

EDITORIAL An Index for OSN 1-30 has been compiled with 20 pages in the same style as before. I'll have photocopies made at the beginning of December & if possible please let me know before that if you would like one. The cost will be £2.30/2.90/3.80 for the usual postal zones. I've also added a page to the OSN web site (www.osnl.co.uk) with the full Index on it, and it can be printed off for free - it's a large file though so may take a while to load with slower connections.

Work on updating the Database is underway and I hope to have it ready before the next Issue. There will be more space than before for additions to the main section, & it's likely to have 56 or 60 pages. At most the cost will be £9.50/10/11, & if you would like a copy it would help if you could let me know before Xmas. I hope to put the main, alphabetically sort on the web site but the total width is about that of a landscape A3 page & I've yet to find a way of persuading my A4 printer to print the right half of such a page from the web page, or a way to download the file in a form that would allow it to be printed.

Another addition to the Site is a page showing the parts of the French AUTO-CYCLE system. This is because I plan to include an article about it in the next Issue and there will not be room to show all the parts there. Of course enough about them will be included in the article to make it understandable but it seems a pity not to make all the details available. In this case they occupy 8 A4 sides and it should be possible to print each of the original sides onto a landscape A4 or US Letter page.

It may be that I will add other material of like nature in the future, and possibly articles for which there is no immediate space in the Newsletter. Another reason for using the web to supplement articles is that copies of MCS are no longer available (except Tim's MECCANO CD of course), and so an increasing number of readers cannot refer to it.

Which brings me to the MCS Extra Sheets that were available with Issues 7-27. A new reader recently asked me if I knew of any for sale and didn't realise that I could still supply them, although now only 2 complete sets are left. A set consists of 598 sheets, most double-sided, and the total price is £100/104/118. Like MCS it seems unlikely that the Extra Sheets will be reprinted in the foreseeable future.

Shorter NOTES, with thanks to all contributors.

1. From Jacques Pitrat. Some more information on the **LITTLE JIM Train Construction Sets**, made by Metalcraft for the J.C.Penney store, see 23/677-8 & 24/691. There were three sets: 100, 200 & 300, and their contents were exactly the same as those of METALCRAFT Sets 980, 981 & 982. The lid of the 300 is as described in OSN 24 except that the 12 Cars that can be made are shown on it. 'Builds 4 at one time' it says on the lid but that does not mean any 4 Cars, for example one cannot build the Coal Car & the Armored Car simultaneously. It is also claimed that the Cars can fit any gauge track, but the two lengths of Axle in the Set allow only O gauge & a wider gauge - and for the latter the Wheels have to be outside the Trucks and look very awkward.

LITTLE JIM Train Construction Sets: S1 [31/908]

2. Josep Bernal wrote that he has some **C.I.G.E.A.** brass parts and they are threaded M4 (see 27/789).

C.I.G.E.A: S1 [31/908]

3. Jack Little sent a November 1947 Colton, Palmer & Preston trade ad for **EZY-BILT**. It shows Sets 1-8 in a pile so only the lid of the top box can be seen. It is just like the one in 28/837 with the 2 boys & galleon, except that the ad is in red & black only, so no green bits. This is the earliest sighting of the 1-8 range. The ad shows all the boxes the same size but Jack wrote that while they were all tin, the 1-3 were smaller than the 6-8 - the 4 & 5 have yet to be seen. Also in the ad, the sole agents: 'GEO. WILLS & CO. LTD., in all Capital Cities'.

EZY-BILT: S2

[31/908]

4. In 10/244 it was noted that the vee of the **N-G-NEERO** MECCANO-type 70mm Pulley is quite narrow and David Hobson pointed out to me that its illustration in MCS, identical to the **FORGEACIER** one (N-G-NEERO was virtually a copy of FORGACIER, presumably made under licence), makes it look much wider. Some FORGEACIER parts came to hand recently and sure enough the 70mm Pulley is wide like the illustration, and that's because it is like a MÄRKLIN Flanged Disc Pulley with a single flanged disc, and not 2 discs riveted together. The pattern of piercing in the faces of the 2 types is the same.

Although most parts in the 2 systems look very similar there are small differences of detail. The most obvious is in the name stamped on most circular parts, with FORGEACIER JEP FRANCE on the French parts instead of N-G-NEERO MADE IN ENGLAND. The punched holes are about 3.6mm and the N&B in the only NGN set examined are the metric M3; the FOR equivalents are referred to as 3mm in the French instructions and are no doubt the same. But the threads used in the other parts differ. FOR/NGN bosses are tapped M3.5/¹/₈" BSW, and the threads on other parts like the Threaded Pin & Handrail Support are M3.5/4BA. Axles are about the same size, 3.43mm Ø for the few NGN examples seen and 3.43-3.54 for some FOR parts. (In passing both lots of parts included 3 different lengths of Crank Handle, from 145 to 245mm o/a. I had thought, from the 'per bag, containing:- N123 7 cranks, various lengths' in the NGN Parts List, and a similar entry for FOR, that there were actually 7 different lengths. But 7 does seem a little excessive, especially in a system in which such parts can be cut to any length, and probably the 'various lengths' meant only the 3 seen. Some illustrations of the Accessory Set show what appears to be more than 3 lengths but a FOR example to hand, mostly still strung, has 2 each of the 3 lengths, but arranged so they look to be 6 different lengths - their ends hidden under a card for other parts.)

