rechte strippen 1/25 en 1/19 gebruikt, verlengd met 1/9. Bovenaan zijn zij verbonden door de omgezette montageplaat 27 en de hoekbalk 2/9.

Aan de bovenste verbindingshoekbalken komt de looprail te hangen. Deze bestaat uit de hoekbalken 2/25. Er moet op worden gelet dat de wielen van de loopkat *onder* de looprail door kunnen rollen en dat er ruimte blijft tussen de wielen en de hangers van de rail. De bovenzijde van de loopkat bestaat uit een montage plaat 8/5 x 11, de zijden uit de beschermplaten 7/5 x 7, de bodem uit de montageplaat 8/5 x 5.

Aan de voorkant bevindt zich de vaste as van de takel, opgehangen aan lagersteunen.

Het wagentje wordt samengesteld uit de omgezette montage plaat 6/3 x 9 (conisch), terwijl hierboven, op een paar strippen 3/5 , zich de losse as van de takel bevindt.

BENODIGDE ONDERDELEN

Benaming	Aantal	Nummering	Benaming	Aantal	Nummering
Hoekbalk	6	2/25	Rechte strip	6	1/6
Hoekbalk	6	2/9	Rechte strip	2	1/2
Hoekbalk	6	2/6	Rechte strip	1	1/3
Hoekbalk	10	2/1	Strip	2	20
Rechte strip	8	1/25	Strip	2	21
Rechte strip	8	1/19	Strip	2	18
Rechte strip	4	1/15	Strip	2	4
Rechte strip	8	1/9	Strip	4	22
Rechte strip	4	1/7	Strip	2	3/5

Benaming	Aantal	Nummering	Benaming	Aantal	Nummering
Strip	2	10	Mont.pl.dubb.		
Strip	2	3/11	ong.	2	5/5x11
Lagersteun	6	19	As	3	24/4
Lagerst.omg.	6	27	As	1	24/2,5
Mont.plaat	1	8/5X5	As	1	24/8
Mont.plaat	1	8/5x11	As	1	24/2
Mont.plaat	1	8/3x5	Askoppelbus	2	12
Mont.pl.omg.	1	6/3x5	Wiel (klein)	6	14
Mont.pl.omg.	1	6/3x9	Stelring	1	11
Mont.pl. omg.	1	6/2x3	Wiel	4	16
Snaarschijf	1	16			

DER JUNGE BAUMEISTER (from FETA) Some notes on this post-WW2 German system were given in 42/1277 and now thanks to Jürgen Kahlfeldt, more details are available.

The Parts. The 65mm Pulley and Gear Ring are steel rather than aluminium. The Rubber Ring for the 25mm Pulley is #31 and is 22/36mm Ø. Strips are 12.7-13.0mm wide and .9-1.6mm thick with 4.5mm holes at 13.0mm pitch. Most bosses have a bore of 4.0mm, ±.1mm for a few, but in some 65mm Pulleys seen it is as small as 3.7mm. At this time the diameter of the Axles is uncertain.

The Sets. The Grundkasten (Basic set) box, Fig.1 in OSN 42, measures 330*170*28mm. Jürgen's example has a lid with a blue/white crackle finish with the OSN 42 label except that the background is brown rather than grey. Its con-tents are as in OSN 42 except that is has 6x 11h Strips (the OSN 42 figure was probably incorrect).

The 'A' set measures 195*155*26mm and the label (as in OSN 42) has words along the bottom which explain that it is suitable for the beginner or as an add-on. The contents are as follows:

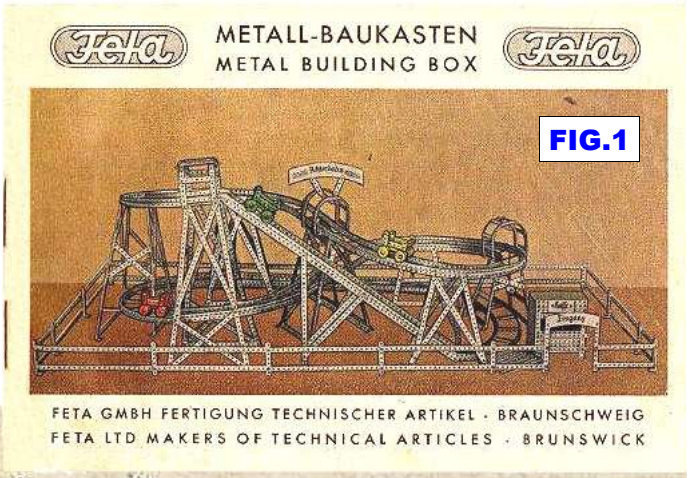
#2,3,6,7 Strips, 11,7,5,3h {6,4,4,2}
#5 DAS, 1*5*1h {2}
#10 A/B {4}
#11 Axle, 105mm long {2}
#14 Pulley, 25mm Ø {4}
#18 Flanged Plate, 11*5h, 140*65mm {1}
#20 Hook {1}
#21 Span'driver {1}
#25 Bolt, M4, 6mm, steel, {20}
#27 Nut, M4, hexagonal, 7.2mm A/F, steel {20}
#28 Set Screw, M3, 6mm, aluminium {4}
#31 Rubber Ring, 22/36mm Ø {4}

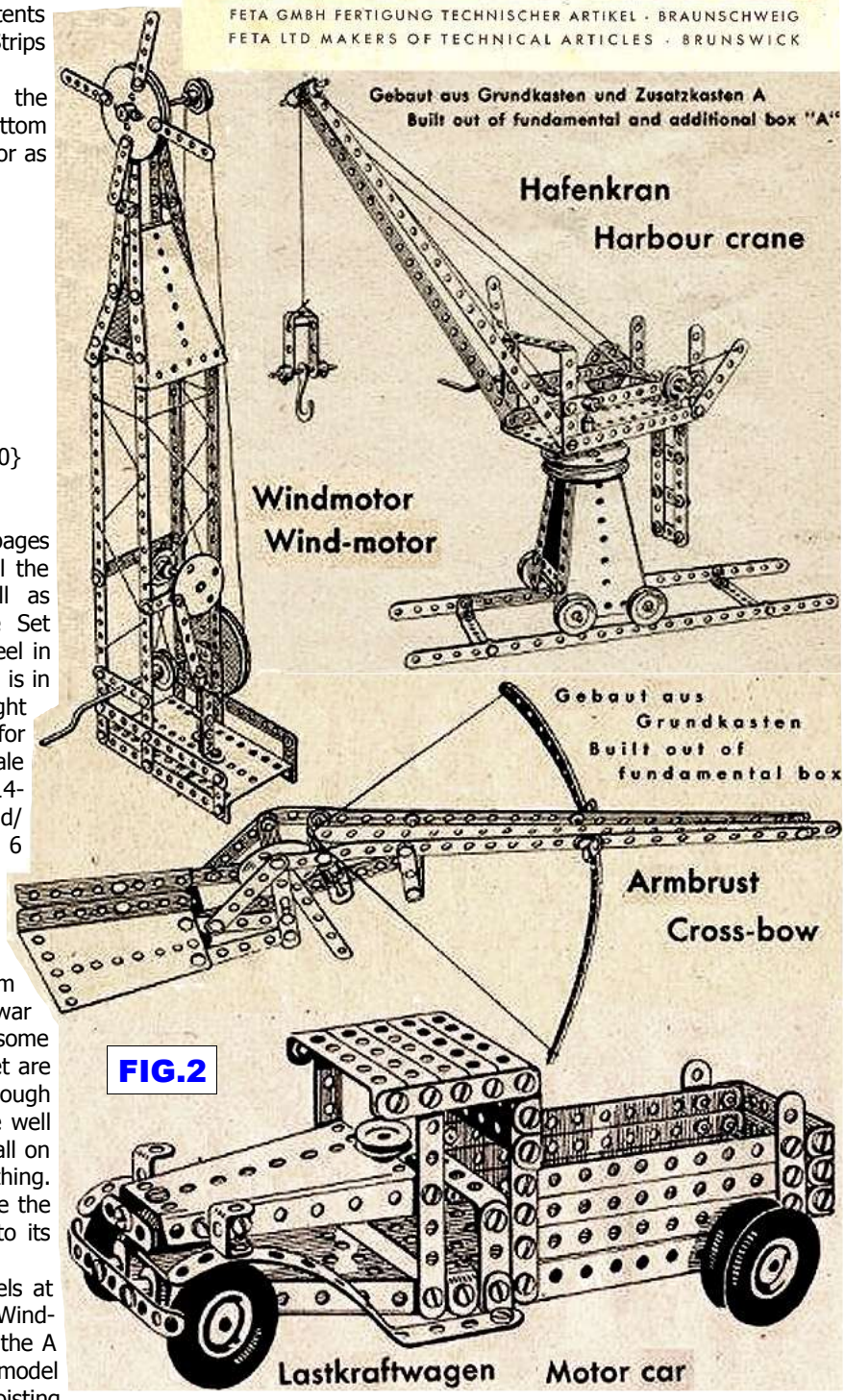
The Manual. This has 24 unnumbered pages including the covers, with the front in Fig.1. All the text is in (sometimes poor) English as well as German. pp2-3 have the Intro, pp22-23 the Set Contents, and p24 a photo of a largish Big Wheel in colour. This, like the Roller Coaster on the front, is in the best tradition of showing what a lad might aspire to. The remaining pages have 10 models for the basic set on pp4-13, from Balkenwaage/Scale to Flachsreiniger/Flax-cleaner; 2 for Set A on pp14-15: Handwagen/Double-wheel-barrow & Dreirad/ Tricycle (actually a 3-Wheel Delivery Cart); and 6 on pp16-21 which need the Basic plus A sets, from Feuerwehrleiter/Fire ladder to Anhänger/ Trailor. Each model has a page to itself but none have a parts list or any instructions.

The models are quite fair for this size of system and I easily spotted most of them in a prewar MÄRKLIN manual – some near exact copies, some adaptations. In fact the contents of the Basic set are quite similar to the prewar MÄRKLIN No.1 (though that had 6x 25mm Pulleys). But the models are well chosen because none are inanimate – they are all on wheels, or have rotating parts, or do something. Several have cord drives but the only one to use the Gears is the Flax-cleaner with a step-up drive to its rotor.

Fig.2 is a montage of 4 of the manual models at their original size. Of those not marked the Wind-motor needs only the Basic set, the 'Motor car' the A set as well. The Crane is really quite a good model with cord brakes on both the luffing and hoisting motions. Most of the models could be made from the illustration but not I think the Cross-bow – there is a long explanation for it in the MÄRKLIN manual.

It is curious that the Manual has no Illustrated Parts – it doesn't seem that there are any pages missing from it so perhaps they were on a separate sheet. The OSN 42 Sheet possibly but that might be thought to been been later because its models have a parts list & instructions. On the other hand, of its 4 models all but the Steam Engine are of little interest and are not in Jürgen's manual. The model for the A set in OSN 42 is not in it either.





DER JUNGE BAUMEISTER (from WEHMA) Again thanks to Jürgen Kahlfeldt for sending scans of a manual to add more to the account in 41/1278 of the second system with this name. He commented that it was almost certainly launched after WW2, and most likely in about 1947. Thanks also to Thomas Morzinck for his good offices.

The Manual has 20 light fawn pages plus covers, 210*146mm, landscape. The design on the front is as described in OSN 42; the other covers are blank except for 'Nachdruck verboten!' on the back. The inside pages are printed in dark brown. pp1-2 give a lengthy Introduction. pp3-6 have 12 models for Set Nr.0, from Rollkarre (4-Wheel Trolley) to Schaukelstuhl (Rocking Chair). Then pp7-12 have 12 Set 2 models from Elektrokarre (Electric Truck) to Fahrbarer Drehkran (Mobile Crane), and pp13-16 have 8 Nr.2 models, Auto (Lorry) to Scheune (Barn).

p17 has the Set Contents, pp18-19 the Illustrated Parts, & p20 photos of Set 1, 1A, & 2, plus the printer's name & address as in OSN 42.

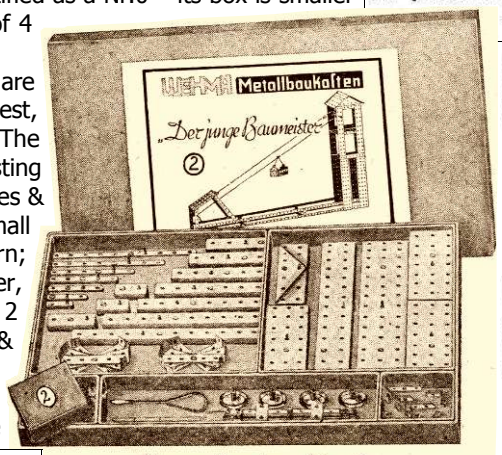
Dimensions From the Manual it is clear that the hole pitch is 15mm. And that the Strips are 15mm wide, the Narrow Strips 7.5mm.

The Set Contents with the Set 0A & 1A columns omitted, are shown in Fig.1 (changed to B&W). The Rubber Rings seen in the larger OSN 42 sets are not listed or shown anywhere. My English names for the parts follow with those asterisked shown in Fig.2 (in B&W): **#1-4** Perf. Plates with #1,2 (3 holes wide), & #3,4 (2 holes wide); **#5-13** Strips; **#14-20** Narrow Strips; **#21** Triangular Plate 5*2h; **#22** 1*5*1h DAS; **#23** Flanged Plate* 3*7h; **#24,25,27** A/Bs: 1*3,2,1h; **#26** 1*3*1h Narrow DAS; **#28** 1*2*1h DAS; **#29** Obtuse A/B*; **#30** Screwdriver; **#31** Spanner*; **#32** Collar*; **#33** Pulley*; **#34** Bolt*; **#35** Nut*; **#36 Axle** 110mm; **#37** Axle with Threaded End* 130mm; **#38** Crank Handle.

Nr.	Namen der Teile	Kasten: 0	1	2
1	Rechteckplatte 210×45 mm 14 Loch	—	2	4
2	Rechteckplatte 105×45 mm 7 Loch	1	2	4
3	Rechteckplatte 210×30 mm 14 Loch	—	2	4
4	Rechteckplatte 105×30 mm 7 Loch	1	2	4
5	Flachbänder 180 mm lang 12 Loch 15 mm br.	3	5	10
6	„ 150 „ „ 10 „ „	3	5	10
7	„ 120 „ „ 8 „ „	3	5	10
8	„ 105 „ „ 7 „ „	3	5	10
9	„ 90 „ „ 6 „ „	3	5	10
10	„ 75 „ „ 5 „ „	3	5	10
11	„ 60 „ „ 4 „ „	3	5	10
12	„ 45 „ „ 3 „ „	3	5	10
13	„ 30 „ „ 2 „ „	6	8	15
14	Flachbänder 150 mm lang 10 Loch 7.5 mm br.	—	1	2
15	„ 120 „ „ 8 „ „	1	1	2
16	„ 90 „ „ 6 „ „	—	1	2
17	„ 75 „ „ 5 „ „	—	3	6
18	„ 60 „ „ 4 „ „	—	2	4
19	„ 45 „ „ 3 „ „	1	2	4
20	„ 30 „ „ 2 „ „	—	3	6
21	Giebelstücke	2	2	2
22	Lagerbügel 5 Loch	3	5	10
23	Grundplatte 105×45 mm 7 Loch	—	—	2
24	Winkelstücke 3 Loch	—	3	6
25	Winkelstücke 2 Loch	2	4	8
26	Lagerbügel 7.5 mm breit	—	2	4
27	Winkelstücke 1 Loch	6	12	24
28	Lagerbügel 2 Loch	1	1	2
29	Dachwinkel	2	4	4
30	Schraubenzieher	1	1	1
31	Schraubenschlüssel	1	1	1
32	Stellringe	4	4	4
33	Schnurlaufräder	4	4	4
34	Schrauben 8 mm lang	30	40	150
35	Muttern	30	40	150
36	Welle 110 mm lang	2	2	2
37	Welle mit Gewinde 130 mm lang	1	1	1
38	Handkurbel	1	1	1
	Gesamtteile:	124	196	513

FIG.1

The Sets from p20. Fig.3 is the Nr.2 & the partitioning matches Fig.B in OSN 42. The Nr.1 matches one of the smaller OSN 42 sets and is partitioned by 4 trays, 1 large, 2 medium, & one small (for the N&B box). The other small OSN 42 set can now be identified as a Nr.0 – its box is smaller than the Nr.1 but with the same range of 4 trays though differently arranged.



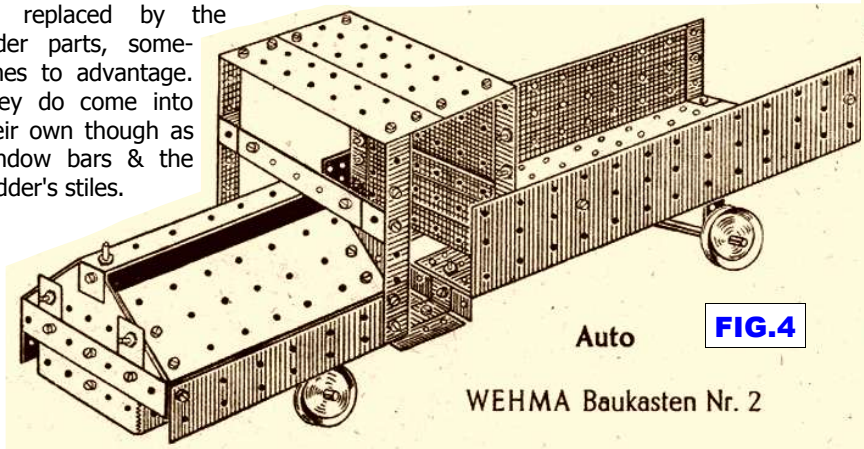
Grundkasten Nr. 2
mit 513 farbigen Teilen u. Anleitungsbuch

FIG.3

FIG.2

The Models Those for the Nr.0 are simple with a cord-driven Windmill the best, but also a nice little Skier, my favourite. The Nr.1's are also simple but more interesting with a Summerhouse and 2 each of Cranes & Machine Tools. 2 of the Nr.3's are a small Hand Cart & a Ladder to go with a Barn; the others include the model on the cover, a fair Bridge over 100cm long, and the 2 models below as examples of the best & worst (about full-size).

Comments To my eyes the various Buildings look rather well and justify the inclusion of the Triangular Plate in what is a quite small system. I'm not so sure about the 7 Narrow Strips & DAS: they are not used in many models and when used they could often be replaced by the wider parts, sometimes to advantage. They do come into their own though as window bars & the Ladder's stiles.

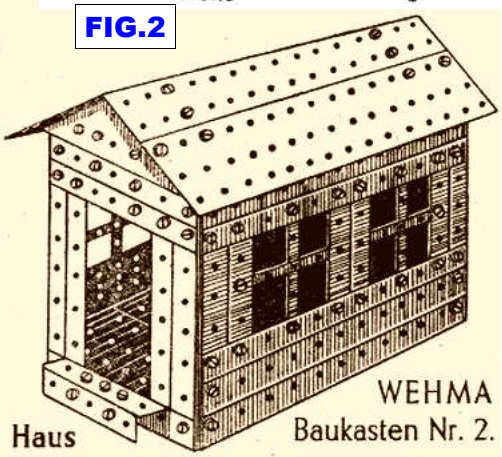


Auto

FIG.4

WEHMA Baukasten Nr. 2

Nr. 1 — 4 Stück Nr. 11 — 2 Stück Nr. 24 — 6 Stück Nr. 31 — 1 Stück
Nr. 2 — 4 Stück Nr. 12 — 2 Stück Nr. 25 — 8 Stück Nr. 33 — 4 Stück
Nr. 4 — 4 Stück Nr. 13 — 7 Stück Nr. 27 — 17 Stück Nr. 34 — 83 Stück
Nr. 5 — 1 Stück Nr. 21 — 2 Stück Nr. 29 — 4 Stück Nr. 35 — 83 Stück
Nr. 8 — 10 Stück Nr. 22 — 1 Stück Nr. 30 — 1 Stück Nr. 36 — 2 Stück
Nr. 10 — 4 Stück



Haus

WEHMA Baukasten Nr. 2.