On dates, David has found the relevant UK patent, No.381348. It is in the name of the Société Industrielle de Ferblanterie, of Boulevard Beaumarchais, Paris, and its application Date was 21/10/31. It has a convention date of 21/10/30, a year earlier, and so there will be a corresponding French patent of that date. The patent describes the workshop-box of tools & materials, and the advantages of the system. There is also a patent of addition from the same company, UK 384215, application date 17/6/32, convention date 15/10/31. This describes the use of the lid of the workshop-box as a baseplate for the cutting & perforating machines, and it also describes the shearing & bending tools. David commented that the use of the lid in this way would seem an important feature to avoid damage to table tops and parent/child relations. In fact the lid was fitted with rubber feet

& the benefit of this in allowing use anywhere, without fear of damage, was pointed out in both the FOR & NGN instructions.

On the end dates, nothing is known of NGN after WW2 but David found FOR listed in a 1954 & 1955 dealer's catalogue, but not in the 1959 edition. He also mentioned that catalogue pages showing FOR, from 1931 to 1951, are in a book called *Le Jouet de Paris JEP 1902-1968*.

FORGEACIER: S1; N-G-NEERO: S1 [31/908-9]

5. Don Redmond commented that the number of **KONSTRUKTOR systems**, 18 at present, makes it difficult to identify any particular one, and that wherever possible the 'official' name should include any qualifying name on the box, transliterated of course. I'd rather given up doing this because sometimes the name on the set isn't the same as the one on the manual, sometimes the names on sets in the same range differ, and sometimes the names have stylised or cursive letters which makes transliteration difficult or even impossible. However I can see that for anyone prepared to do the necessary transliteration, the extra name would help in the critical case of having a set or manual and wanting to identify which **KONSTRUKTOR** it is in the OSN Index or Database. The transliteration table that I use for normal characters was given in 4/75, and below (thanks to Michael Denny) one for

<i>Printed form</i>	<i>Cursive form</i>	П	п	П	п
А	а	Р	р	Р	р
Б	б	С	с	С	с
В	в	Т	т	Т	т
Г	г	У	у	У	у
Д	д	Ф	ф	Ф	ф
Е	е	Х	х	Х	х
Ё	ё	Ц	ц	Ц	ц
Ж	ж	Ч	ч	Ч	ч
З	з	Ш	ш	Ш	ш
И	и	Щ	щ	Щ	щ
Й	й	Ъ	ъ	Ъ	ъ
К	к	Ы	ы	Ы	ы
Л	л	Ь	ь	Ь	ь
М	м	Э	э	Э	э
Н	н	Ю	ю	Ю	ю
О	о	Я	я	Я	я

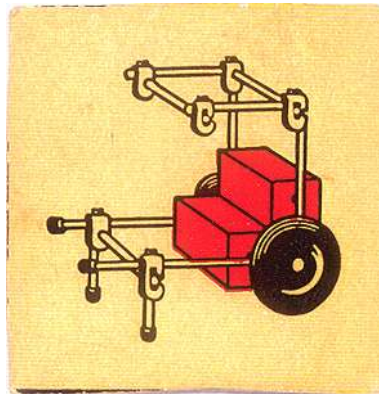
their cursive form. In the end though I suspect that the real answer would be an illustrated index with small photos of the logo, lid(s), manual cover(s), etc for each system. Comments on all this would be welcome.

Cyrillic Names [31/909]

6. Don also sent some details of John Wapshott's **LIL'N-GINEER** set (see 27/782), or rather a set of parts in a chocolate box, with the name from the original lid pasted on to its lid.



The form of this name, left, differs from the one in OSN 27 (even though there may originally been another word after CONSTRUCTION). There was no model sheet with the set but 6 cards, 5*5cm, with a model on each.



The model on the one left isn't included in the OSN 27 model sheet; the others are but the drawings differ a little in each case. Some of the parts are not quite the same either, notably the dimensions of the wheels: Don gave the o.d. of their Tires as 27, 30, & 33mm, but it isn't sure which of them are original.

LIL'N-GINEER: S1 [31/909]

7. News from Paul Goodman that deliveries of the **MÄRKLIN METALL Excavator Set** were stopped until a mistake in the instructions was corrected – they were due to resume around August/September. Paul also sent a better photo and some notes on the model. All the movements are hand operated by Cranks on one side of the cab but there is probably enough room inside to house Motors, etc. The tracks are based on the MetallusTrack Set with nearly 1600 parts. Looking at the photo there are probably special Plates used in the cab & bucket.

MÄRKLIN: S2 [31/909]

8. Paul also recently visited the **AUTOMAT** factory and kindly sent me a current catalogue. It is identical to the 1993 one described in OSN 21 but there may have been some small changes in the contents of the current sets. With it a leaflet showing 5 Junior Gear Kits not known before. They are #1-5, called Gear Drives; Traction Drives - synchronous; Traction Drives - asynchronous; Gear Drives with crossed Shafts; & Friction Wheel Drives. Each is packed in a plastic box & has a selection of Gears & parts to make frameworks for them, including a clear Plastic Plate unique to the Junior sets. The ready-built **COMPACT Gear Models** are also mentioned, 50 of them though the firm's web site, www.compact-technik.de, lists 76. This site also has some details of the sets, & illustrations of the parts. A price list for the parts can be downloaded & it shows a few changes from the Catalogue, with some additions and some deletions.

AUTOMAT:S1 [31/909]

SMALL AD [31/909]

Wanted STOKYS sets, parts, manuals. Please list & price in first letter. Richard Symonds, Suite 101, 1675 Martin Dr., Surrey, B.C. V4A 6E2, Canada. Tel: 1-604-536-6538.

OSN Subscription Rates The price per Issue, including postage, at Printed Paper Rate where available, is £5.50 for UK; £6.50 by air to Europe & surface anywhere; £7.50 by air outside Europe.

Back Issues For the zones above : OSN 1: £1/£1.30/£1.50; OSN 2,3: £2.30/£2.70/£2.90 each; OSN 4-27: £3.60/£4.10/£4.50 each; OSN 28 onwards: £6/£7/£8.

Payments Please make cheques etc payable to P.A.Knowles. Remittances must be in Pounds Sterling (GBP) or, as cash, in Euros or US Dollars (at £1=€1.50= \$1.80). Payments from overseas may also be made using PayPal.

Small Ads Short ads are free to subscribers (but repeats may not always be possible, please ask). Insertion guaranteed in OSN 32 if received by the end of January.

OSN – Your Credit Balance:

was after OSN 30

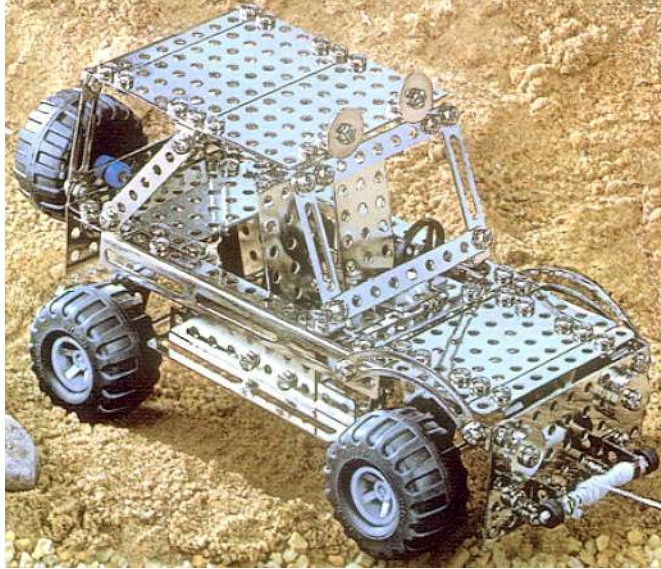
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is after this Issue

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

CONSTRUCTION in 2004 Josep Bernal & Paul Goodman have kindly sent me the 2004 Eitech catalogue. The sets listed are Nos.02,04,06,07*,08,09*,10,11,15,30,31,32,60,61,62,64,65,66,72,75,76,78,81*,86*,87*,88*,89*,90*.155. Those with asterisks are labelled as new. In August the Eitech web site showed all the above plus 01 & 77. Taking those into account the sets missing from the January, 2004 web site range given in 30/885, are 03,05,13,17,63.

The New Sets 07 was described in OSN 30. **09** has 446 parts and is said to build Jeep-Modellen. 3 are shown on the lid, the longest perhaps 30cm. All have the same front end &



chassis as the one above but the cab & back vary. No steering by the look of it. **81** is a small set for either of the simple models on its lid, a Bicycle & a Tricycle. Again no colour apart from the handlebar grips. **86** has 171 parts and the 3 lid models are a Motorcycle & 2 Motor Tricycles, all fairly small nickel/grey models with small Wheels and cylinder fins from Flat Brackets, or 2h Corner Brackets perhaps. **87** (248 parts) is for Digger top right & 2 similar tracked Machines. I don't remember the Track & Sprockets parts before. **88 & 89** each feature 3 little models which were previously sold as single models in the Startbox range (see 11/293 & 13/343). The 88's were 81, 84, & 93; and the 89's, 83, 92, & 94. The Sets have 168 & 167 parts respectively & those in plastic are shown blue & grey. The **90** has enough (185) parts to build the Loco, Tender, & Signal on the lid right. The rails look like string.



The Parts Packs are as in 2003 except that 117-119 have been replaced. **117** is still a Battery Box but instead of a switch it has a knob and 2 leads, each with a little cylinder half way along – possibly a plug & socket. It is described as 'stufenweise schaltbar' (continuous control?). **118** is a blue Geared Motor, with a body about 4cm long, for use with the Solar modul. **119** contains 8 blue plastic Gears, a Worm Z1; 3 flat discs, Z20,40,60; and 4 which appear to have a metal boss: a Pinion Z14, and Gears also numbered Z20,40,60. The PNs probably denote the number of teeth. Z40 has 4 large face holes & Z60, 6. Z20-60 without boss look like the standard parts #1455-7.