Nr. 1 — 2 Stück Nr. 16 — 2 Stück
Nr. 2 — 4 Stück Nr. 17 — 6 Stück
Nr. 3 — 2 Stück Nr. 21 — 2 Stück
Nr. 5 — 10 Stück Nr. 27 — 19 Stück
Nr. 7 — 10 Stück Nr. 29 — 2 Stück
Nr. 8 — 10 Stück Nr. 30 — 1 Stück
Nr. 10 — 10 Stück Nr. 31 — 1 Stück
Nr. 11 — 2 Stück Nr. 34 — 131 Stück
Nr. 12 — 2 Stück Nr. 35 — 131 Stück
Nr. 13 — 12 Stück

Snippets. The SONNEBERGER Gears/Motor Outfit

SONNEBERGER sets are often offered on Ebay and some 6 examples of the Gears/Motor set have been seen over the years – not many perhaps considering that it was needed for many of the models in the manual for later standard sets, the one described in 18/503. This note is based mainly on information kindly sent by Joachim Kleindienst about the 1966 set shown on his website, www.baukasten+sammler.de. (Its well worth visiting, click on Metallbaukasten in the top left corner, and then on Baukasten to see sets, or Werbung/Kataloge for publicity material.)

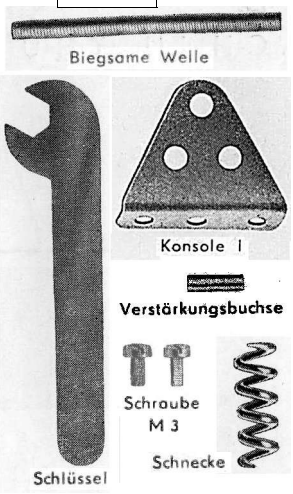
FIG.1

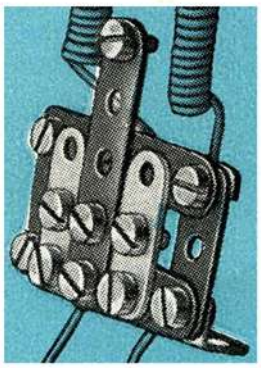
The SETS Joachim's box measures 31*26*3½cm and its lid is shown in Fig.1. The text in its bottom right corner is 'GHG.-Nr.6520/3/1' and 'VEP MDN 18,75'. The first group indicates the wholesaler or maker, I'm nor sure which; the second is the selling price (MDN was the abbreviation for the East German Mark from 1964 to 1967). In passing Joachim's website comment that the Set was hardly a bargain at its original price of MDN18.75, may perhaps help to explain the relative rarity of the Gears outfit. The lid's design is the one most commonly seen and is as used for the standard sets of the time except for the name: Elektro+ mechanischer Getriebekasten.


FIG.2

2 of the 6 Ebay sets have the earlier 'standard' lid design (still from the VEB Injecta company) with 2 boys working on a Sailplane's framework. At 31*19½*4cm, the box is a little smaller, and rather than the later moulded plastic tray (Fig.2), the parts are in 1 large & 2 smaller compartments formed by card partitions. One of these sets was said to be from the 1960s and has the same MDN 18.75 price as Joachim's in the lid's bottom right corner. So the change of lid design seems to have occured between 1964 & 1966.

FIG.3





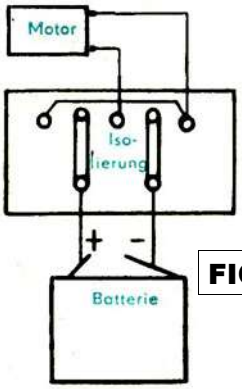


FIG.4

Mit Hilfe einfacher Baukastenteile und einiger Isolierbänder kann der auf der Abbildung gezeigte Schalter hergestellt werden. Er dient zum Ein- und Ausschalten sowie zur Veränderung des Drehsinnes am Kleinmotor.

The PARTS Most of the parts can be seen in Figs.2-6: the open box, parts copied from the manual's Illustrated Parts, and 3 of the manual models. Points of interest, where known, are given in the list of parts that follows, with my names, and quantities greater than one in curly brackets. Of the 32 parts about half were not in the standard sets and are shown in blue. As many readers will know SONNEBERGER parts have 4.2mm holes at 10.0mm pitch, M4 N&B, but with bosses tapped M3.

• **Gears** with boss, large and small. These are the standard Mod. 1.5 parts. • **Bevel** with boss {2}. • **Worm**. The TRIX wire type, see Fig.3 – it is next to the blade of the Screwdriver in Fig.1. • **Flanged Disc Pulleys** with boss, 50 and 30mm Ø. The 30mm is the same diameter as the standard Pulley but that doesn't have the circumferential slots in its face. • **Double Pulley**. Missing from the Set, it can be seen in Fig.6. • **Motor**, 4.5v, 150mA, 2500 rpm. • **Motor Mount**. The Motor is clamped between the top & bottom formed plates. • **Igelitierte Cu-Litze** = Igelitierte (meaning not found) Copper Connecting Wire. • **Verstärkungsbuschse** = Strengthening Bush or Sleeve. It is shown in Fig.3 but its use is unknown. In some Ebay photos the Motor's shaft looks substandard and so it could be a push-on sleeve – but one might think though that this would have been done in the factory. • **Flanged Plate**, 5*9h. In the manual 2 long slots are shown in each flange but the part in

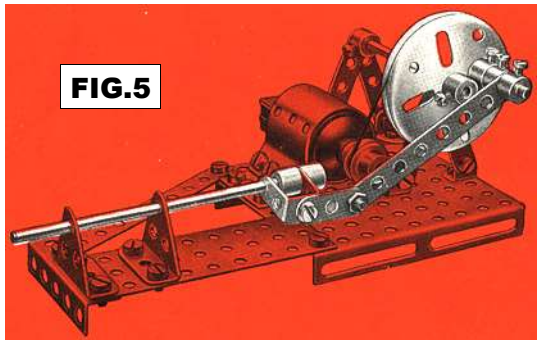


FIG.5

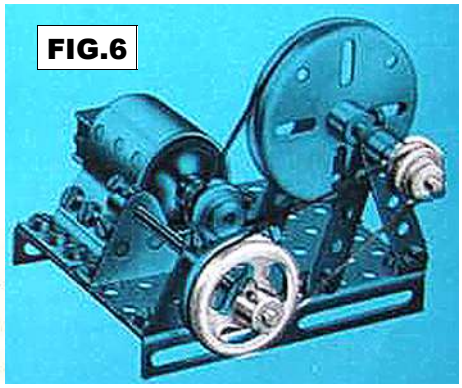


FIG.6

Fig.1, and the only example where the flanges can be seen in the Ebay sets, has 9 holes instead. • **Strip** 3h {2}. • **A/B** {2}. • **Trunnion** {2}, see Fig.3. • **Insulating Strips** 3 & 5h {4,4}. • **Insulating Washer**, 4*10*1mm {10}. • **Axles**, 75 & 110mm. • **Crank Handle**. • **Screwed Rod**, 60mm. • **Coupling** {2}. • **Collar** {4}. • **Flexible Coupling**.

It is shown in Fig.3 (Biegsame Welle) and may be the MECCANO type, perhaps about 6cm long. • **Bolts**: M4 {50}; M4 x 12mm {3}; M3, for the bosses {15}. For reasons unknown two types are shown in Fig.3. • **Nut** M4 {70}. • **Spanner**, see Fig.3 but the actual part is longer has a cranked ring opening at the other end. In one Ebay set the tray has a dedicated recess for it between the Gears and the Motor. • **Screw-driver**, wooden handled.

FIG.7

The MANUAL has 20 pages, 21*15cm, and the cover is shown left. Its PR is Sb 52/66 V 11 28 559. The same cover can be seen in all the Ebay sets including those with the earlier lid. Apart from the off/on/reverse Switch in Fig.4, the models seen are simple mechanisms often needing a few standard parts which are not in the Set. Alongside each model is a small stylised sketch of an industrial application with a short account on the technology on the facing page. Figs.5 & 6 are examples of the models. The original illustrations of the Switch in Fig.4 have been rearranged.

SONNEBERGER: S4 OSN 43/1306

Snippets. A PERFECTOR No.3 OUTFIT Since the notes in 38/1163 a No.3 set, not previously known, has been seen on Ebay. It isn't 'organised' but it contains some parts not seen before. The Ebay photos don't actually show the set's number but one of them is a manual page with a model (right) made from 'Baukasten 3'. Also below, a few points of interest from recent Ebay photos.

The NEW PARTS These are mostly those which were promised as additions to the system on the rear cover of the manual described in 23/855. They comprise the Gears already covered in OSN 38 and: • A **Pulley Disc** (Fig.2), nickelled, which scales at 68mm Ø. • A **Strip** of 15h, and probably a longer one of around 20h. • A **Perforated Plate** 2*7h, and a 7h long **A/G**. Both these would be made from the blank used for the 2*5h Flanged Plate. • An **Axle** about 20cm long. • Possibly the **Triangular part**, two of which can be seen in the scrap view of the rear axle in Fig.1. • The **Tool** in Fig.2 which looks to be a short length of Strip with a centre hole and a notch in each of its rounded ends. One end is angled. It is used to move parts along Axles and was the second Tool mentioned in the OSN 23 manual, not the black one illustrated in OSN 38. • On the **OSN 38 Tool**, one manual page shown for the Ebay Set describes how it is used to open the Driving Dog to allow it to be pushed onto or along an Axle. The nib at one end is slid between the Dog's wings and turned through 90° to spread them. Such a tool wasn't found necessary when the Dog was first tried (before OSN 38) with an Axle, but it has now been found that by chance the Axle used then was one of two with a diameter of only 2.99mm, and the Tool is definitely needed with normal 3.07mm Ø Axles. Also opening the part to put it on an Axle was almost impossible unless it was held with pliers because otherwise the rather large force needed to turn the Tool was so great that the part slipped round in the fingers. It was noted that although a whole page in the manual is devoted to using this Tool it doesn't show the Dog being opened prior to putting it on an Axle. Really the Dog's springiness is unnecessarily strong. • Also from said manual page it is clear that at that time the **Axle Stop** was just the Driving Dog turned round so that its square end faced the appropriate way. It may be though that earlier it was a separate part, perhaps similar to a shorter version of the Coupling.

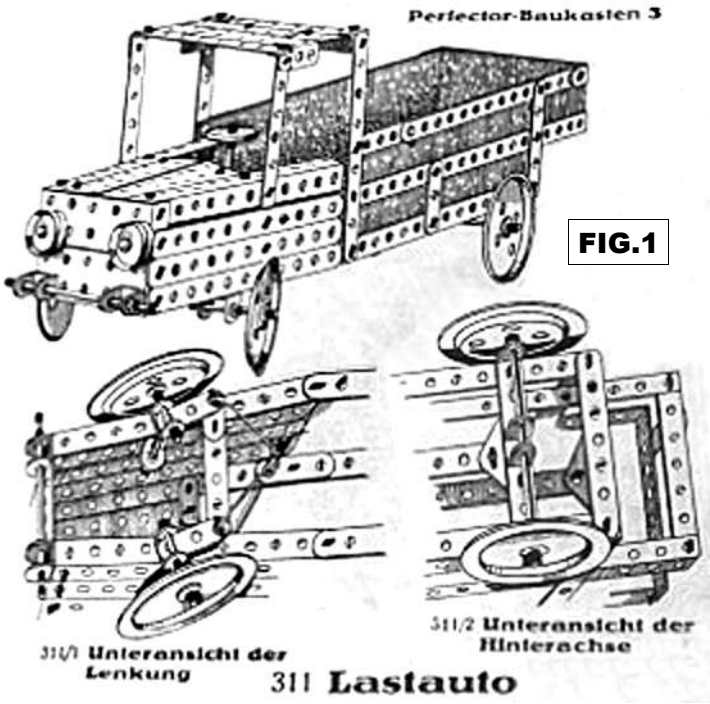


FIG.1

The SET is in a 2 layer, 5cm deep, brown box with an irregular pattern of dark brown streaks on it. It has the same plan size and lid label as the No.2. The base has the same partition too and the tray has two lengthways partitions giving 3 bays of near equal width. The parts sit on blue cards in these bays and the small parts are in 3 of the small parts boxes. The set seen has many more parts than the No.2 including 8 Flanged Plates, 4 of the new large Pulley Discs, and 2 each of the Gears (all copper coloured, as in Fig.2). Among the jumble of other parts two each of all three Tools can be seen and so the box probably contains parts from more than one set. Supporting this, there are nickel & copper Pulleys & 36mm Pulley Discs, whereas in all the other 7 sets (Nos.1, 1a, & 2) seen on Ebay all of each of the circular parts in them have one finish or the other (in passing the Pulleys in one No.1 are brass coloured). Going back to the Set, in one corner a number of bright RH Bolts & hex Nuts can be seen – they look about the right size to fit the small holes but may of course be foreigners.

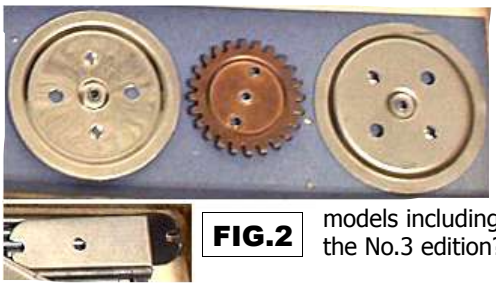


FIG.2

The MANUALS All that is known of the No.3 manual is the model in Fig.1 and the page devoted to using the Tool to open the Driving Dog. The model has cord operated 'proper' steering and the wheels are the new Pulley Discs, used singly.

It is also worth mentioning that although the OSN 23 edition is the commonest seen it is now clear that it was made up from an earlier 20 page manual with 8 pages of No.2 models added in the middle. That explains the odd model numbering in OSN 23 and without the 8 pages the models are 101-160 as before, followed by only 201-207 for Set 2.

Was there ever a manual with No.2 models including the Gears? Or were they the included in the No.3 edition?

PERFECTOR: S2 OSN 43/1306

'New' System: CONSTRUCTION AUX BATONNETS

by Jacques Pitrat

This account is based on a set from an early system which still contains many parts and 4 model sheets. The main parts are slender wooden Rods (called Bâtonnets, but as will appear the name in inappropriate) which are joined by being pushed into brass Connectors. The other text on the box lid (Fig.1) indicates that the system was conceived in accordance with the 'Froebel method'. The model sheets carry no text at all, not even the name of the system.

Friedrich Fröbel (1782-1852) was a German educationalist who created the name and the concept of 'kindergarten', and insisted on the importance of play and games for the education of young children. In particular, he invented several constructional games, called 'spielgaben' (usually translated as 'Froebel gifts'), and he designed wooden blocks, rods, balls, etc., as educational aids used in teaching children according to his method. Eisenzeit (p.35-36) & Baukästen (p.34-35) show the importance of his work in the development of construction systems. Several German makers (R. Schäfer, S. Fischer, Louis Engel) either manufactured systems created by Fröbel (see T33 in Baukästen), or developed new systems inspired by his ideas. An example of such a system, made c.1900 by Engel, is T39 in Baukästen: it shows a new wooden construction system called 'Fröbel's Bauschule' with a picture of Fröbel on the lid. It does not seem that any of these games contained metal parts.

As already mentioned the present system also claimed to have been conceived in accordance with Fröbel's ideas, and although the text on the lid is written in French, I do not believe that it was made in France. First of all, an accent on the upper case 'A' in 'Bâtonnets' is just visible on the lid, and at that time an accent was never put on an upper case 'A' in French (it is only in the computer era that such an accent began to appear). Also 'Bâtonnet' is a word which would be used by a Frenchman to describe a cylindrical object which is not too long and is not relatively small in diameter: it would not be used to describe a slender rod. So this box was likely to have been made in a non-French speaking country, where the subtleties of the French language, and the idiosyncrasies of French typography, were not well known.

Another reason comes from the 8 Flags present in the set: France, Netherlands, Belgium, Romania, Portugal, Sweden, Great Britain, and Spain. These Flags certainly belong to the set, two appear in one model (see Fig.4), and they give an idea of the nationality of the maker: the two flags in the model both have three stripes laid out horizontally. Among the Flags in the box, only one has this pattern, the Dutch flag, but another flag also had this pattern, the German Empire flag, which was a horizontal black-white-red tricolour. This flag is not in the box, and this might be expected: a German flag was certainly not a selling point in France at the time. So, a German origin is plausible; moreover, the German toy industry was led the world, and Fröbel's ideas were widely known and appreciated in Germany.

The Flags are also useful in helping to date the set: the Romanian flag was created in 1867; the Portuguese flag is the royal blue & white one, which disappeared in 1910 with the revolution; the Sweden flag is the Union flag with the union badge representing Norway, which was removed in 1905 with the dissolution of the union between Sweden & Norway. Thus, this system was certainly made between 1867 & 1905 (and it came before the Meccano's Kindergarten outfit in 1907). The lid looks old & dull, compared with the colourful lids of the systems made c.1900, so this system could have been produced c.1890.

FIG.1

FIG.2

The maker's logo on the lid has three angels & a book with the letter 'E' on it four times, so the name of the maker probably begins with an 'E'. Thus it is natural to think that Louis Engel (Engel means 'angel' in German) was the maker: he was producing other systems in accordance with Fröbel's ideas, and we can see that his coloured logo in Baükasten was a single angel. It is possible that this system was made earlier, when Engel had the logo on the present set. In that case, there must exist a German Engel system with the same contents.

The Set is in a box 308*206*24mm, and the open box with the lid attached by a paper hinge is shown in Fig.2. In what follows I indicate the number of each part present in the set, but the real number was certainly larger: some have been broken, and others have been lost, it is very easy to lose small, light parts, such as the Connectors.

The Parts The **Rod**. There is only one size: 230mm long with a diameter of 2.0mm – it was necessary to cut them to the desired length. There are still 175 of them, plus 9 shortened ones.

The **Connectors**. The set includes 4 kinds of brass connecting parts, with two, three or four arms (see Fig.3). The length of each arm is 10mm. In some of the models it is necessary to bend some of these arms, but this bending can break them if it is made too often: there are 5 broken ends in

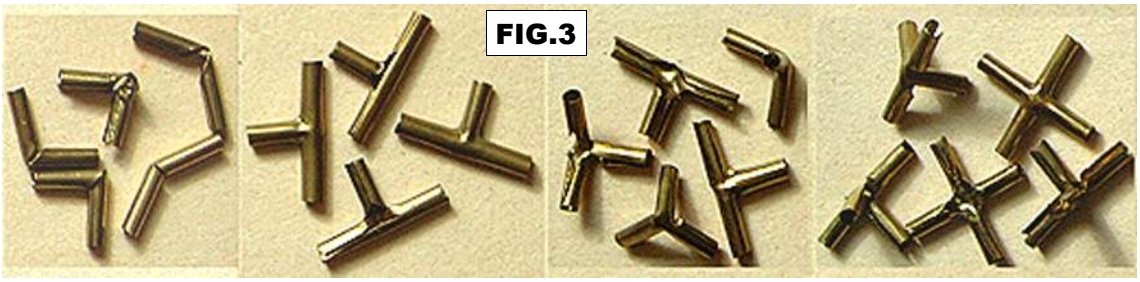


FIG.3

the box. • **2-Arm Connector** (26). They can be bent from straight to an acute 'V'. • **3-Arm Rigid Connector** (87) where the ends cannot be bent: this is a flat T-connector. • **3-Arm Connector** where all the arms can be bent (58). Unbent it looks almost like the preceding Connector. • **4-Arm Connector**, where again all the arms can be bent (24). When it is flat, we have an 'X' connector.