CONSTRUCTION [1] S3

OSN 31/910

POLYLONG in 2004 Early in the year, when the account in 30/886 was written, there were numerous sets offered on Ebay, mostly from Germany. The numbers have gradually decreased and now in August there are just a few each day, and not the wide range of sets initially available. The only new sets seen were 3 of 5 on Ebay from a UK seller. The 2 already known were COMBINED EXCELLED Nos.522 & 525, see 31/887. The lids of the 3 new ones are shown below. The one

with the Biplane is COMBINED TOYS No.530A - only Nos.501, 502, 505, & 506 of the 500 series were known before. The second one is No.530B and is just labelled TANK KING OF THE LAND, with no other indication of its POLYLONG parentage to be seen. The third, just called RACING, does have the POLYLONG logo in the top right corner, and like the first has POWERFUL TOYS at bottom right – the TANK has BATTLE GAME there.



POLYLONG: S3

OSN 31/910

News from Australia Jack Little has kindly sent over a number of items of interest. The first came from the personal papers of the late E.G. Page, the Meccano agent in Australia for many years. His company, E.G. Page & Co., made an application to the Australian Tariff Board to have the import duty on Meccano sets reduced, and 3 companies who were making small sets at the time, gave evidence, at a Board enquiry on 16th May, 1933, in support of the duty being retained on No.000 & 00 Meccano sets. The representatives of the 3 companies at the enquiry were Theo. Levy Pty. Ltd.

for CONSTRUCTO (see 26/753); Mr Cooper of Irving & Cooper, manufacturer's agent for EZY-BILT (see 22/636); and probably Addie M. Keating of A.M.K Mfg. Co., for BIG-JOY (see 24/697). In his evidence Mr Cooper said that 2 more EZY-BILT sets selling at 5/- & 8/6 were in the process of being launched, and this is in line with the Nos.1-3 sets available in 1936 mentioned in OSN 22, with the No.1 at 2/6. This item gives the first sure dates for BIG-JOY & CONSTRUCTO, and an earlier date for EZY-BILT.

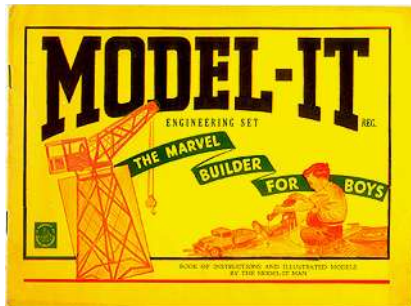
OSN 31/911

BIG-JOY: S1; CONSTRUCTO [3]: S1; EZY-BILT: S3

More on MODEL-IT The range of sets in this post-WW2 Australian, c50 part system was Prep-Set, Junior, Senior, Master, & Master de Luxe. Also a Giant Super Wheel Set with just 4 of the Super Road Wheels in it, see 19/545. The layout

make axle stops.

There was no manual with either of the above sets but one to hand could well have been with either. The appropriate pages in it correspond to those in MCS. Right, its cover, and the wording at bottom right are BOOK



of the parts in all these sets is shown in MCS and now Jack has sent photos of the Senior & Master de Luxe. Both are very similar to the MCS illustrations. Left, the label from the centre of the yellow Senior set lid, it scales at 10*7". The words



OF INSTRUCTIONS AND ILLUSTRATED MODELS BY THE MODEL-IT MAN. The Lawdex logo in the bottom left corner is shown left. The manual contains no indication of date but an example seen on Ebay, with the same cover and number of pages, was

under the name are ENGINEERING SET | THE MARVEL BUILDER FOR BOYS. Bottom right on the lid is another smaller label with MODEL-IT | SENIOR on it. Apart from some Brackets replacing the Screwdriver, the parts layout is symmetrical left to right, and below the righthand side of the box. The Master de Luxe has 2 layers of parts and one of them is shown bottom right. Points of interest are the 5 & 25h Braced Girders; the green 5*11h Flanged Plates (called Box Girders) with their red, 3*9h cutout Plates beside them; and 2 parts which are not in the MCS Parts List. They are the U-formed 5*5h Flexible Plate above the DAS bottom right, and on the opposite side of the box, what looks like a 3*5h Flanged Plate made from a 5*5h Flexible Plate. The only different parts in the 2nd layer are red

said to be from 1957.