Cork Cylinder (33), diameter 10mm, height 9mm. Their only use in the models seems to be as 'wheels' on the Wagon in Fig.4. They aren't nearly as large as shown there and appear to be simply pushed onto a short Rod. In that case they can't roll and pushing a Rod through a Cork risks it breaking.

Beads • The White Beads (30) are used as stops at the end of Rods. The diameter of their hole is slightly inferior to the diameter of the sticks, and only the end of a Rod can be pushed into a Bead. • The light Brown Beads (2) and Long Beads (2) have holes slightly greater than the diameter of the Rods, and they can be pushed on and used for decorating the models.

Flags (8) They have the same pattern on both sides, except the last two (Great Britain & Spain) which have the Merchant Navy flag on one side & the Navy flag on the other.

The Models The model sheets include the models on the lid. 3 of the 4 sheets are 142*208mm: one has 17 simple models of flat figures, the second 9 models of polyhedra, and the third 5 models: a Bed, a Table, a Pair of Steps, a Sledge, and a Horse Wagon. The fourth sheet (202*269mm) has four models of apparatus for physical education.

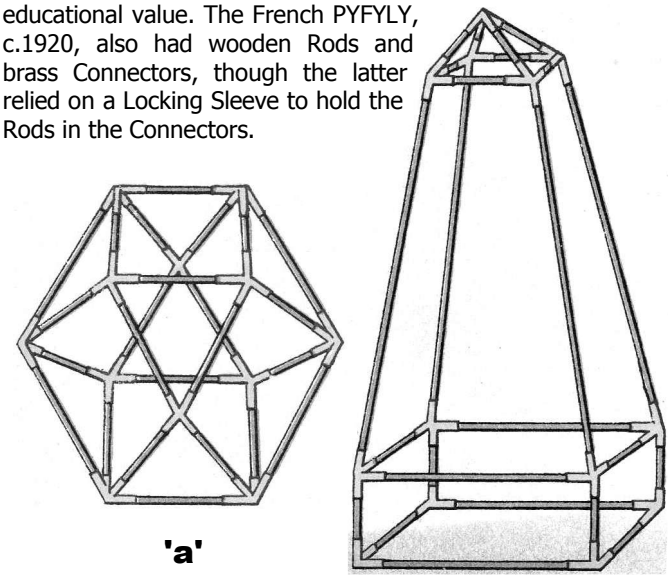
Fig.4 shows 2 of the Polyhedra, the Wagon, and a Gym Frame. All are the original size except the Gym Frame at about 70%.

Many of the models are rather simple, five of them even use only one Connector: an acute, a right, an obtuse angle, a 'T', and an 'X'. The largest model is a Gym Frame, which requires 58 Connectors. The most difficult model is the Cuboctahedron (Fig.4a), which has the six square faces of a cube and the eight triangle faces of an octahedron. It requires only 12 4-Arm Connectors and 24 Rods, but I doubt that a kindergarten child could build it.

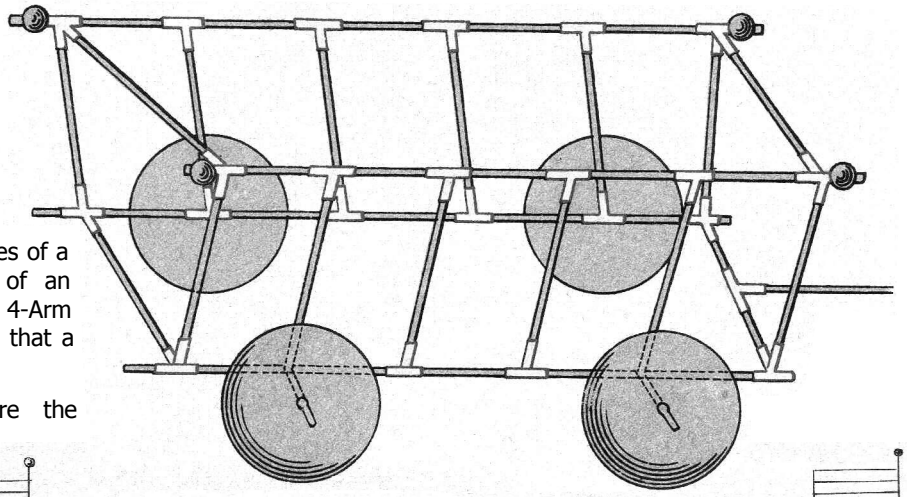
Remarks When we compare the contents of the box and the models, there are enough parts for use by several children simultaneously. Although it was not the goal of the inventor of this system, it would also be possible to design larger models for older children. With the contents of the box, one could build a Bridge or a large Eiffel Tower, and the characteristics of this system are particularly well adapted to these kinds of models.

This pioneering system had a drawback for its use with young children because it would be dangerous to let them use a cutting tool to cut small Rods from the large ones. Also finding the right length for a Rod would be a very difficult task at that age (or at any age for some of the models). Certainly, an adult would have to cut the Rods to the correct length for each model that the child wanted to build. Therefore, it would have been useful to include instructions for the teacher, and I cannot believe that the creator of this system did not write such a paper: either it was lost, or it was not translated into French.

Finally it is interesting to note that the system was the ancestor of several English systems such as HAPPYNACK in 1914 and ALCON in 1949, though they differed in size and in the material used, and none claimed to have any particular educational value. The French PYFYLY, c.1920, also had wooden Rods and brass Connectors, though the latter relied on a Locking Sleeve to hold the Rods in the Connectors.



'a'



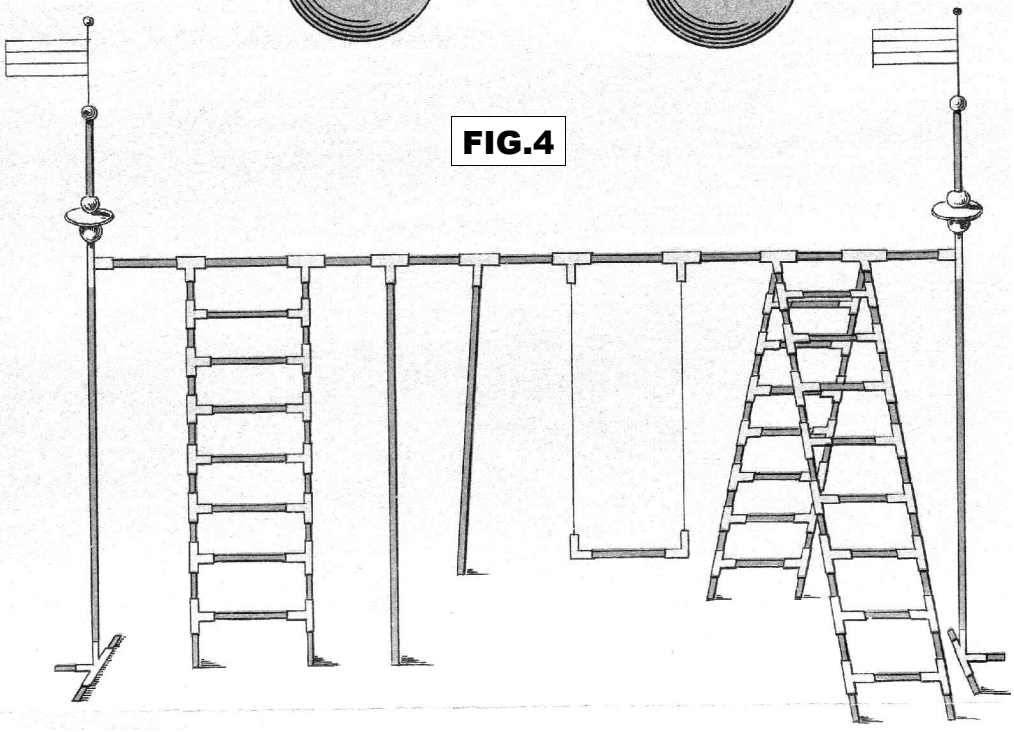


FIG.4

Snippet. Another GECO OUTFIT Something on an outfit from this German system, which relied on wooden Beams held with metal Connectors, was given in 37/1114. Since then a set, probably smaller, was offered on Ebay and a few more details can be seen in it. Also it was said that the Beams are 1cm square and up to 32cm long.

The set is in a plain cardboard box, 40*12*6.5cm, with no label. As shown it had a layer of parts in the bottom with 2 full width trays, about 33cm long, above. One is a little more than 1cm deep with no partitioning; the second nearer 2cm deep and partitioned into 8 bays in 2 rows of 4. There were no Wheels in the set but there would have been room for a card of parts above the trays.

Below a few of the parts including: • Various Connectors including: a 4-Way; a 4-Way with a tapped boss; a 3-Way; and two 2-Ways, one Reversed & one Angled. • The end of 2 Axles which look to be at least 4mm, and possibly as much as 5mm in diameter. • Wires with their ends either bushed or formed into a 'U'. From all the photos it can be seen that there are 3 lengths, one about 24cm long as in the foreground of Fig.1, the others one-half & one-third as long. The longest is bushed at both ends, the others at only one.

Other parts that can be seen in the various photos are a Collar similar to the boss, and at least 5 lengths of the Beam from about 2 to 32cm long, plus one of about 6cm with its ends cut at 45°.

The Ebay photos included 5 Model Sheets, Nr.1 to Nr.5, with models varying from simple on the Nr.1 to those for Set 2 on the Nr.5 below. These Sheets are in the same style as those mentioned in OSN 37 but whereas 2 of the present Sheets and all the 5 that could be seen in the OSN 37 photos are headed as being for the 'Geco-Bauspiel', the present Nr.3, 4, & 5 are for 'Conrad's neuem Bauspiel'. (Of the present Sheets the models on the Nr.1, 2 & 4 can be seen on 3 of the OSN 37 Sheets and arranged in the same way.)

The present Ebay item was said to be 'Conrad's Geco' but the only indication that can be seen to justify this is on the Model Sheets and I wonder if the Set was in fact a CONRAD (mooted in OSN 37 as coming after GECO) and not a GECO.


FIG.1

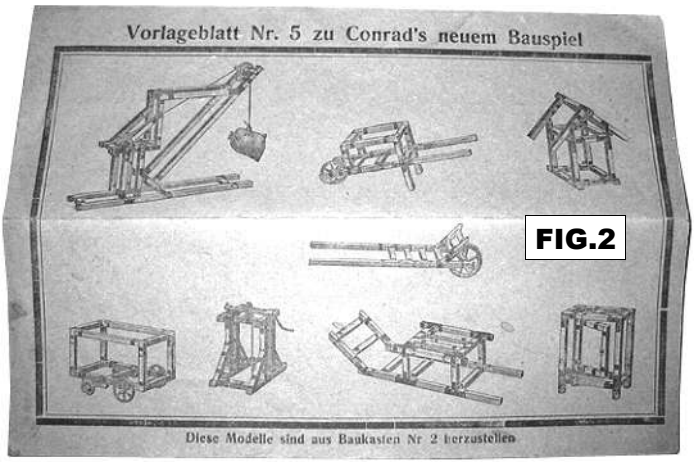


FIG.2

OSN 43/1309 **GECO: S2**

A DUX Auto Outfit Jacques Pitrat sent copies of some pages from a DUX Aero manual copyright 1933, and one contained a list of sets including 3 under the heading 'Der Auto-DUX-Automobilbaukasten'. The first is 'Auto-DUX SSK. (Mod. 386)', and alongside is the photo below. The words on the Tyres are 'AUTO-DUX Ballon 18"X45"'. Apparently SSK stands for Super Sport Kurz (Kurz = Short (wheelbase)). The set is said to have parts to build a 40cm long, 14cm wide, Sports or Racing Car.

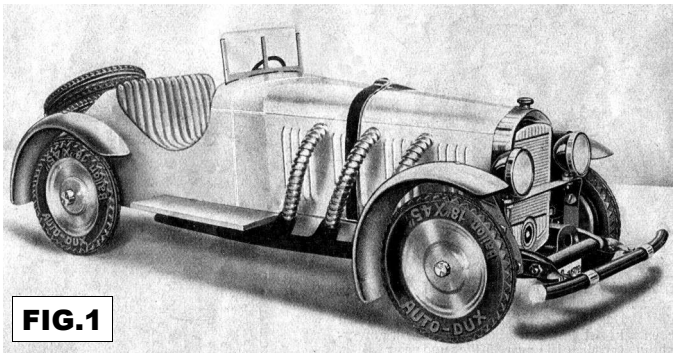


FIG.1

The second set is a Spring Motor (Mod. 440) which is wound up from the front of the model and propels it for 50m. The third, called Fernlenkung, is an add-on set to give remote control of the steering from behind the model (probably by pulling on cords).

Google found the photos right: the first a model, missing some of its trim, sitting in the bottom of the set box, and the second an outfit. Another blurry photo of a lid shows the whole label and the Car is running on a race track. The purple box in the top right corner of the box could be the Remote Control outfit. Few, if any N&B can be seen in the model so how were the parts held together?

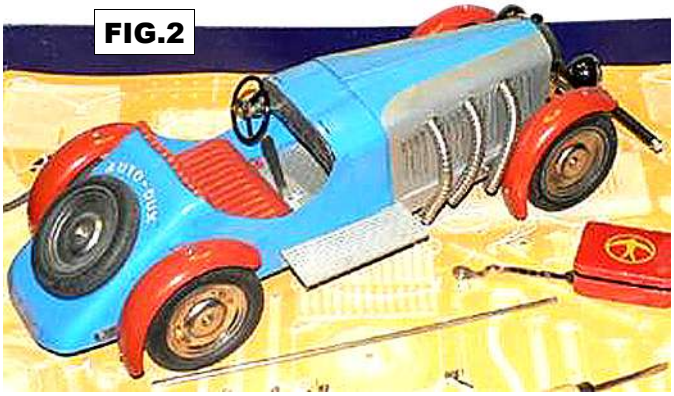


FIG.2

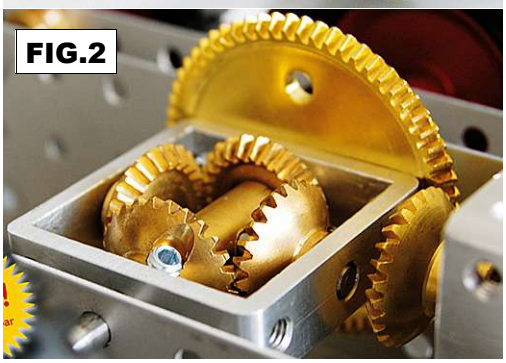
FIG.3

OSN 43/1309 **DUX-AUTO: S1**

STOKYS Update based on the company's website in June. The last account was in 40/1203.

The Sets The basic sets 0-4, their linking sets, and the 2 Gears outfits are unchanged. 4 Mini-Modelle sets have been added, SN80-83, called Töff (Motorcycle), Go Kart, Mini F1, & Flugi (right). All use the same wheels and have from 50 to, for the Flugi, 75 parts.

A Differential of an improved design has been introduced, as right. The frame appears to be an extruded section with tapped holes to allow the large Bevel to be bolted on. 3 of the 4 Bevels within the frame have a much shorter, untapped boss. 3 sets are listed: BG01, with the parts less the drive Bevels; BG02 as BG01 but ready assembled; & BG05, all the parts including the drive Bevels. From another photo it looks as if the large Bevel may have no boss.

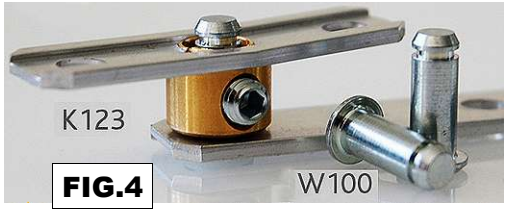


Motors etc New too are ranges of Geared Motors, Transformer/Rectifiers, Connecting Cables, & Switches. All, apart from the Cables, are housed in yellow, rectangular boxes with tapped mounting holes in one or more

faces, as in the Motors above. The Motors are M131-3, 12v, 35*35*86.5mm in size, with a 12.7mm long output shaft. Their speed/current/ torque are 260,55,11rpm/.2,.5,.3a/ 0.14,.45,1.15Nm respectively. The Transfos are M105 & M113, 230 to 12v, with 2.5 & 30w outputs [sic], in boxes 35*35*48 & 35*73.5*73.5mm. The Switches are M121-2, 35*35*13,19mm in size, and are 1-pole on-off, & 2-pole fwd-off-rev. The Cables are M065-8 black, 075-8 red, 085-8 yellow, 095-8 blue, 50, 100, 200, 400mm long, with end plugs.

The Parts A number of parts are no longer listed, and there are many new ones, but mostly different sizes of the structural parts. Items that stand out are the BZP N&B, & the Double Gears. I will list all the changes as additions to/ subtractions from the list in 40/1204. A few of the new parts are not illustrated and it's not entirely clear what they are. On the website Parts K100 to K137 & W100 are listed separately from the other parts under the name Gelenke but here they are in their appropriate sections.

Achsen (Axles) Plus: • **Gelenkbolzen** (Headed Pin) W100, 4mm Ø, 10mm long. It is shown right passing through a Strip and held in a Double Arm Crank by a Grub Screw. There is no indication of the intended use of the groove at the Pin's tip. • **Axles** W007/009, 70/35mm. • **Screwed Rods** T019-022, 25/40/100/200mm (it is not clear if these are fully threaded).



Bügel (Brackets) Plus: DAS E050-051, 3*3*3/3*2*3h

Lochbänder (Perforated Plates) Plus: • **2h wide** B018/ 114/123, 78/14/23h long. • **3h wide** B028/119-122/124/125/ 130/133, 23/3/4/6/8/16/25/78/33h long. • **4h wide** B042/ 089/090/115/131/134, 10/19/23/15/5/14h long. • **5h wide** B044-046/070/081-085/142/145, 19/24/ 24[sic]/6/5/11/14/16/32/15/8h long. • **Flat Girders** B069/110-112, 23/10/ 78/85h long.

Platten (Plates) Minus: • **Plates** P031/045, 5*4/5*8h. • **Flanged Corner Gusset** P053, 5*4h.

Plus: • **Plates** P106-108/141, 6*6/ 7*7/6*8/7*78h. • **Bogen** (a Curved Plate?) P061, 3h.

Profile (Strips) Plus: Strips P015/ 017/022/023/025/104, 15/17/12/23/ 25h long/135° Schutzblech (a Mudguard?) 4h.

Räder und Pneu (Wheels & Tyres)

NB: Pulley 20mm with boss, R104, and **Pulley 35mm** with boss, R106, are described as aluminium with brass bosses.

Minus: • **Pulley 35mm** with boss, R116. • **Tyres** RZ61/62, Lorry 76/Wide 47mm Ø. • **Balloon Tyres** RZ71-76, 50/60/72/80/100/125mm.

Plus: • **Balloon Tyres with brass Hub** R077, 125mm (R076 which was 125mm, is now 110mm).

Schrauben/Muttern (Nuts/Bolts)

Minus: • **All Nuts & Bolts.** • **Grub Screw** S027.

Plus: • **Bolts** Allen head, BZP: S006/009, 6/20mm; G951-954, 100/200/500/1000x S006. • **Nuts** 6mm, BZP: S005; G955-958, 100/200/500/1000x S005. • **Grub Screw** 4mm long, Allen head, BZP: S026; G959-961, 100/200/500x S026.

Verbindungen (Connecting Parts) Plus: Joint Plate EX14, 7h (shape unknown).

Werkzeuge (Tools) Plus: Screwdriver H010 Allen headed.

Winkelschienen (Girders) Plus: • **A/Gs** V015/017/023/ 025/033, 15/17/23/25/33h; • **'L' A/Gs**, 1*3h, G057-059, 17/19/25h; • **'L' A/Gs**, 1*2h, G060/066, 7/78h; • **'U' A/Gs**, 1*2*1h, G010/018, 6/10h; • **'Z' A/Gs**, 1*3*1h, G040, 8h; 1*5*1h, G049, 8h.

Zahnräder (Toothed Wheels) Minus: Double Gear Z016, 11/40t.

Plus: • **Bevel Gear**, short Z029, 26t (as used in the Diff.). • **Double Gear** Z110-121, 11/19, 11/26, 11/38, 11/40, 11/52,

11/57, 11/60, 11/66, 11/76, 11/136, 11/170t.

Zubehör (Fittings) Minus: • **Cord** K073, 5m, • **Big End** (Strip Coupling) T001, • **Threaded Pin** T009.

Plus: • **Spacing Ring** K010, 10mm. • **Pleuelkopf** K018, Big End? (possibly a new name for the deleted T001, or a new version of it). • **Chain** K062, red plastic. • **Driving Bands** K074-077, 300/450/600/960mm, 3.5mm PVC. • **Cranks** (NB Unlike the existing brass Cranks all the following are aluminium with brass bosses): K100, 3*4h Plate with a central boss; K113-117, Strips 3/4/5/6/7h with centre boss; K123/125/127, Strips 3/5/7h with an end boss; K133-137, Strips 3/4/5/ 6/7h with a boss at each end. NB The Hand Wheel which was H005 is now T005.

A MÉCANIC Manual A general account, but mainly about the parts, of this early 1920s, ½" pitch French system, was given in 12/314 & 21/603. Of the manuals all that was available were the few pages of an early one which were used for the original MCS entry, and a few pages from a later version which were the basis for the MCS Extra Pages. A manual now to hand lies, chronologically, between these two. Each of these three manual has models for all the five sets produced, A – E.

MÉCANIC followed ÉCÉPÉ and the early manual followed on from the ÉCÉPÉ edition. An Ebay photo shows that the back cover of the early manual still included references to ÉCÉPÉ and features the set illustrated in 12/314, but with the MÉCANIC name under it, where 'ÉCÉPÉ' would have been. (In passing this Ebay lot was a Set C with the Manual, and also a leaflet which explained that production of ÉCÉPÉ had been halted during the war and that now it was to resume under the MÉCANIC name, with the promise of future 'extensions et perfectionements'.)

The later (third) manual has many more pages than the early one, 64 against 32, and many more models, 142 against 85. It also shows more parts, though the contents of the sets remained unchanged.

The present manual is very similar to the later one with the same number of pages, and the same number of pages for the models from each set. One difference, probably the only significant one, is that the Illustrated Parts does not include the 2 clockwork Motors shown in the later edition. The Manual's 64 portrait format pages (including covers) are 156*240mm, but the front cover, identical to the lid label in OSN 21 except that it doesn't have the red set letter panel in the top left corner, is printed landscape. The back cover shows 9 of the manual models printed in dark blue – it is similar to its later equivalent but that has one more model, and the models are arranged around the panel in Fig.1. (Not all of the small parts in it can be seen clearly and not all of the large parts are shown – of the latter those missing are the 5*11h Perforated Plate, the Square Signal Disc, & the Semaphore Signal Arm. The Arm and both types of Disc can be seen in Fig.2b.) The Illustrated Parts are on pp3-6, and the Set Contents are on p60.

The other pages are given over to the models, as follows:

- Set A: 26 models from 1. Tableau noir (Blackboard) on p7 to 26. Scie à métaux (Mechanical Hacksaw) on p14.
- Set B: 30 models from 27. Passage à niveau (Level Crossing) on p15 to 56. Traineau à glace (Sledge) on p24.
- Set C: 38 models from Balançoire (Child's Swing) on p25 to 94. Escarpolette (Swing) on p37.
- Set D: 21 models from 95. Maison (House) on p38 to 115. Indicateur de directions (Train Destination Indicator) on p46.
- Set E: 23 models from 116. Presse à friction (Friction Press, though the action seems to be a driven vertical shaft) on p47, to 138. Potence à signaux (Signal Gantry) on p59.
- Finally 4 models needing extra parts, from 139. Etabli (Work Bench) on p61, to 142. Tour Eiffel on p62.

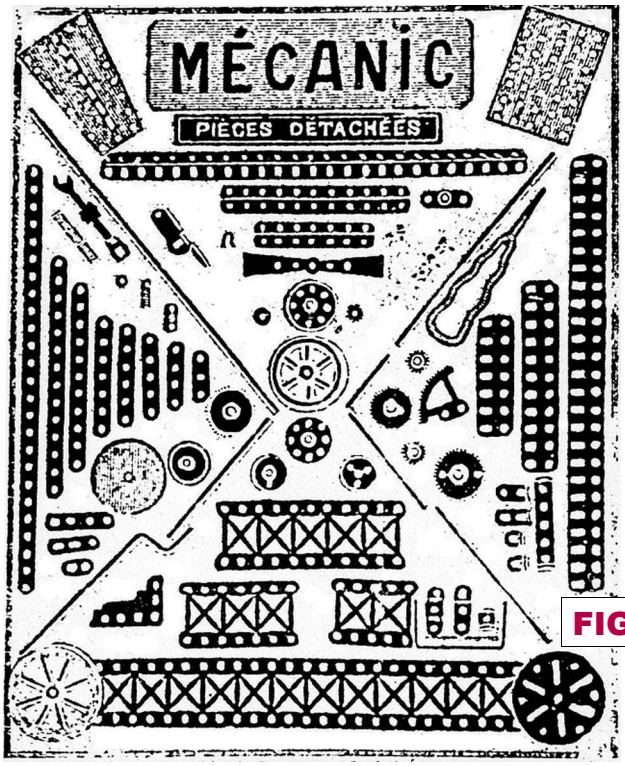


FIG.1

The models are similar in range & style to those for say, MECCANO at the same period, though few if any are copies. The Sets through 'D' are quite small with only 70 N&B in the largest, and perforce the models are straightforward with cord drives as the only mechanical feature. Many are simple models of machine tools and there is only one Aeroplane, the model on the cover, and only one motor vehicle, the Car in Fig.3a. The inclusion of 2 Spoked Wheels in all the Sets, and 4 of the Architraves (½ Frontons) from Set B onwards, serve to improve the appearance of some of the models. Both the Windmill (Fig.2a) and the Car are from Set D.

Set E has 120 N&B & 9 Gears, so the models can be a little more ambitious. They include a Transporter Bridge, several motor vehicles, & the other models illustrated here. The Tour Eiffel, one of the manual models which needs extra parts, looks the part and is well over 1m high. None of the Vehicle have any form of steering. The many parts in the system which were not included in the Sets would have allowed much more advanced models, and I wonder if the Model Leaflets mentioned in 12/315 included any such.

One line drawing & list of parts is provided for most of the models, with an extra view for a few of the larger ones. This is not adequate for the more complicated models – it is not easy to work out how the Dredger in Fig.3c works, for example. (All the drawings here are at their original size,

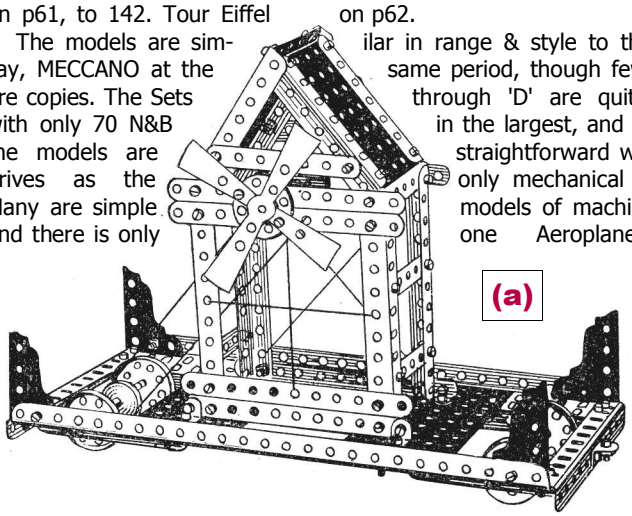
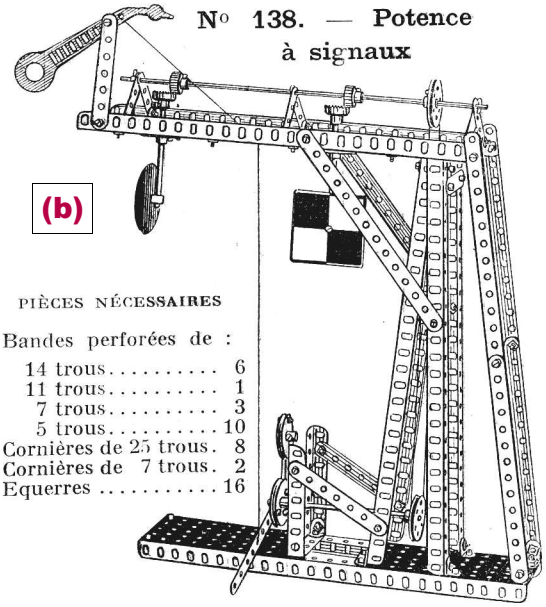


FIG.2



N° 112. — Petit Moulin sur plate-forme

PIÈCES NÉCESSAIRES

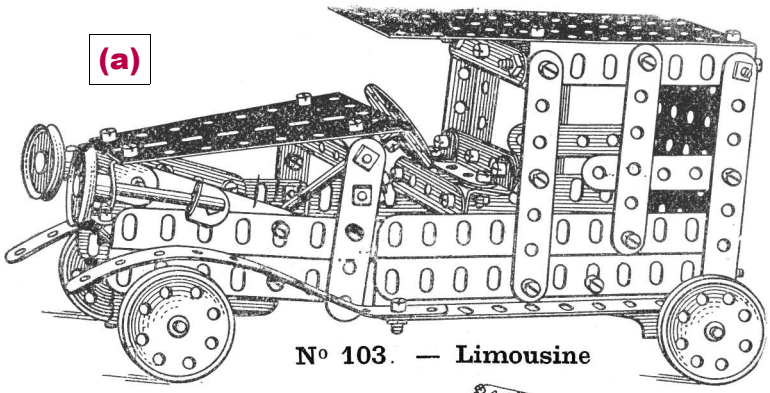
Bandes perforées de :
11 trous..... 6
7 trous..... 2
6 trous..... 1
5 trous..... 6
Cornières de 25 trous.. 2
Cornières de 11 trous.. 6
Cornières de 7 trous.. 8
Equerres 5
Ailes 2
Grandes plaques rectangulaires..... 2
Petites plaques rectangulaires 2
Tringles de 11 m/m 5.. 3
Poulies de 36 m/m.... 4
Poulies de 25 m/m.... 2
Roue de barillet... 1
Bagues d'arrêt.... 2
Vis et écrous..... 69
½ Frontons..... 4

N° 138. — Potence à signaux

PIÈCES NÉCESSAIRES

Bandes perforées de :
14 trous..... 6
11 trous..... 1
7 trous..... 3
5 trous..... 10
Cornières de 25 trous. 8
Cornières de 7 trous. 2
Equerres 16
Tringles de 9 m/m..... 2
Tringle de 29 m/m..... 1
Poulies de 36 m/m..... 4
Roues d'angle petites. 2
Pignons de 19 m/m..... 2
Pinces à ressort..... 4
Vis et écrous..... 69
Grandes plaques rectangulaires 2
Petites plaques rectangulaires 2
Aiguille de sémaphore. 1
Disques 2
Bagues d'arrêt..... 4

(a)



PIÈCES NÉCESSAIRES

Bandes perforées de		Poulies de 36 m/m.	4
11 trous.....	2	Poulies de 25 m/m.	2
7 trous.....	2	Pignon de 19 m/m.	1
6 trous.....	2	Roue de barillet	1
5 trous.....	12	Pinces à ressort.	4
Cornières de :		Vis et écrous...	70
11 trous.....	6	Plaques rectangulaires :	
7 trous.....	8	Grandes.....	2
Equerres	18	Petite.....	1
Tringles de :		Plaques secteur.	2
11 c/m 5.....	1	Bagues d'arrêt..	4
9 c/m.....	2	½ Frontons....	4
5 c/m.....	2		

N° 103. — Limousine

N° 130. — Voiture-Echelle de Pompiers

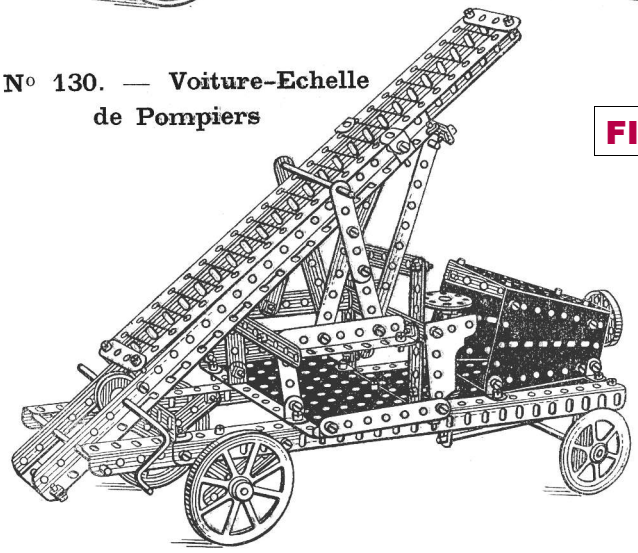
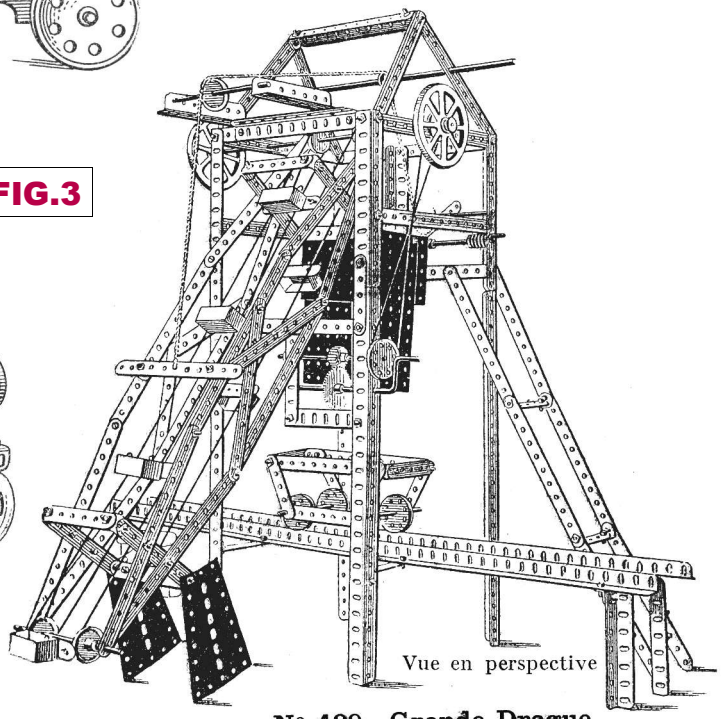


FIG.3



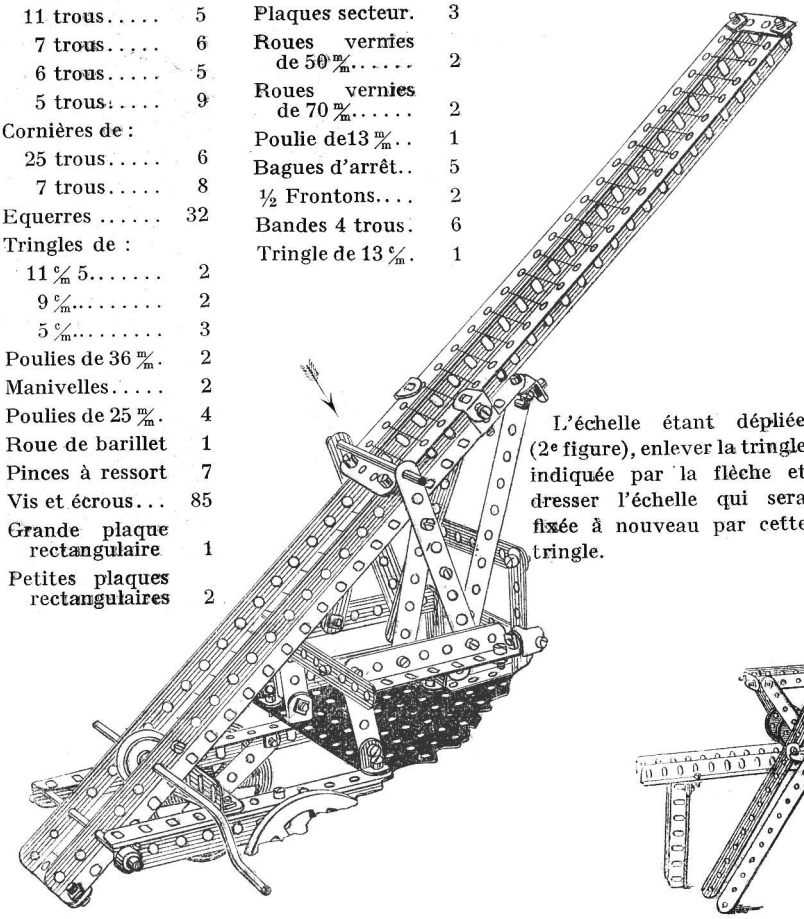
Vue en perspective

N° 129 Grande Drague

(b)

PIÈCES NÉCESSAIRES

Bandes perforées de :		Plaques secteur.	3
11 trous.....	5	Roues vernies de 50 m/m.....	2
7 trous.....	6	Roues vernies de 70 m/m.....	2
6 trous.....	5	Poulie de13 m/m..	1
5 trous.....	9	Bagues d'arrêt..	5
Cornières de :		½ Frontons....	2
25 trous.....	6	Bandes 4 trous.	6
7 trous.....	8	Tringle de 13 c/m.	1
Equerres	32		
Tringles de :			
11 c/m 5.....	2		
9 c/m.....	2		
5 c/m.....	3		
Poulies de 36 m/m.	2		
Manivelles.....	2		
Poulies de 25 m/m.	4		
Roue de barillet	1		
Pinces à ressort	7		
Vis et écrous...	85		
Grande plaque rectangulaire	1		
Petites plaques rectangulaires	2		

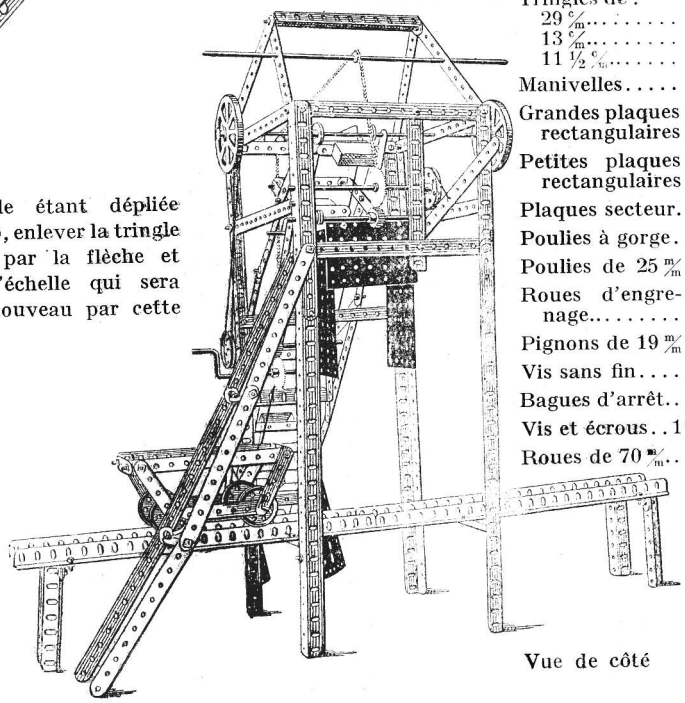


L'échelle étant dépliée (2e figure), enlever la tringle indiquée par la flèche et dresser l'échelle qui sera fixée à nouveau par cette tringle.