SUMMARY OF MANUAL

•Name: MODEL-IT •Details of maker: MANUFACTURED BY MODEL-IT MANUFACTURING CO., SYDNEY, AUSTRALIA – A CARVEL PRODUCT on the bottom of many pages, but Lawdex Manufacturing Company INCORPORATING MODEL-IT MANUFACTURING CO., SYDNEY, AUSTRALIA on C4. •No dates/Ref Nos. •Page size: 244*180mm. •No. of pages: 16+covers, unnumbered. •Language: English. •Printing: photos of models. •Page Nos. of Illustrated Parts List & highest PN: C3,42. •No Set Contents. •Sets covered: smallest (unnamed), Junior, Senior, Master, Master de Luxe. •No. of models for each set: 24,22 (inc those on p9 – not designated),8,2,4. •Name, Model No. (only for the smallest set models, which are lettered from A on each page), Page No. of first & last model of each set: smallest: FARM CART,A,1; PICNIC TABLE AND SEATS,F,4. Junior: HAMMER HEAD CRANE,5; OVEERHEAD TRAMWAY TROLLEY,9. Senior: LOW WING MONOPLANE,10; FLAT TOP TABLE TRUCK,13. Master: ELECTRIC DRILL,14; MINE SHAFT ELEVATOR,14. Master de Luxe: AMERICAN EXTENSION FIRE LADDER TRUCK,15; OIL DRILL DERRICK,16. •Other notes: intro on C2; printer on C4: Elgood & Son Pty. Ltd. – Sydney.

7h Trunnions, bright 1*3*1h DAS, and the parts shown left. They are a Double & a Single Arm Crank (with no slotted holes), a Pinion & a Gear with (like the Bush Wheel) 4 face holes, a Worm, & 2 Fork Pieces. Of these only the Fork Pieces are in the MCS List (#42 Big End). Other parts in the 2nd layer are 2 more Road Wheels and 2 of #32, the Pulley used as their centre. In passing there are two points of interest in the MCS List: the '2h' Pulley is 1 1/8" Ø, and #22 is Rubber Tubing, to be cut to