(c)

PIÈCES NÉCESSAIRES

Bandes perforées de :		Cornières de :	
14 trous.....	24	25 trous.....	8
11 trous.....	17	11 trous.....	7
7 trous.....	6	7 trous.....	8
6 trous.....	4	Equerres	24
5 trous.....	16	Pinces à ressort.	14
4 trous.....	2	Tringles de :	
		29 c/m.....	2
		13 c/m.....	3
		11 ½ c/m.....	2
		Manivelles.....	2
		Grandes plaques rectangulaires	2
		Petites plaques rectangulaires	2
		Plaques secteur.	2
		Poulies à gorge.	6
		Poulies de 25 m/m	6
		Roues d'engrenage.....	2
		Pignons de 19 m/m	2
		Vis sans fin....	1
		Bagues d'arrêt..	3
		Vis et écrous..	115
		Roues de 70 m/m..	2



Vue de côté

and all of the original detail can be seen. The only explanatory note given is about the ladders in the Fire Engine.)

Finally one point about the parts: a Windmill Sail, called Ailes de Moulin, but not illustrated, was mentioned in 12/314, but this is in fact the Propeller (called just Aile). It is used in the Monoplane on the cover and two are used as the sails in small Windmill models – as in Fig.2a for example.

The EZY-BILT No.9 Outfit This was the largest set in the range, introduced in late 1960 or 1961, and it continued unchanged until Ezy-Bilt's demise in about 1970. The details which follow are from 2 sets seen on Ebay, and a manual kindly sent by Jim Osborne.

The Set was packed in the wooden box, right, and inside, sitting on one another, were 6 moulded plastic trays containing the parts, yellow in one of the Ebay sets, and white in the other. The box's lid included the front panel to allow easy access to the trays.

FIG.1

The Set Contents follow, as given in the manual, with a Meccano PN in square brackets where the Ezy-Bilt name is unusual. **Strips**: 4,2,16,6,6,2,18,6,2,14 of #1-10, 1½,2,2½,3, 3½,4½,5½,7½,9½,12½". **Flat Girders**: 2 each of #14-22, 1½,2,2½,3,3½,4½,5½,7½,9½". **A/Gs**: 2,2,2,4,4,2,2,8,2 of #28,30,32-8, 1½,2½,3½,4½,5½,7½,9½,12½,18½". **DAS**: 2,10,6 of #41-3, ½*1½,2½,3½". **Clutch Spring**: 2 of #49 [M120b]. **Curved Crank**: 8 of #50 [M90a]. **Curved Strip**: 4 of #51 [M90]. **Formed Slotted Strip**, 3": 8 of #53. **Trunnions**, Angle & Flat: 4,6 of #53,55. **Brackets**: 24,30,8, 4,4,8 of #58-62,65, Flat, Angle, Double, Reversed Angle, 1*1" Angle, Obtuse. **Double Bent Strip**: 3 of #63. **Crank Bent Strip**: 1 of #64. **Plates**: Base, 2 of #67 [M52]; Sector, 2 of #68 [M54]; Flanged, 3,2 of #69,70, 2½*1½,3½"; Flat, 4 of #71, 5½*3½"; Flexible, 10,10,10,6,12 of #75-9, 1½*2½, 5½", 2½*2½,4½,5½"; Strip, 6 of #81, 12½*2½"; Curved 'U', 2,6 of #83-4, 9⁄32,1 11⁄16"; Hinged Flat, 1 of #85; Semi-Circular, 4 of #86. **Cylinder**: 2 of #87. **Pulleys**: ½" brass w/ o,w boss, 3,1 of #88-9; 1" w/o,w boss, 4,6 of #90-1; 2", 3" w boss, 6,2 of #92-3. **Road Wheel**: 4 of #94. **Rubber Tyres**: 4,6 of #95-6, 1" & 2". **Axle Rods**: 2,4,6,6,2,2,4,3,2 of #99-106,108, 1,1½,2,3½,4,4½,5,6½,11½". **Crank Handles**: 1,1 of #110-1, 3½, 5". **Bush Wheel**: 2 of #113. **Wheel Disc**, 1¼", 2 of #114. **Gears**: 2,2,4 of #115-7, 1½" Contrate, Worm, Pinion. **Collar**: 8 of #120. **Short Coupling**: 2 of #121. **Hooks**: 1,1 of #123-4, Plain & Loaded. **Hank of Cord**: 1 of #125. **Anchor Spring** for Cord, 2 of #126. **Connectors**, Rod & Strip, Rod: 2,2 of #127-8. **Spring Cord**: 2 of #131. **Screwdriver**: 1 of #132. **Spanner**: 2 of #133. **Washers**: 24,4 of #134-5, ⅜, ¾". **Driving Bands**: 2,1,1 of #137-9, 3,6,10". **Grub Screw**: 30 of #140. **Spring Clip**: 30 of #141. **Nut**: 300 of #142. **Bolts**: 180,10,4,4 of #143-6, ¼,⅜,½,¾". **Threaded Pin** & Nuts: 1 of #147. **Pivot Bolt** & Nuts: 1 of #148. **Screwed Rods**: 1,1,2,1,1,1,1,1,1 of #150-8, 1,2,3, 3½,4½,5,6,8,11½". **Instruction Books**: 1 each of #160-2, for Sets 1-5, 6-8, 9. A **C/W Motor** (Fig.2) was also included in the Outfit.

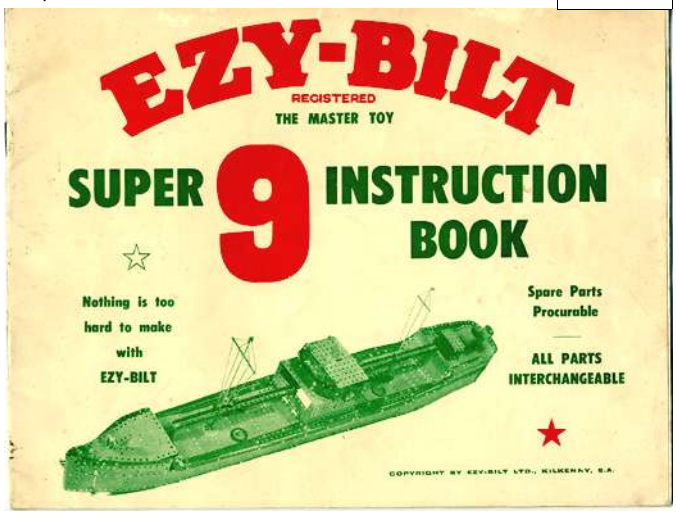

FIG.2

Compared with MECCANO in the 1960s the EZY-BILT No.9 generally lay between Nos.8 & 9 in the parts common to both systems. But the EZY-BILT range lacked a number of the Liverpool parts, the Triangular & Plastic Plates for instance, and the large circular parts, Flanged Wheels, & Braced Girders. Other areas of weakness were in brassware & Gears, especially the absence of Sprockets and a Gear Wheel to mesh with the Pinion – both of these were not added to the EXY-BILT range until the mid-1960s, well after the No.9 appeared, and as far as is known they were never included in any of the sets. On the plus side there were more Flexible Plates, which compensated for the lack of the plastic variety, 18 Flat Girders were included (there were none in the MECCANO No.9), and there were 2 Cylinders instead of Sleeve Pieces.

The Manual has 20 unnumbered pages, 280*213mm, plus covers, and the front is shown right. C2 & p1 have an Introduction, and p2 shows the use of belts and the Gears in drives for the C/W Motor. The Set Contents are on p18, p19- C4 are blank except for the printer (McCallum Ltd., Printers, Norwood) on C4, and a heading on p19: Design Page – use to plan/sketch improved/new models.

The 11 models are on the remaining pp3-17 and unlike those for the smaller sets, they owe virtually nothing to MECCANO. The first, 9-1, though not actually named, is a Car Chassis and the last, 9-12, a Dragline (though the name may be misleading, see Fig.4). There is no model 9-9 – a page is headed 9-9 but it has the Parts List and another photo of the 9-8 model on the previous page. The other models are a Railway Wreck Crane, 3 Earth Movers of one sort or another, a Semi-Trailer, an Oil Tanker ship (as on the cover), a Helicopter, a (twin-engined) Hercules Transport Plane, and a Caravan (with interior fitments). All are quite large models, the trailer of the Artic is 24½*9½" in plan with side walls 2½" deep, and range from fair to very good in appearance. They are all fairly simple mechanically with no brakes on winding shafts, but the vehicles have parallelogram steering linkages, and the Helicopter has a cord drive to the tail rotor. None of the models include the Motor, and the Gears are only used in the Grader's scraper (see Fig.4) and the rear axle drive of the Chassis. There are 2 or 3 good photos of each model with brief constructional notes – I'd say an experienced modeller would enjoy working out the finer points of the models (the Intro on C2 does suggest making 1-5 & 6-8 models before tackling the No.9's). Fig.4 has full details of one model and one photo of 5 others, The Dragline & Hercules at ⅔ the original size, the others at ⅓.

FIG.3



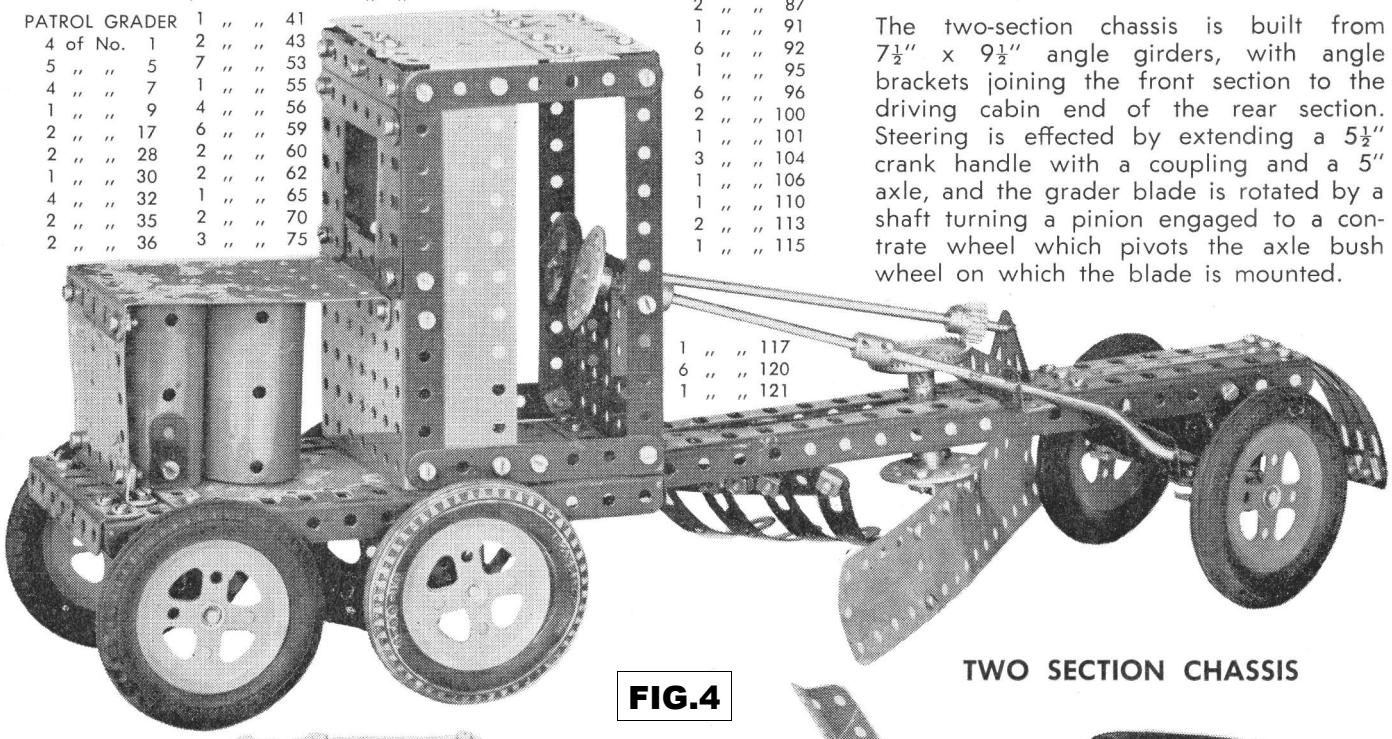
PARTS REQUIRED

PATROL GRADER

4 of No.	1	2 „ „	41
5 „ „	5	7 „ „	43
4 „ „	7	1 „ „	53
1 „ „	9	4 „ „	55
2 „ „	17	6 „ „	56
2 „ „	28	2 „ „	59
1 „ „	30	2 „ „	60
4 „ „	32	1 „ „	62
2 „ „	35	2 „ „	65
2 „ „	36	3 „ „	70
3 „ „	76	2 „ „	75
2 „ „	77	1 „ „	79
1 „ „	87	2 „ „	91
6 „ „	92	1 „ „	95
6 „ „	96	2 „ „	100
1 „ „	101	3 „ „	104
1 „ „	106	1 „ „	110
2 „ „	113	1 „ „	115
1 „ „	117	6 „ „	120
1 „ „	121		

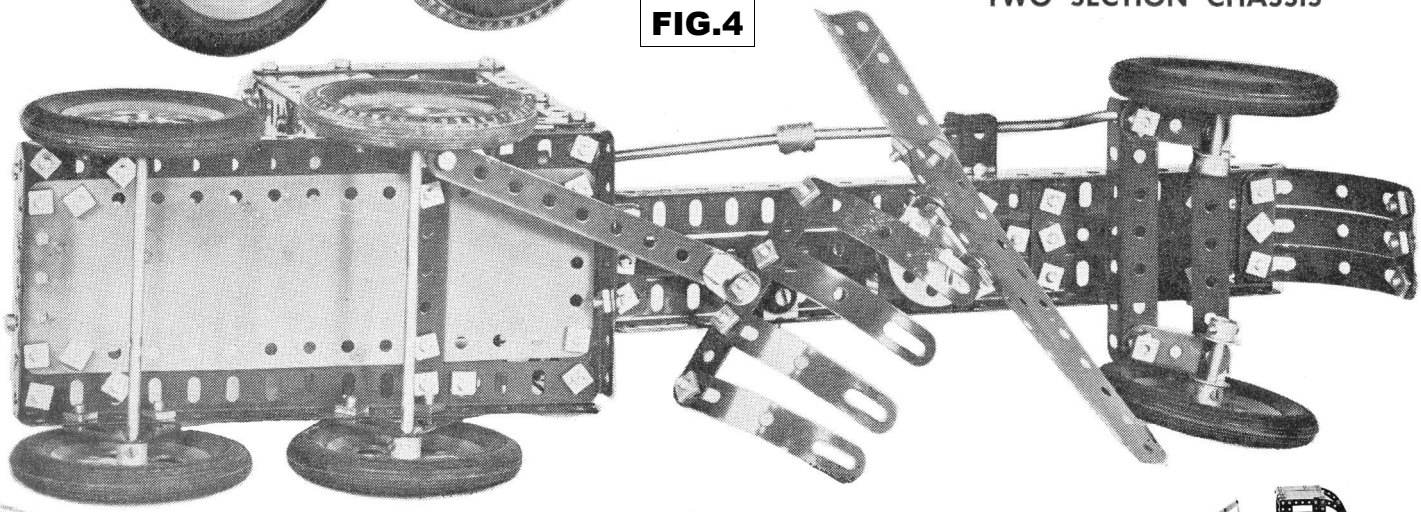
PATROL GRADER AND ROAD PLOUGH, 9-6

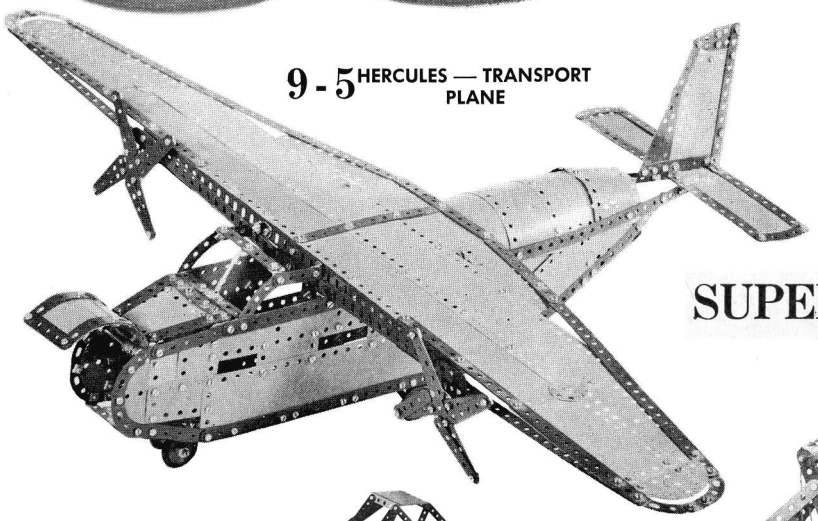
The two-section chassis is built from 7½" x 9½" angle girders, with angle brackets joining the front section to the driving cabin end of the rear section. Steering is effected by extending a 5½" crank handle with a coupling and a 5" axle, and the grader blade is rotated by a shaft turning a pinion engaged to a contrate wheel which pivots the axle bush wheel on which the blade is mounted.



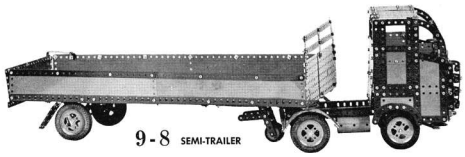
TWO SECTION CHASSIS

FIG.4





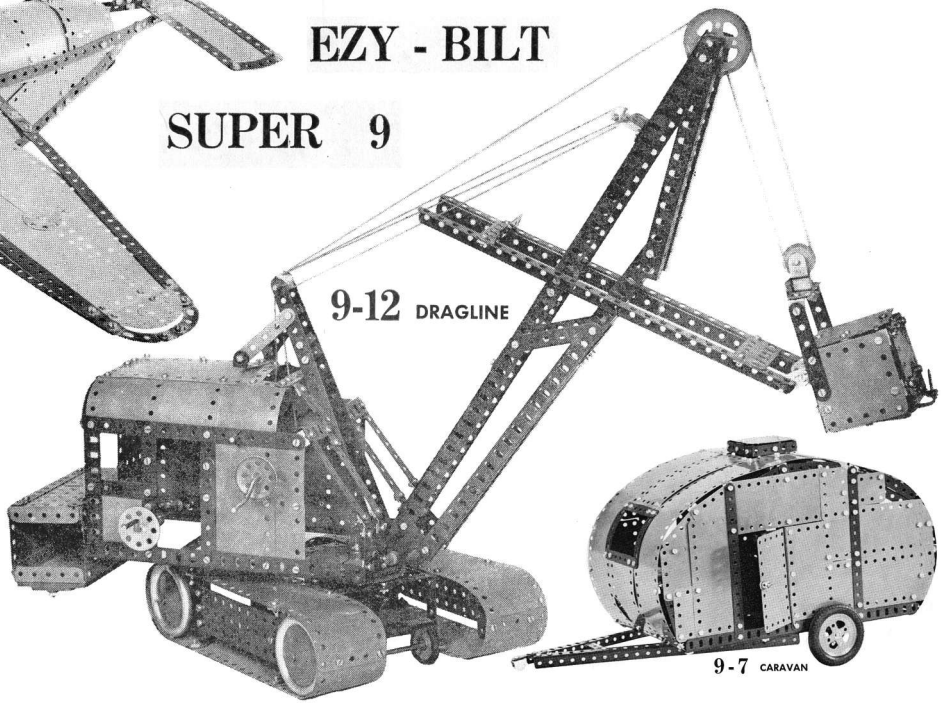
9-5 HERCULES — TRANSPORT PLANE



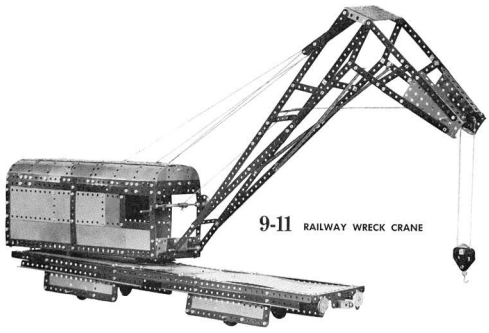
9-8 SEMI-TRAILER

EZY - BILT

SUPER 9



9-12 DRAGLINE



9-11 RAILWAY WRECK CRANE

9-7 CARAVAN

WI.-DI. Until now only the name of this small, early post-WW2 German system was known: this note is about an example of the basic Nr.0 set now to hand, not quite complete but with its manual. It was produced by Ing. W. Diedrich of Hamburg and no doubt the name WI-DI is made from, as is often the case for German systems, the first two letters of the maker's fore- (Wilhelm perhaps) and surnames. The main parts are Strips with a hole pitch of 6mm & special purpose Plates, all made of a non-ferrous metal, probably zinc.

FIG.1

FIG.2

The SETS The set structure is explained in the manual. There were Sets 1-3 which could be added to Set 0 to allow models of, respectively, a Gantry Crane, a Slewing Crane, and a Loading Gantry to be made. Also Sets 0-3 were available as one outfit referred to as Standardwerk. Finally a Set 00 with special & spare parts for use with the other sets.

Set 0 Its box measures 21½*15½*2½cm, with the lid in Fig.1. Compartments inside are formed by one loose, full length card tray; the small parts are in a plain brown card box, 8½*5½*2½cm. The contents of the set are not given but those needed for the manual models are noted in the next section. Virtually all of them are required for the Crane in Fig.6 and its parts list is given below (in B&W for clarity). To the right alongside it, rubber stamped in blue in the original, and no doubt an afterthought, is a list of the Strips with the number of holes or slots in each – it would be virtually impossible to build most of the models without it.


4 Stk. Strebe Nr.1
2 " " " 4
2 " " " 6
1 " " " 8
4 " " " 10
11 " " " 12
6 " " " 14
10 " " " 15
16 " Winkel " 17
2 " " " 28
2 Stk. Deckblech Nr.18
2 " Seitenblech " 19
1 " Dachplatte " 20
2 " Kopfbleche " 21
2 " Rollen " 22
1 " Welle " 24
1 " Kurbel " 36
1 " Hubhaken " 37
1 " Seil
67 Schrauben u. Muttern
No. 1 = 17 Langloch
4 = 23 Rundloch
6 = 9 Langloch
10 = 13 Rundloch
12 = 11 "
13 = 10 "
14 = 9 "
15 = 3 Langloch
FIG.3

The PARTS The different parts in the Set as found (except the Cord) are shown below, with the smaller ones, enlarged, right. One Plate and some sizes of Strip were completely missing but are included in the notes that follow.

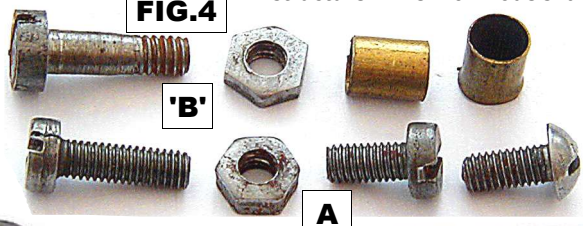


FIG.4

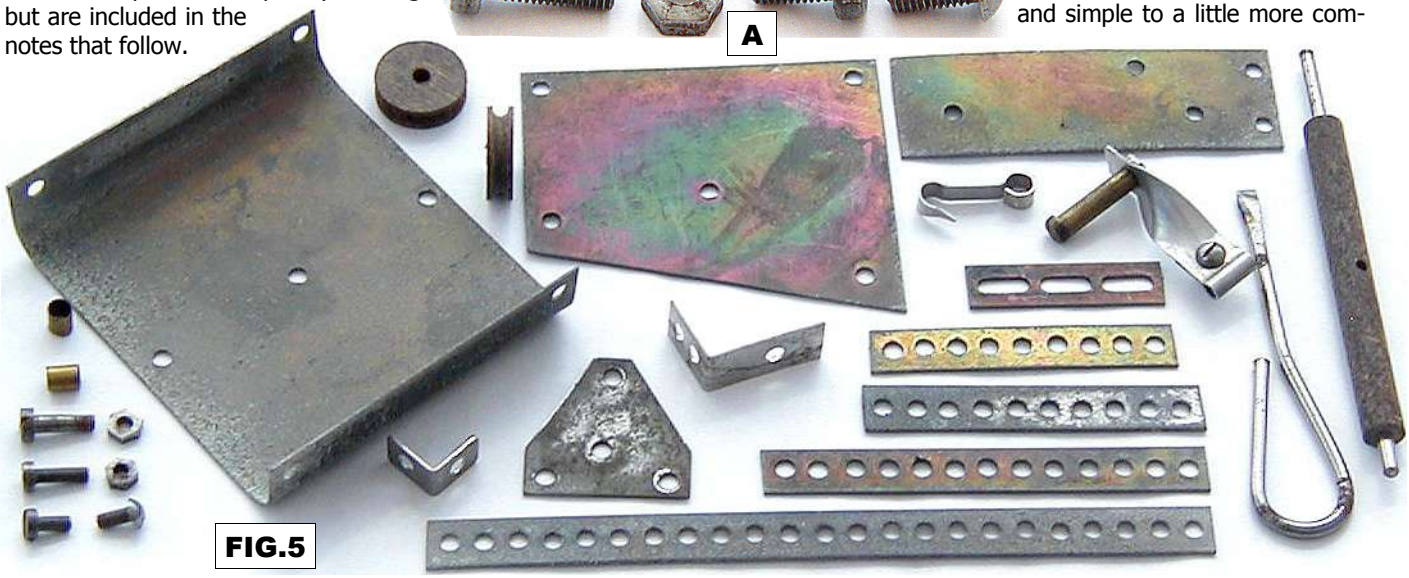


FIG.5

The quantities in curly brackets are those needed for the manual models. Most holes are 3.5mm at 6.0mm pitch • **Strips**, #4,10,12-14, 9.6-10.1mm wide & .8-1.1mm thick, with 23,13,11, 10,9h {2,4,11,1,6}. • **Slotted Strips**, #1,6,15 with 17,9,3 slots {4,2,10}. The slots are 9.5mm long at about 12mm pitch. • **A/Bs**, of aluminium: #17, 1*1h, 8.2mm wide {16}; #28, 1*2h, 10.0mm wide {2}. • **Plates**, see Figs.5 & 6, 8-.9mm thick: #18, Flanged {2}; #19, Side, tapered {2}; #20, Roof, missing, near square {1}; #21, Jib Head {2}. #18-20 fit together with a lengthways hole pitch of 60mm. • **Pulley**, #22, wooden, 17.8mm Ø, 5mm wide {4 – in the models they are usually called up with a Type B N&B, see below}. • **Winding Rod**, #24, 100mm o/a with 3.0mm nickelled steel ends pushed into a 7.8mm Ø wooden 'drum' {1}. • **Winding Handle**, #36, aluminium with a brass sleeve handle held by a long bolt {1}. • **Pulley Block**, #37, it is made from 2 flat trunnions spaced by 3 brass sleeves, the lower one carrying the aluminium hook; a Pulley runs on a Bolt B through the centre hole {1}. It's not clear if the Pulley & Bolt B are additional to the 4 of each needed in one model – only 4 of each were found in the Set. • **N&B**: '**standard**' (row A in Fig.4), M3 with Nuts 5.5mm A/F, and Bolts 10,6,6½mm u/h, with 5.5mm Ø heads {67; 63 Nuts & 12,38,19 Bolts found}; **Type B**: the Pulleys run on these, with Nuts 6-6¼mm A/F and 11mm u/h Bolts, with a 6mm Ø head, and a 3.4mm Ø shank threaded over about 4mm. The thread is 3x.6mm, and the only one of this size in the list in 7/169 was an early French standard. {4}. • **Screwdriver**, of 3mm nickelled steel wire, 78mm o/a. • **Cord**, a short length of loosely twisted twin strand blue Cord was in the Set.

The MANUAL It has 8 unnumbered beige pages, 207* 143mm, printed in black; the front is shown in Fig.2. The PR along the bottom is 'Auerdruck GmbH., EP 36, Hamburg 1 – 3027/1000/8.47/Kl. C 9/982'. p2 has an Intro including the set structure. The 10 models are on the remaining pages from Sägebock (Sawhorse) to the Drehkran (Slewing Crane) in Fig.6. The latter is the only large model, and the only one in which any of the Plates are used; the others vary from small and simple to a little more com-

plicated, the Tipping Wagon in Fig.7 for example, followed by a Swing and a Seesaw. There is a large drawing & list of parts for each – the models here are ⅔ their original size.

REMARKS Some of the parts are unusual and there were one or two nice touches in their design. For example the Bolts 'B' to carry the Pulleys which obviate

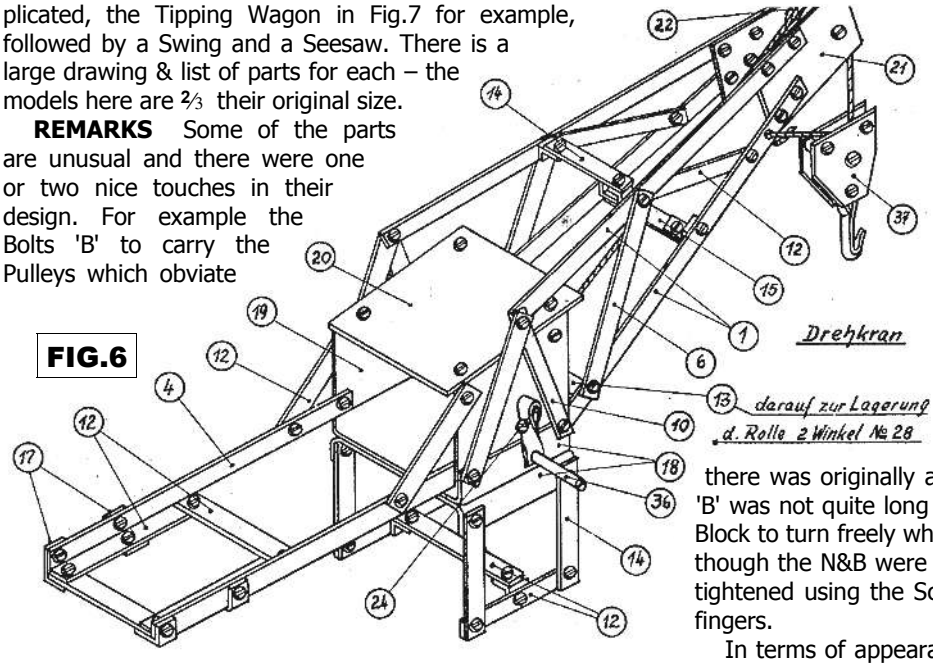


FIG.6

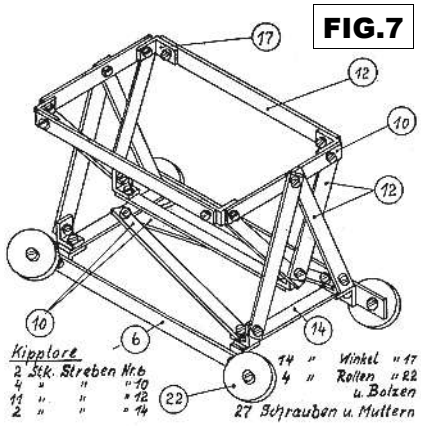


FIG.7

the need for lock nutting, and are sized to give minimal side play. Also the hole through the centre of the Winding Shaft for the Cord. Taking tolerances into account the 6mm hole pitch just allows two Nuts or Bolt heads in adjacent holes.

I made the Crane, though slightly simplified because of the parts missing from the Set. The parts are reasonably accurately made and fitted together well despite the difference in the pitch of the holes and slots. The only difficulties were a) how to join the jib head and allow the Pulley there to run freely – perhaps there was originally a longer Bolt in the Set; and b) the Bolt 'B' was not quite long enough to allow the Pulley in the Pulley Block to turn freely when its Nut was fully tightened. Otherwise though the N&B were a joy to use because they could be fully tightened using the Screwdriver and holding the Nut with the fingers.

In terms of appearance the completed model suffered from the jib being too wide at the cab end and the Jib Head Plates looking rather clumsy. In both cases it would have been difficult to make improvements without using appreciably more parts and without adding some extra holes to the Flanged Plate.

Finally my thanks to Thomas Morzinck for help with the German in the Manual.

More on GLORIA Ebay photos of a GLORIA 1 set from this small German system were shown in 28/839. Now thanks to Jan Ringnalda more information is to hand from a set, again a No.1, which he was able to examine, courtesy of its owner, Erik Beek.

The packaging is the same as the OSN 28 example, and the parts too, but their holes are 2.9mm Ø at 6.0mm pitch, and are thus much smaller than the 4 & 10mm mooted as possible earlier. The parts found in the Set are listed below, with explanatory notes as necessary to supplement the OSN 28 account. All the sheet metal parts are .88mm thick.

Strips: 8,8,8,6,12,5,10,6,10,10,8 of 25,21,15,13,11,10,8,7, 6,5,4h. 1 **A/G** (below), 7h long with arms 6.9*8.3mm (2 were in a set seen on Ebay). **DAS**: 2,6,4,8 of 1*4,5,6,7*1h. 1 **Single Bent Strip** (right), 19.3mm long o/a (the possible 1*2h A/B in OSN 28). 1 **Bush Wheel**, with a 19.3mm Ø, 4h disc, & a 6.5mm Ø boss. **Pulleys**: 1,2,14 of 25.6, 18.6, 10.5mm Ø. The 10.5mm has no boss & looks to be zinc. **Collars**, 5mm long: 3,4 of 6.5, 5.9mm Ø, the latter with a 4.6mm Ø spigot, 1.4mm deep. **Spacers**, 5.9mm Ø: 3 each of 2.5 & 2.7mm wide. **Axles**, 2.0mm Ø: 1 each 150,52.5,31.3mm long. 2 **Crank Handles**, 45mm long o/a. **N&B**, M2: 40,6,3 Bolts, 5,10,12mm long; 55 Nuts, 6mm A/F.

Of the 5 sets seen on Ebay (all No.1), 4 have the model leaflet shown in OSN 28. It is a single folded sheet with the inside below. The leaflet in the remaining set also consists of a single sheet, but much larger and folded to give a landscape format, and then folded into three to fit into the box. Its cover design is the same as the lid label; Fig.3 is the Ebay photo of its inner face.

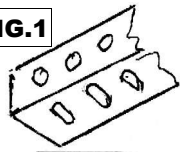


FIG.1

FIG.2

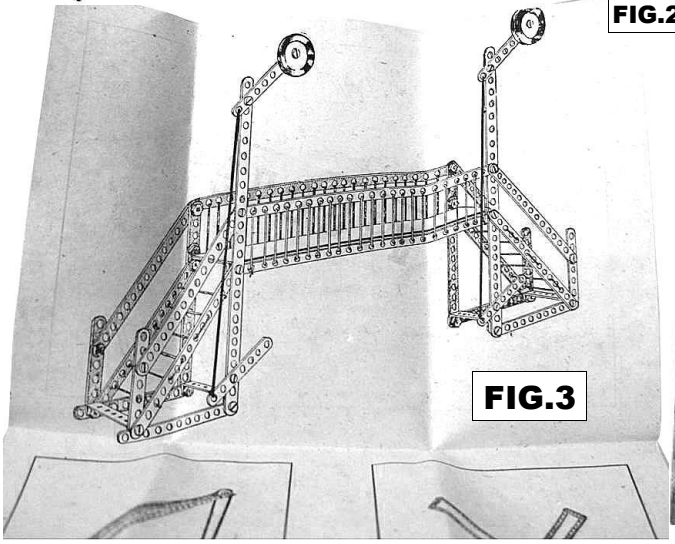


FIG.3

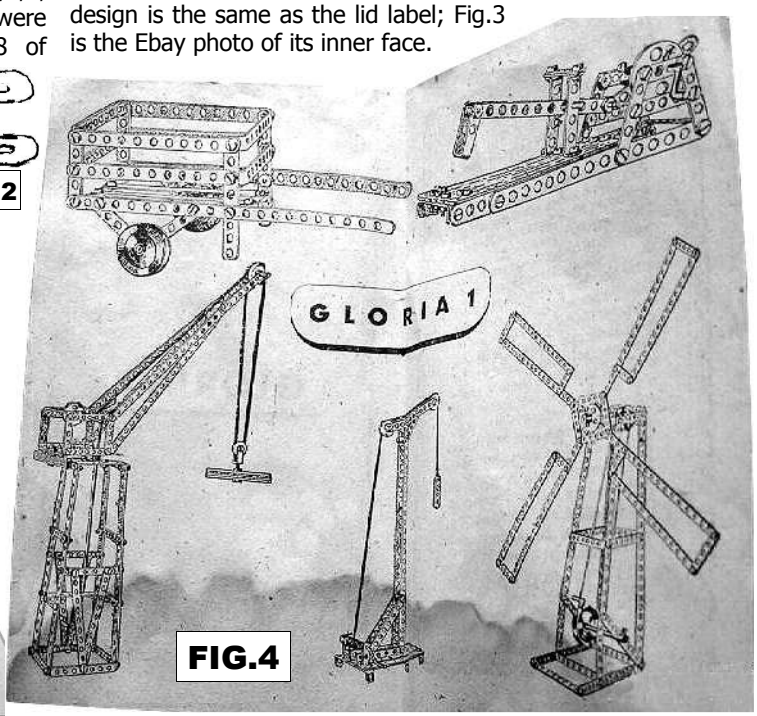


FIG.4

METABA An Ebay snippet about a No.1 set from this small German system appeared in 42/1273 It was in a cardboard box but now Jean-Pierre Guibert has kindly sent details of his set, also a No.1, but in a wooden box. Especially welcome this because some of the 'guesses' in OSN 42 were wrong, particularly the hole pitch.