There is one photo, usually quite clear, of each model,



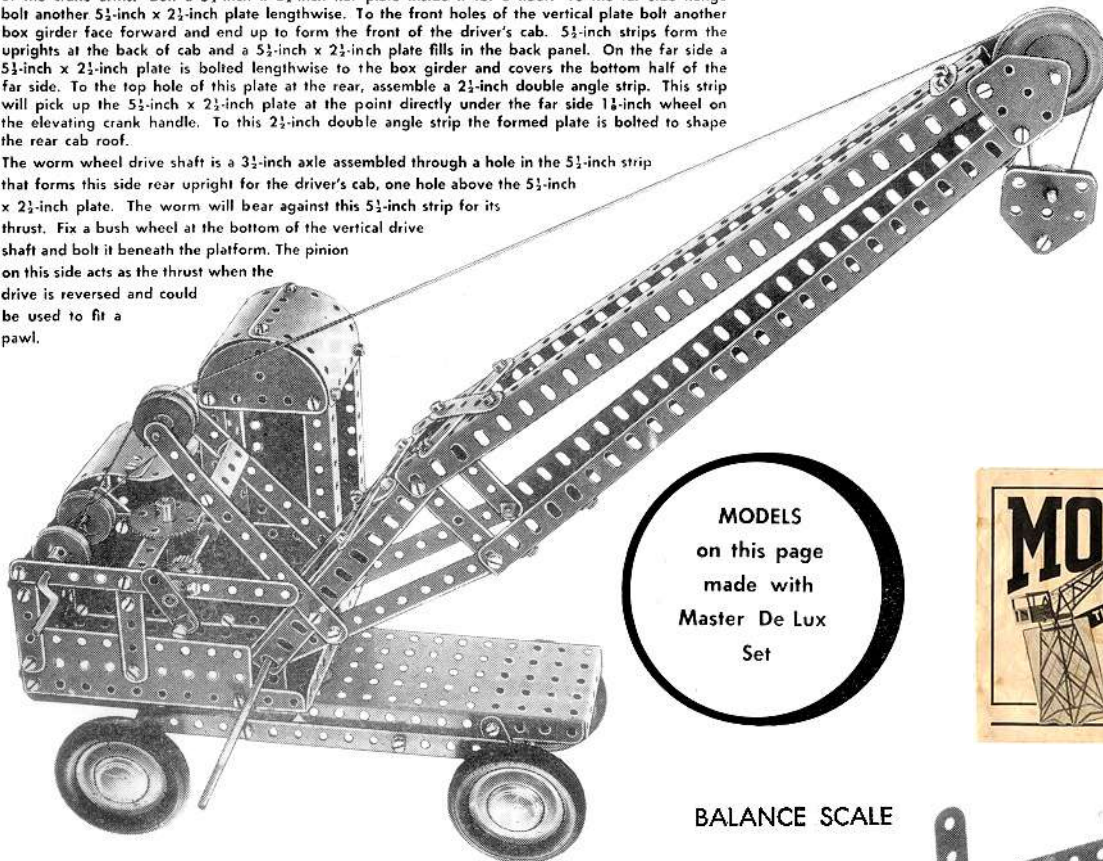
OSN 31/911

MODEL-IT: S1

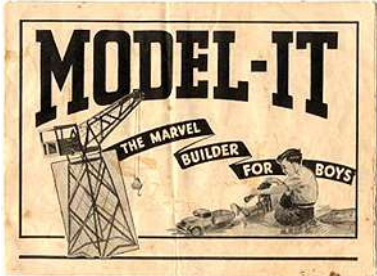
MOBILE SWIVEL CRANE

Turn a MODEL-IT Box Girder upside down for the floor of the swivelling cab, located at the bottom of the crane arms. Bolt a 5½-inch x 2½-inch flat plate inside it for a floor. To the far side flange bolt another 5½-inch x 2½-inch plate lengthwise. To the front holes of the vertical plate bolt another box girder face forward and end up to form the front of the driver's cab. 5½-inch strips form the uprights at the back of cab and a 5½-inch x 2½-inch plate fills in the back panel. On the far side a 5½-inch x 2½-inch plate is bolted lengthwise to the box girder and covers the bottom half of the far side. To the top hole of this plate at the rear, assemble a 2½-inch double angle strip. This strip will pick up the 5½-inch x 2½-inch plate at the point directly under the far side 1½-inch wheel on the elevating crank handle. To this 2½-inch double angle strip the formed plate is bolted to shape the rear cab roof.

The worm wheel drive shaft is a 3½-inch axle assembled through a hole in the 5½-inch strip that forms this side rear upright for the driver's cab, one hole above the 5½-inch x 2½-inch plate. The worm will bear against this 5½-inch strip for its thrust. Fix a bush wheel at the bottom of the vertical drive shaft and bolt it beneath the platform. The pinion on this side acts as the thrust when the drive is reversed and could be used to fit a pawl.

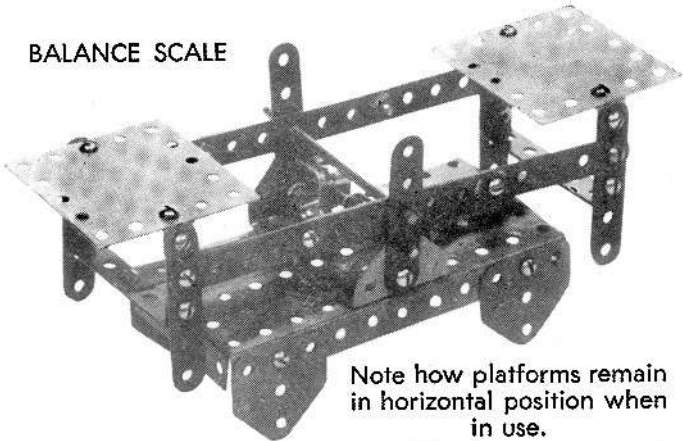


MODELS
on this page
made with
Master De Lux
Set



10 pages & 34 models, has a cover (below) similar to the yellow one but is B&W (the coloured stains on it indicate that it is B&W, not just the photo). It does not though have REG. after the MODEL-IT name, or ENGINEERING SET below it, nor the small print at the bottom, nor the logo in the bottom left corner. It was said to have 'Manufact-

BALANCE SCALE



Note how platforms remain in horizontal position when in use.

with some building instructions for the larger ones. Most are fairly run-of-the mill but the 4 for the largest set are good looking, though their 'mechanics' are quite simple, & a touch suspect in places. The Super Wheels look well on a Fire Engine & Semi-Trailer Lorry but the Crane above is my favourite, even if it hasn't a hook. Hoisting is clearly from the rear Crank Handle, but the function of the Axle next along with the Double Arm Crank on its end isn't immediately obvious. A Worm on it engages the Gear (the Pinion is just to locate the Axle) so it looks as if it may be the slewing drive, but what then of the luffing, & what does the forward Crank Handle do?

In many of the models for the sets through Senior, several variations of the parts can be seen. In most cases the top of the Flanged Plate is pierced with only the edge and centre rows of holes; the Trunnions are often shown as '5 hole'; and most of the Flexible Plates have squarish corners. These earlier (?) parts can be seen in the Scales above right.

Another manual on Ebay, described as 240*180mm, with

ured by G.E.Rose, Australian representatives Lawrence Distributing Co., 326 Edgecliff Rd., Woollahra, Sydney' on its back cover. So it may well be that this manual was before the Lawdex one, and in that case could the 'simpler' parts have been from the same era?

MODEL-IT: S2

OSN 31/912

A BILD-A-KIT Manual A BILD-A-KIT Model Sheet was described in 26/753, but now Jack has sent a copy of a manual, and he also wrote that he has been told that the system's name was registered by William Kerr, Henry Lawson, & Violet Amy White. Also that the company was Radio Electrical Hardware, 25 Queen St., Melbourne 1946, but no trace of it has yet to be found in directories, etc.

The manual is for Sets 1-5, has 16 pages, 6¾*4½", plus covers (the back cover is thought to be missing). The front one is shown right; the number on the set lid can't be seen clearly but may be a 5. The words left of the name on the lid are '10001 TOYS'. C2 is blank; p1 has an intro and an ad for the 5 sets which includes 'BILD-A-KIT is strongly made in Australia of pressed and cast metal parts, in complete sets in 5 sizes.'