FIG.1

FIG.2

Name: METABA is no doubt derived from METAllBAukasten.
Maker: 'P. Spier, Oberingenieur, Mag.-Bergedorf, Grasweg 11' is on the bottom of the box and could be the maker or distributor. Since 1938 Bergedorf has been part of Hamburg and is known as Hamburg-Bergedorf (was 'Mag.' on the box actually 'Hag.'? If so it could be an abbreviation of Hamburg). Grasweg was the street but it seems not to exist today.
Date: not known but from the name on its bottom, the box may be after 1938 (the Ebay vendor of this Set mentioned the 1920s; late 1930s or early 1940s was suggested on Ebay for the parts in OSN 42).
References: none.

The PARTS Fig.1 shows the 11 different parts in the Set.
Holes are typically 3.15mm Ø at 10mm pitch.
Thread M3.
Material/Finish Plain steel.
Details The **Strips** are 1mm thick and 9.5mm wide. The **Pulley Disc** is 25mm Ø. The **Axle** is 3.1mm Ø & 85mm long, with the ends threaded. The **Bolt** is 10mm long.

The SET The box (Fig.2 & 3) has a sliding lid and measures 20*25*3.8cm. Fig.4 shows the lid label with a 4h Wheel Disc and a boy with slightly unusual clothing.

FIG.4

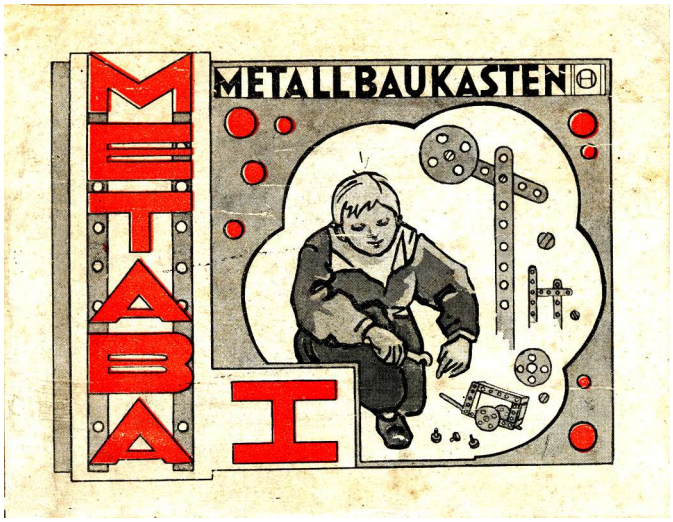
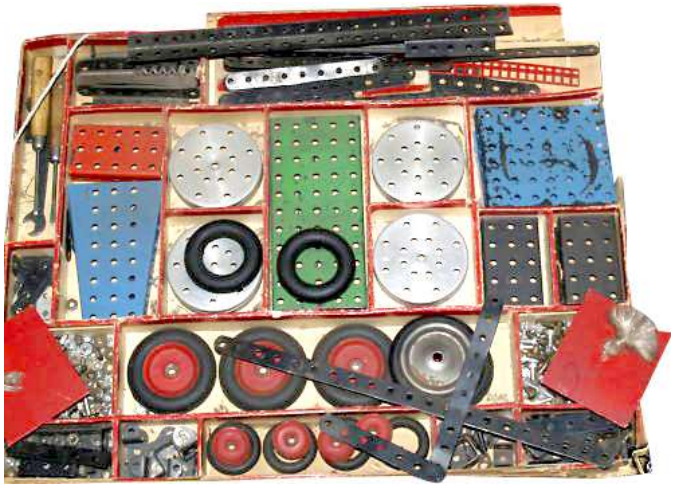


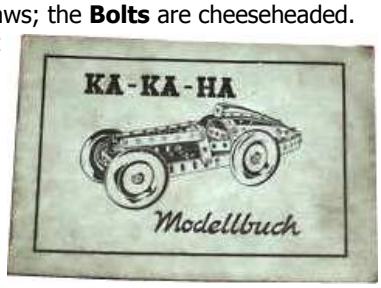
FIG.3

Snippet. Another KA-KA-HA Outfit This example seen on Ebay gives a better idea of the system than the one in 36/1090. The lid is as before except that the label is much cleaner and the background colour is a pale orange. The box is probably a little larger with, as can be seen below, somewhat different partitioning.



A few observations about the parts. • The **Strips** that can be seen are 7, 11, & 21h long, and the **A/Gs**, 21h, & 5h probably. • The **Flanged Plates** are: 11*5h, 7*6h (blue), 5*3h (black), & the 8h long Sector Plate. There is also a 5*3h **Girder Bracket** (red, above the Sector Plate). • The red **Pulleys** with Rubber Rings look genuine; the nickel one looks out of place but there were nickel ones in the OSN 36 set. The 2 loose fat Rubber Rings are no doubt foreigners. • No bosses can be seen, no Axles or Screwed Rods either. • There is an unusual red part top right in the box which looks rather like a long narrow **Windmill Sail** at least 14h long with a rectangular slot opposite each hole. • The **Nuts** are hexagonal and match the Spanner's jaws; the **Bolts** are cheeseheaded.

Right the manual that was with the set. It was said to have 23 pages and a PR on the back of 'Satz und Druk IV/10/06 Satke/ Halle W 335 1000 4009/ 51'. Satke is probably the name of the printer and Halle the town.



There are 2 towns called Halle in Germany, one (Halle, Westfalen) near Bielefeld, and one (Halle, Saale) 30km east of Leipzig in what was East Germany. It seems likely that the 'W' after Halle indicates Westfalen but the only result of a Google search was a G.Satke, printer, in a 1950 directory, at 26,28 Große Steinstraße, in Halle, Saale. If there is a date in the PR then '335' is one possibility, but 1951 is perhaps more likely.

Snippet. A MÉCAVION Jet Set No.55A A model made from the parts in the Set below was shown in 40/1202. The box size was given as 50*35cm.

Of the 5 aircraft on the Set's lid only the two with swept wings, top right & bottom left, look as if they can be made with the parts in the Set. And as far as can be seen the only difference between them is the position of the Tailplane on the Fin. No doubt the other models need the 55B outfit mentioned on the model leaflet in OSN 40, and it isn't known if it was a larger or an add-on outfit.

In discussing the parts the photos in OSN 40 help to explain how they are assembled. The main wing & tail parts are obvious in the box, and, on either side of the Tailplanes, the curved Straps that pass under the fuselage to attach the Wings to the fuselage. The basic fuselage is made from 8 parts, 3 yellow & 5 red, with the 4 Nose & 4 Tail Sections butt jointed, and with the Side parts lapped by the Upper & Lower Sections.

The smaller parts include the formed Nose Intake & Tail Jet Fairings at the top of the box, inboard of the yellow Nose Sections, each of which is fastened to the fuselage by 4 N&B. Next to these are the Undercarriage Legs which bolt onto the underside of the Wings and look to be hinged to allow 'retraction'. Next again, the Wheels with red Tyres. There ought to be a matching nose wheel but there is no sign of any parts for it – perhaps they are in the small parts box. The slot in the yellow Lower Fuselage Nose Section might allow it to retract. The transparent Canopy is next to the tip of the starboard Wing with lugs at each end to bolt it to the fuselage, and there is a Pilot in a seated posture to the left of the Fin. A wooden handled Screwdriver can be seen bottom left, and a Spanner with a ring & an open end bottom right.

That leaves 4 'mystery' parts: the 2 narrow, tapered yellow part above the Wings; a dark grey tapered part just above the parts box with the narrow end slightly hooked and a small hole at the other (a tool of some sort?); and a red, narrow part with multiple bends to the right of the yellow Lower Fuselage Nose Section (perhaps it is used inside the fuselage to provide a seat & instrument panel for the pilot).

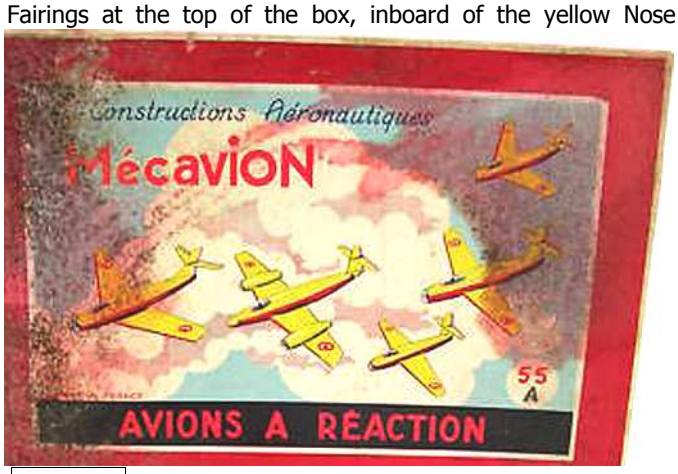


FIG.1

FIG.2

Snippet. 'New' System: TECHNICO The set shown here was offered on the Australian Ebay. The box lid is identical to the manual cover in Fig.3 except for the name of the set across the top (Fig.1), and 'Instruction Book' at the bottom is replaced by text in the top & bottom yellow lines which is too small to read.

The main parts that can be seen in the open box (Fig.2) are a 5*10h Flanged Plate, the Wheels, and 2,3,4,5,6 & 10h Strips. 3*5h, 4*5h, & 5*5h Plates, no doubt flexible, are used in the models in Fig.3, and they are probably under the Flanged Plate in the box. The empty recesses in the box look to have housed a Screwdriver, a Spanner, and (to the left of the 2h Strip) 2*2h Flat Trunnions.

I can't read the name of the model top right (something Fighter maybe), but the others, going clockwise, are a Mini-car, Dragster, Helicopter, Truck, & Cargo Ship.

FIG.1

The 10h size of the Flanged Plate is unusual, likewise the surmised Flat Trunnion, and also the inclusion of 4h size parts in a small set. In combination they don't bring to mind any other system and so perhaps, Australian or not, this brand was not widely sold internationally.

FIG.2

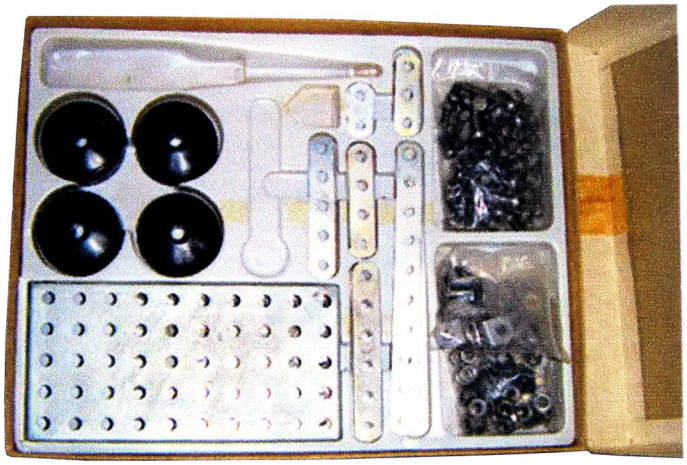


FIG.3

Snippet. BOJA Metall-Lehrbaukasten This German system is mentioned in Baukästen but with no details other than that it dates from post-1945, and may have come from Thuringia in East Germany. The poor Ebay photos below (changed to B&W for clarity) show the heading and 2 models from the model sheet for this 'metal educational building set', and the whole sheet with the set number, 'Nr.3', after the name along the top. All that can be said is that Sheet shows a fair range of models for what was no doubt a small system with conventional parts.

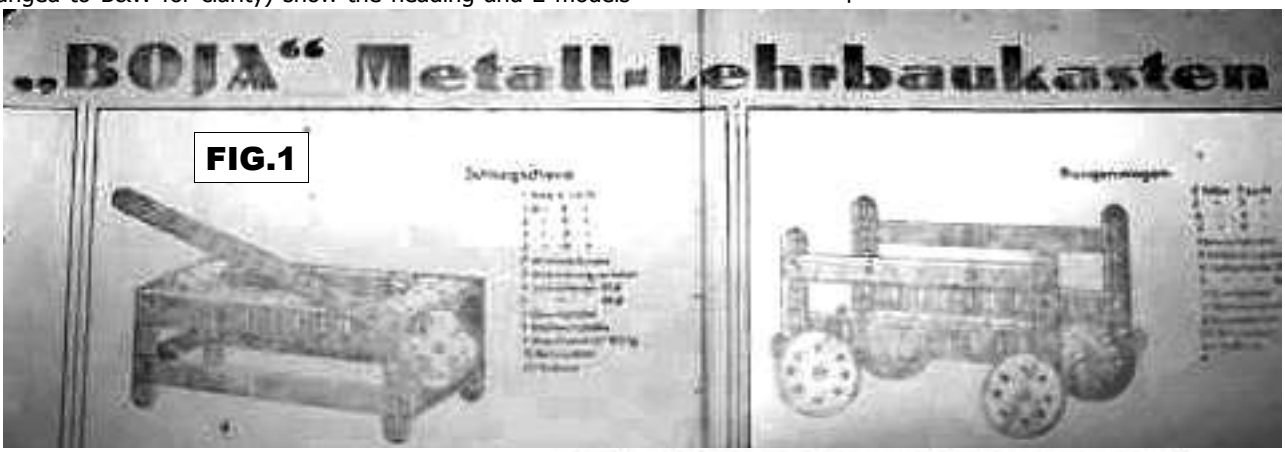


FIG.1

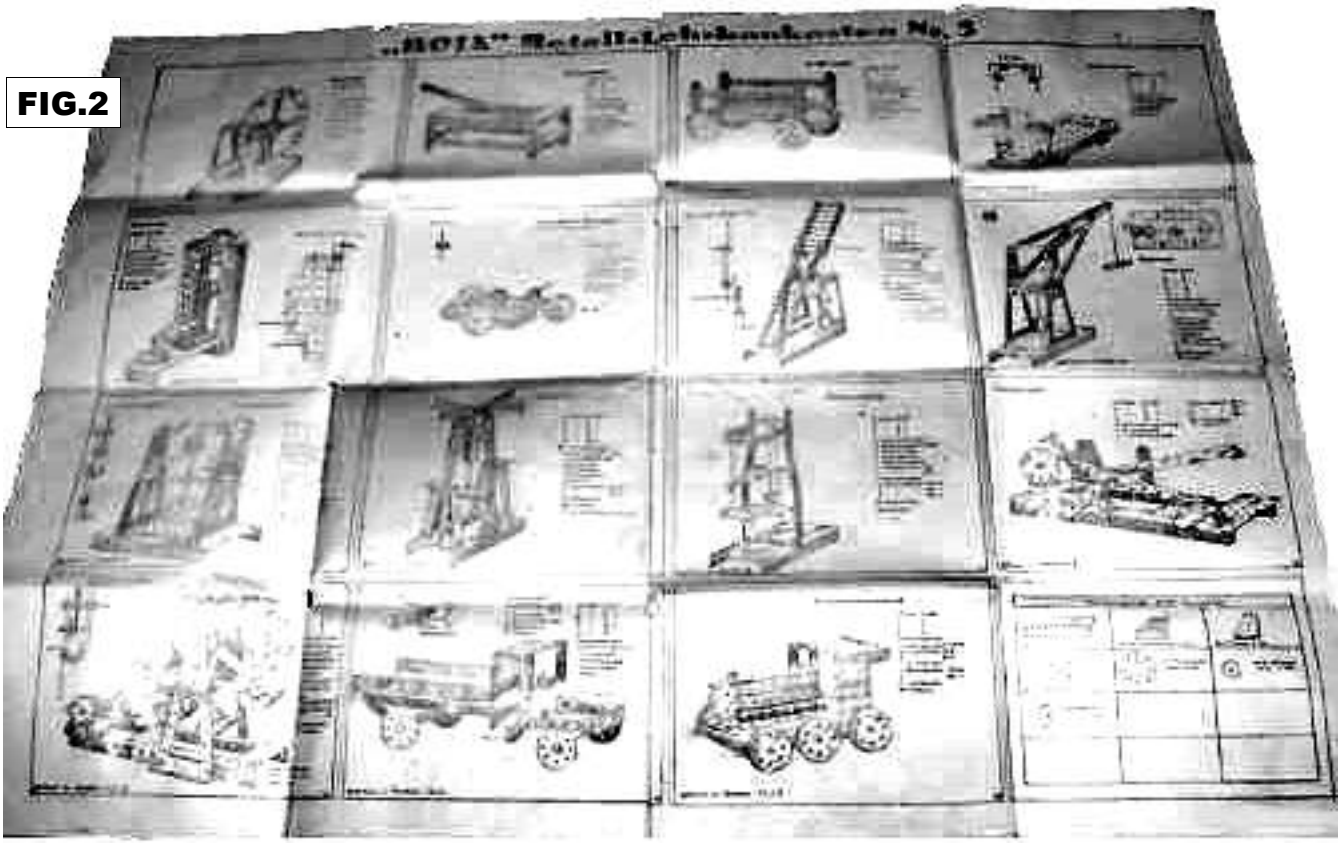
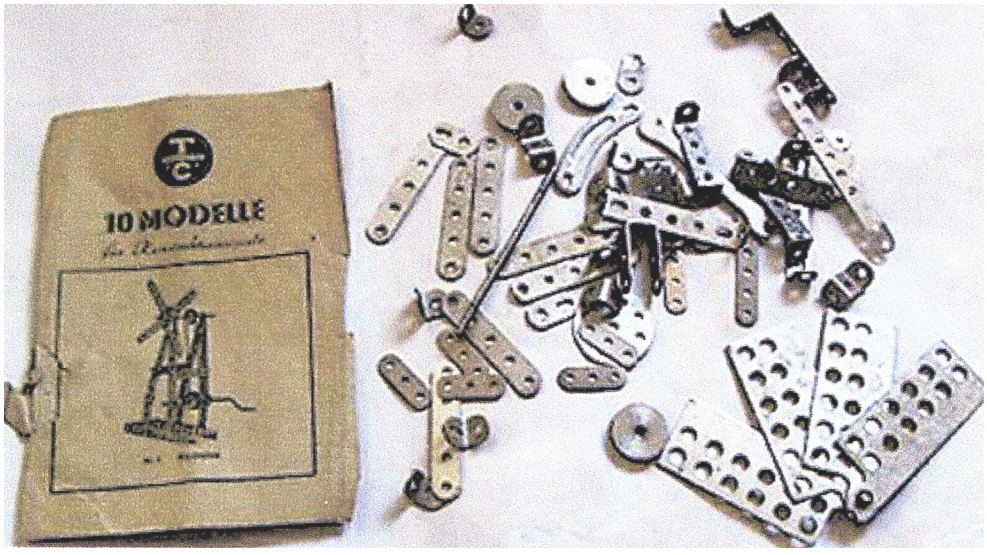


FIG.2

Snippet. KONSTRUKTIONSSPIELE?

A KONSTRUKTIONSSPIELE (K'SPIELE henceforth) box lid was shown in 38/1134 and the manual in the Ebay photo right, said to consist of 2 sheets, carries the same T. & H. Co. logo. The name in small print under 'MODELLE' may be K'SPIELE. '10 MODELLE' is mentioned in Baukästen along with the name K'SPIELE (in OSN 38 '10 MODELLE' was wrongly said to mean 10 sets rather than models).

The parts were said to be aluminium. None of them except perhaps a Pulley and 1 or 2 Strips, could be seen in the OSN 38 mixed lot of boxes and parts, and it's not obvious that the Windmill on the manual cover includes those rather unusual Sails. So there is perhaps a slight doubt as to whether the parts 'belong' to the manual, and if so whether they are from the same series of sets as the OSN 38 outfit.



Snippet. 'New' System: DER KLEINE INGENIEUR
From the Ebay photos below of this rare German system it is clear that it is not the DKI mentioned in 17/476. Looking at the Crane and boy on the label they are very similar, though not identical,to those used for METALLIX, see 28/821 & 30/889, and the colour scheme is the same too. One other possible connection, METALLIX was made by the Hanover firm, Schreiner & Firmont, and according to the Ebay seller this DKI set also came from a Hanover factory (unnamed). In fact, with a little imagination the Schreiner & Firmont name, followed by 'Hannover' (the German spelling) can just be seen in the row of small, black text along the bottom of the manual cover.

'No.1' is printed at top right on the lid label & manual cover, and comparing the box with that of the METALLIX No.1, the partitioning is similar although the DKI box is a little larger. Most of the DKI parts, leaving aside the Tyre, could easily be the same as METALLIX except that the 5*9h Flanged Plate has no centre cutout. If the 2 long Screwed Rods in the box are 98mm long, as in METALLIX, then the hole pitch scales at the METALLIX 14mm.

If DKI & METALLIX are connected the DKI name in Sütterlin script, and the German/English used for METALLIX, might point to DKI being the earlier version.

FIG.1

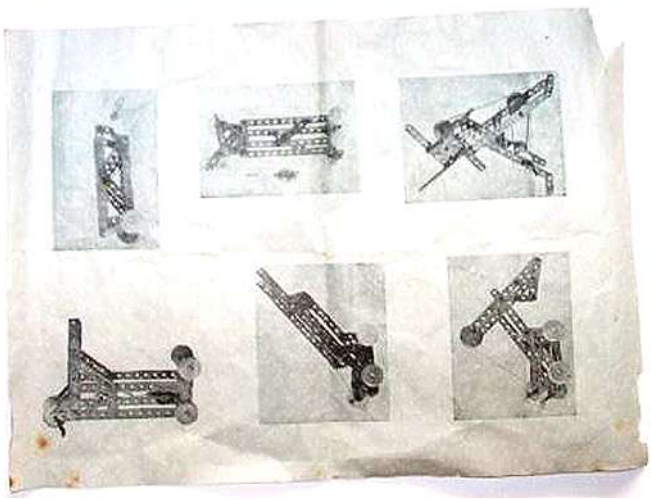
FIG.2

DER KLEINE INGENIEUR [2]: S1 **OSN 4/1320**

Snippet. 'New' German System: KONSTRUKTOR STAHL-BAUKASTEN The box measures 21*13*3cm and the small print on the lid below is 'Otto Hatje | Groß- und Außenhandels-G.m.b.H. München' (a company engaged in wholesale & foreign trade).

The main structural parts that can be seen are 4, 6 & 12h Strips, and the 3*4h Flanged Plate (with centre hole). The hole spacing scales at about 13mm. Bolts can be seen but no conventionally shaped nuts. Instead, the small light grey, slightly tapered parts which from the look of them might be plastic or aluminium. If the former they might just push over the ends of the Bolts and the Axles but in either material they could have an internal thread and act of a form of Nut. If so the ends of the Axles must be threaded. Two of these 'Nuts' can be seen to be open on one side and if that is because they are broken, it would point to them being plastic. It seem unlikely but if they were all like that it would allow them to be gripped while being tightened. The Wheels look to be 'spoked' with webs and again could be plastic. Other parts are the wire Screwdriver with a strange lump amidships, the Crank Handle through the middle of a Winding Drum (or more likely, a cotton reel), and the flat Hook on the end of the white Cord.

No other parts can be seen in the models except that Cord passes over what ought to be a Pulley at the top of the jib in the Crane on the lid, and at the top of the bucket arm in the Digger bottom right on the model sheet.



KONSTRUKTOR STAHL-BAUKASTEN: S1 **OSN 43/1320**

LINX and LYNX, this and that For anyone unaware ot it, LINX was the brand name used by the Bay Manufacturing Company for a few steel parts intended to be used for simple DIY repairs to wooden frameworks and the like; LYNX was a constructional system which started using only the DIY parts, or very similar ones, and grew over the years to a have a reasonable range of parts, ultimately nicely made of anodised aluminium. Something of this progression was given in 16/436 and later notes in 19/552 & 35/1061. Various items of interest have since come to hand, mostly relating to the Phase 1 1946 period. My thanks to all who have contributed material.

Where did it start? The first 1946 address for the Company was just Morecambe, but, see later, Windsor Terrace, Sefton Road, Morecambe was also used in 1946. Thereafter Sefton Road, or just Morecambe, was used (along with all the non-Morecambe addresses during the early years) with Sefton Road in the last known ad from 1952. So Windsor

Did LINX/LYNX began here?

FIG.1

Terrace, Sefton Road sounded promising as the home of LINX/LYNX and David Hobson has found some interesting references. In those days there were no DIY shops/stores, and LINX would have been an ironmongery item, so was there an ironmonger at Windsor Terrace? Yes, and the photo above is of a shop on the corner of Windsor Terrace and Sefton Road. Its sign reads 'Rogers, Furnishing Ironmonger', and in the original photo 'Sefton Rd' can be seen of the dark end wall. The date of the photo isn't known but Rogers, ironmonger, was listed in the 1947 telephone directory at the Windsor Terrace address. And there is one possible, albeit very tenuous connection with the toy trade because a 1934 directory lists Rogers, F.W. & L. under Fancy Goods & Toys at Main Street., Lower Heysham, a town near Morecambe.

I can't find Windsor Terrace on any of the online street maps but Fig.2 is a photo from Google's Street View which looks like it – it is now on the corner of Sefton Street and Heysham Road, and no doubt the latter name was adopted as more houses were built along from Windsor Terrace. And the Furnishing Ironmonger whose enterprise may have given us LINX and LYNX is now Dorothys Launderette.

FIG.2

And as it is today.

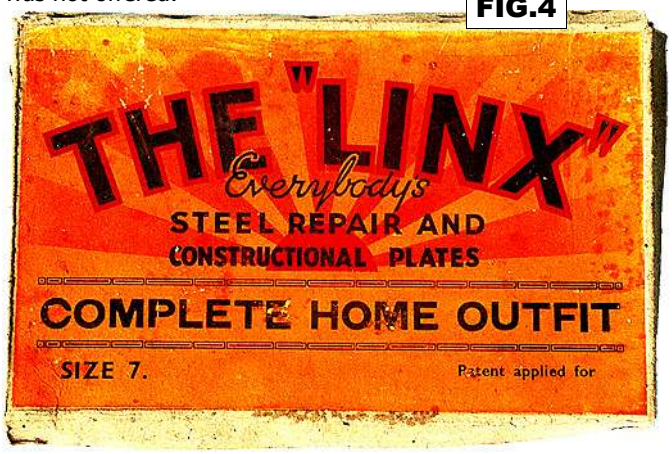
The LINX Repair Outfits. The first reference to them in OSN was the Feb. 1946 ad reproduced in 16/436 for 5 outfits priced at 2/-, 2/9, 3/9, 5/- & 15/6, plus refill packets at 6d to 1/-. But David has found a paper packet which has 'Packets 6d to 5/-' on it (right), and so may be earlier. The Diamond, a rather unusual 'OS' part, but well suited for appropriate repairs, is featured.

FIG.3

In an April '46 ad only the largest 15/6 outfit was mentioned (together with the packets of parts price 6d to 1/-, as in February). Its lid was shown with 'Size 7' on it, and apart from being in B&W, it looks identical to the one below, except that the 'Size 7' line is above the 'Complete Home Outfit'.

An Ebay photo shows a lid identical in design to the one in the April ad above except that the background (in the Fig.4 colours) doesn't have the sunray pattern on it, and it is Size 6 (a size not encountered before) rather than Size 7. It is probably later than the April ad but before Sept. 1947. Later than the April set because a leaflet with it advertised the DIAMOND-, STRIP-, ANGLE-, & BRACKETLINX Packets at 7½d, 10½d, 10½d & 1/-, the slightly higher prices that were given in a Sept. 1947 price list. Earlier than Sept. 1947 because by then Set 6 was a LYNX constructional set and the only Repair outfits were Nos.7 & 8. (No.7 still cost 15/6 so the change from Size 7 to No.7 may not be significant, and in fact none of (the admittedly) few Repair sets seen have 'No.' rather than 'Size' on them.) Also each packet was said to contain 6 parts, or 4 'with Screws', and by Sept. '47 the 'with Screws' option was not offered.

FIG.4



The Size 7 lid above is from one of David's sets. Its contents are suspect because they include many 'non-Repair' parts such as Road Wheels, 24h Strips, & 21h A/Gs, and a similar set seen on Ebay has only Packets it it. Its box is formed into 10 compartments by 2 rows of card trays along its length and as seen each contains one 'Linx' packet of parts, as follows: 3 labelled 6 B.A. Nuts & Bolts; 2 Wood Screws; 1 each of Angle Linx; Strip Linx; Bracket Linx; Screwdriver, Bradawl, Spanner;

and one, yellow in colour, with an unreadable name. It is not Diamond though, & this part would be expected in a set of this size. So perhaps there were originally more packets, & the trays would be deep enough for 2 layers. As to date, the prices on the Packets match those in the Sept. '47 list. The inside of the set's lid is covered by an orange label which shows the use of the parts in 'make-do-and-mend' activities. Left one of the more wayout examples (in B&W for clarity) – new crockery was scarce around the end of WW2 and I remember seeing second-hand cups with broken handles being sold on market stalls. The long strip that runs downwards isn't a known LINX part.

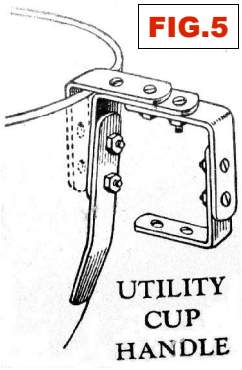


FIG.5

The Construction Sets Examples from 1946 are few and far between and I have yet to see one of the type shown in a Nov. 1946 ad with a lid label matching the MB 4 manual cover (see 16/437). And perhaps there never were any because the set in question was a No.5 and so probably was one of the '1947' range but before the label & manual cover changed to the MB 6 type (16/438).

5 sets thought to be from 1946 are an unopened No.2 from Mike Wright, found in Australia; a No.2 belonging to David, identical to Mike's and unopened when found); a No.3, also David's; a possible No.1 seen on the Australian Ebay; and a No.4 from the UK Ebay. In all they may well represent the evolution of the LYNX packaging during 1946.

FIG.6

The No.2 box, end-opening, is of thin white card 125*90*28mm with the label left. Said label is in the style of the LINX Packet shown in 16/436 and extends to seal the ends. As can be seen the end has 'Temporary Pack' printed on it. A label on the bottom of the box shows a Churchill Tank, the model in the first ever Feb. 1946 ad (16/436 & Fig.8), and a Trailer, as in Fig.7, using the same 3 parts. This label also refers to a Special Prize Competition and a leaflet inside the box offered Special Presentation Boxes of LYNX for any model which was chosen to be included 'in our Large New Instruction Book'. Details were to be sent to 'our Prize Dept., The Bay Manufacturing Company, Windsor Terrace, Sefton Road, Morecambe. Inside the box was a loose Screwdriver, 3 of the usual size, 2½*4", envelopes with the other parts in them, and some fibre waste to stop the items moving about. One of the envelopes is an orange LINX packet, with its price '7½d' and name 'DIAMOND LINX' blacked out. The address on it is Victoria Street, Morecambe. Inside it are 5BA N&B with 51 hexagonal Nuts, and RH Bolts: 34x ¼" & 5x ½". The other envelopes are plain manila: one contains 24 Strips with 4 holes at ½" pitch; the other 12x 2*2h A/B, 4x 2h Corner Brackets (⅝" pitch), 4 Diamonds (¹³⁄₁₆" pitch), 6x 1" Discs, & a 5BA x 6BA Spanner. All the parts are nickelled except the black Spanner. Also in the box, a 'LYNX MODEL INSTRUCTIONAL FOLDER M.B.2 PRICE 2D', a single sheet, 237*164mm, folded once to give 4 sides, and then again to fit into the box. It is printed in blue and the front is shown in Fig.7 (in B&W). Inside are 3 small Aircraft, & a Jeep, while on the back is the Tank on the box, but called just CHURCHILL, and a note saying no building instructions are provided because 'the makers want you to use your own imagination'. All the models show the LINX style Strip with the closed-up end holes although this is less noticeable in some of the models, the Trailer for instance. Perhaps a deliberate ambiguity after the ½" pitch for the 4h Strip had been introduced.

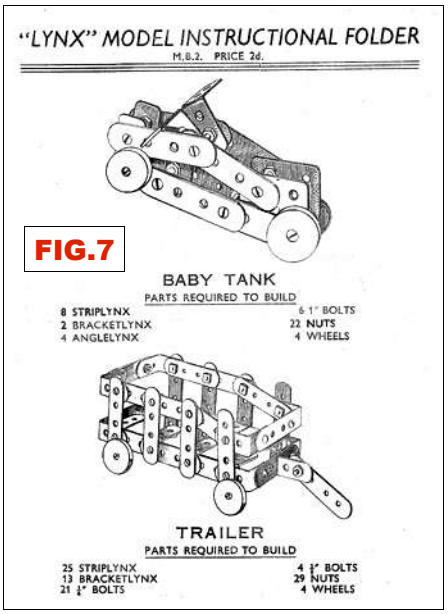


FIG.7

The No.3 was in a similar card box but 134*81*55mm and it had been opened. Its label below originally extended to seal the ends and 'No.3 LYNX TOY Constructional Outfit' is printed there with a price of 9/2 written on in pencil. The parts were

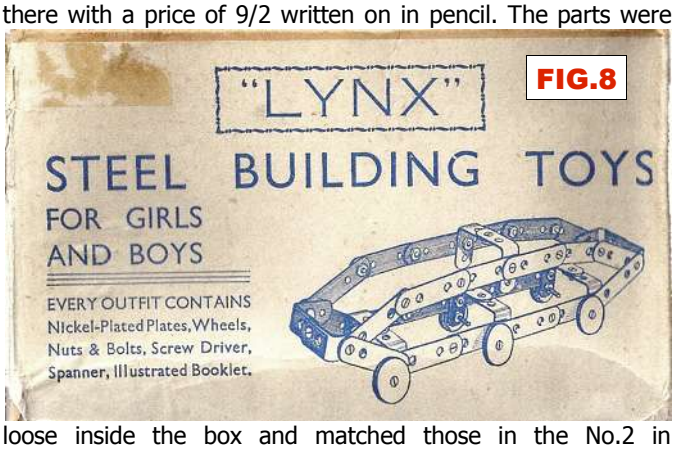


FIG.8

loose inside the box and matched those in the No.2 in dimensions & finish. They comprised 67 Nuts; 54x ¼" & 10x ½" RH Bolts; 30 Strips; 18x 2*2h A/B, 8x 2h Corner Brackets; 8 Diamonds; 8x 1" Discs; a Screwdriver & a 5BA x 6BA Spanner. Missing were the Model Leaflet or Manual and, no doubt, the parts envelopes.

The No.4 The centre and top left corner of its 13*8*1" lidded red box, below (with the corner of the manual bottom left), has a label of the same design as the No.3, and perhaps

FIG.9

it is the same size too. From the original of the open box overleaf (Fig.10) and the other Ebay photos, the following quantities of parts seem likely: 38 or 48 Strips (43 are needed for one of the manual models; 24x 2*2h A/B, 18 (or possibly 14) 2h Corner Brackets; at least 12 Diamonds; 12x 1" Discs; a Screwdriver & a 5BA x 6BA Spanner. Also the orange LINX packet as in the No.2 with the price & name blacked out. It was said to be unopened and to contain 'screws and spring clips', but in the absence of Axles one wonders about the Clips.

FIG.10

The parts look to match the earlier ones except for the blackened Screwdriver. The manual cover and 4 of its model pages were shown and these match exactly the MB4 manual described in 16/437.

The No.1? This came from the Australian Ebay and the box right is 5*2". It is thought to be a possible No.1 because it is smaller than the No.2 described earlier. From its red side it probably has a lid and so matches the No.4. The 'Tank' label is as before except for the conflation of the name and the line of text under it.

FIG.11

MISCELLANEOUS 2 unconnected items. • Jack Little wrote that a company called Lincoln Industries Ltd. of Balm St. & Nuffield St., Newmarket, Auckland, New Zealand was listed in a 1950 business directory as a manufacturer of Lynx toys. • 2 additional differences between the MB 6A & MB 6 manuals (see 16/438) are that in the MB 6 the address of the maker is 171 Great Portland Street, London W.1, and there is no note on p'16' about packing the Spring Clip with paper if it slips.

CONSTRUCTION in 2010 from the Eitech web site. 9 new sets have been added, including a large Crane Set, and 5 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*,80,83,84,87,91,92*.

FIG.1

Set 09

FIG.2

Set 35

The lids of all the sets now emphasise the 'eitech' name in the style of the sets shown here.

FIG.3

The New Sets. • **No.09** is a 440+ part set for 3 models, and the web picture is shown in Fig.1. Sets 135 & 142 are suggested to motorise the models. • **No.34** is the Eiffel Tower set No.133 but including a 6m long 'light rope' to illuminate it internally. • **No.35** has 960+ parts in a wooden box to make 3 Cranes 'up to 90cm high', as per Fig.2, though it's hard to see much detail. Features are listed as 3 Geared Motors with independent remote control, and the jib slewing on a Ball Bearing. • **Nos.45, 46, & 56** are nice 'simplicity' models of a 7cm span Biplane, a Rocking Horse, and a Tractor & Trailer (Fig.3) using 2 & 3cm Discs as wheels. • **No.57** is a slightly larger Buggy (or perhaps it's an SUV model). • **No.75** is a Solar set with the Cell at the centre of a horizontal rotating arm mounted on top of a 10cm high pylon. The arm, some 25cm long, has a 1v Motor at one end, and is driven by a red plastic Propeller on the Motor's output shaft. At the other end is a small Monoplane – the No.45 model. 2 other models are possible. • **No.92** is a 180+ part set for 3 models, two of which are a Race Car & a ?Quad Bike. Their Road Wheels look like those in No.09. Accessory Sets 135 & 142 are again suggested to motorise them.

The Deleted Sets. • **No.18** was for Cranes, see 35/1062. • **Nos.51 & 52**, small sets for a Helicopter & a Biplane, see 35/1062. • **No.82** for small 'Racers' see 37/1107. • **No.85** to make 3 small models, either a Quad Bike, a Race Car, or a Sports Car. It was introduced in 2005 but I don't think it has been mentioned before.

Accessory Packs & Add-on Sets. These continue unchanged except that • **No.137**, the string of lights for the Eiffel Tower, is added; • **No.115**, the kit to motorise the Loco No.31, is listed again; and • **No.650080**, Tools, is no longer included.