36 models are shown on pp 2-15 with a single photo, often rather small, of each. They are generally much too dark too



BILD-A-KIT: S1

OSN 31/912

BILD-A-KIT SETS and SPARE PARTS

Set No. 1	5/6 each
" " 2	8/7 "
" " 3	12/9 "
" " 4	19/11 "
" " 5	27/9 "

Part No.	Description	
1	Perforated Strip, 2½"	1/2 doz.
2	" " 5½"	2/6 "
3	" " 7½"	2/6 "
4	" " 3½"	1/10 "
5	Curved Crank Strips	1/8 "
6	Double Angle Strip, 2½"	2/- "
7	" " " 1½"	1/8 "
8	Crank Bent Strip	1/10 "
9	Angle Brackets	-7½ "
10	Flat Brackets	-4½ "
11	Double Angle Brackets	-8 "
12	Reversed Angle Brackets	1/- "
13	Angle Trunnions	2/1 "
14	Flat Trunnions	1/8 "

15	Pulley Wheel, 1" diameter	2/4 "
16	" " " "	
	with Boss without Grub Screw	-7½ each
17	Grooved Wheel, ½"	-1½ "
18	Perforated Bush Wheel, 1½"	-7½ "
19	Base Plate	-8½ "
20	Crank Handle, 5½"	1/1 doz.
21	Axle, 2"	-6½ "
22	" 3½"	-7 "
23	" 6½"	-10 "
24	Axle Clips (50 per box)	1/4 box 50
25	Hexagon Nuts, ⅜"	1/4 "
26	Screws, ⅜" x ¼"	1/4 "
28	Train Wheel, 1"	-3 each
29	" " 1½"	-3½ "
30	" " 2"	-4 "
31	Hooks	1/1 doz.
33	Sector Plate Flange Angle	-7 each
35	19-Tooth Pinion Wheel	-4½ "
36	50-Tooth Gear Wheel	-8 "
42	Grub Screws	1/4 box 50
43	Perforated Strip, 12½"	3/9½ doz.

but the originals may have been better. The first is called SIGNALS and the last, MECHANICAL EXCAVATOR. Each of the pages has 'Bild-A-Kit Model Suggestion Book' at the top. No indication is given of which models can be made with which sets.

p16 has the Price List of sets & parts shown above. The prices of the parts are typically 30-50% higher than those in a Jan. 1941 Ezy-Bilt price list, so the present manual is likely to have been post-WW2. By 1958, the date of the next E-B list to hand,

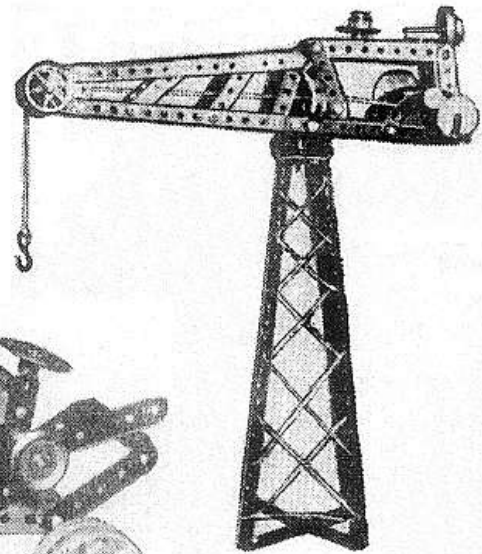
comparable parts are 2-3 times as high as in 1941.

In contrast to the OSN 26 Model Sheet, none of the models in this Manual are copied from MECCANO, or anywhere else as far as I know. A few of them catch the eye but mostly they are quite simple or not that realistic. The 3 above, about 120% natural size, are among the better ones, though they were chosen to show as many as possible of the different parts.

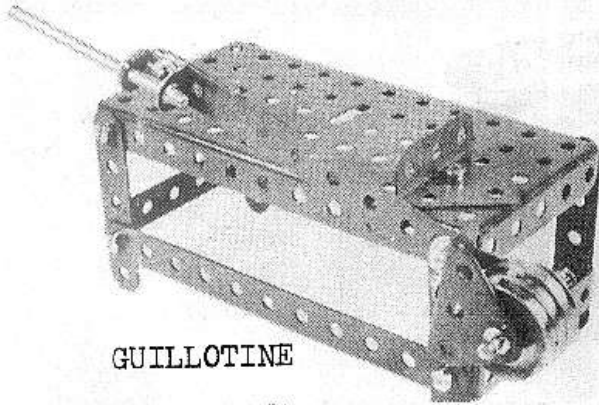
Many of the parts look much like MECCANO; the exceptions and other points of interest are noted below.

- The Trunnions are the 7 hole type.
- The Loose Pulley has no face holes and may have a very short bush.
- The 5*11h Flanged (Base) Plate is always shown with flanges on all sides, and often with the ½" long cross slot, but never with a slit for a Saw Blade.
- The Axle Clips are probably short lengths of rubber tubing.

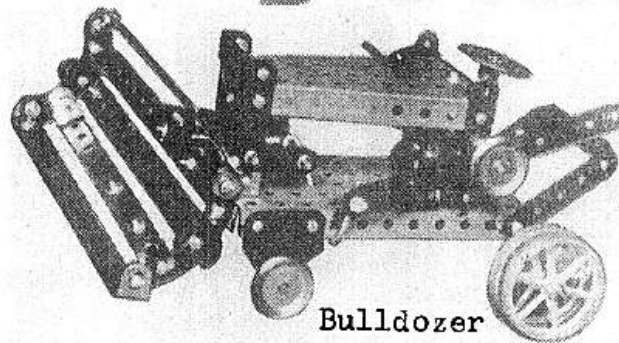
Swivelling Quay-side Crane



GUILLOTINE



Bulldozer

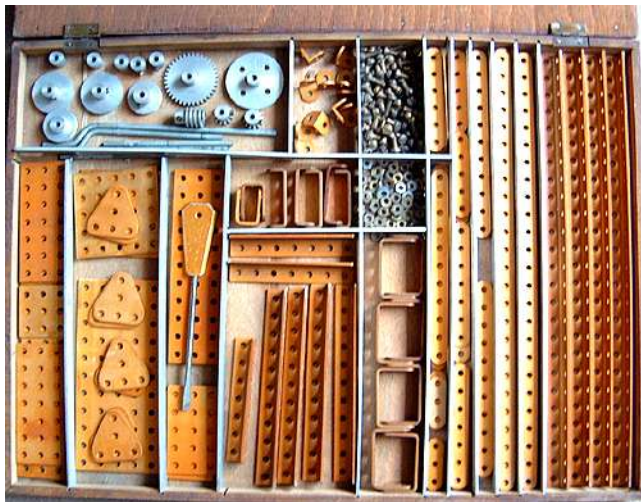


- The Bolt heads are cheese-shaped; the Nuts, listed as hexagon, can only be seen as a blur about the same size as the MECCANO equivalent.
- The Train Wheels (#21-23) are no doubt castings and each size has 6 spokes. Despite the name, no flange can be seen. In some models these Wheels look like discs with rim & spokes raised on them. The rear wheel of the Bulldozer appears to be a pair of 2" Ø.
- The Flanged Sector Plate is 9h long.
- The best view of the Pinion & 50t Gear Wheel is at the back of the Crane, and as might be expected the Gear has no face holes. To mate it with a 19t Pinion implies either a non-2h mesh, or a non-MECCANO DP of about 35 (or a non-½" hole pitch, but that's perhaps unlikely).
- The Screwdriver isn't listed but can be seen in the box on the manual cover. No Spanner is evident lock-nutting is mentioned in the Intro.

IDÉAL MÉCANIQUE The name of this French system was mentioned in 21/618, and now Jacques Pitrat has now kindly sent photos of the set he owns and notes about it.

The name of the system is always printed in capitals without accents. The maker is 'Jouets J.R.B': there is no address, or date, but it is likely the system was produced just after WW2. Sets are very rare so no doubt it was not a great success.

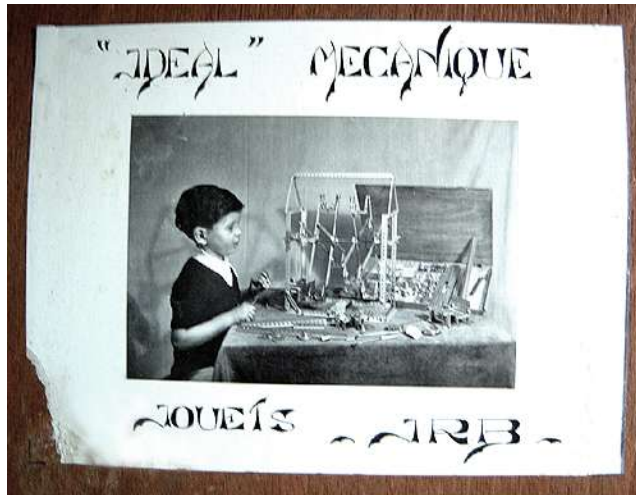
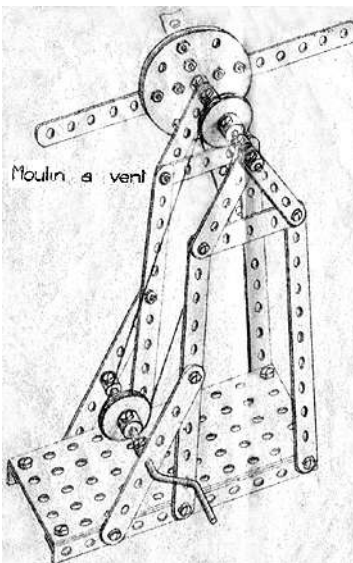
The Set is in a wooden box 44*31.5*2.8cm. There is nothing on the top of the lid, but the label right is pasted inside it. 'Boîte C' appears on the manual cover but nowhere else is any indication of other sets in the system. As can be seen in the open box below there are 17 compartments, formed by aluminium strips as partitions.



Basics The Strips, A/Gs, & Plates are made of 2mm thick, anodised aluminium, copper coloured. The Pulleys, Collars, & Gears are natural aluminium. The Axles & some Nuts are steel; the other Nuts & the Bolts are brass. The holes are 3.8mm Ø at 12.0mm pitch. The thread hasn't been identified but is 3.8mm o.d. With one exception mentioned below, bosses, & the Collar are single-tapped.

The Set includes the following parts, with the quantities found in curly brackets:

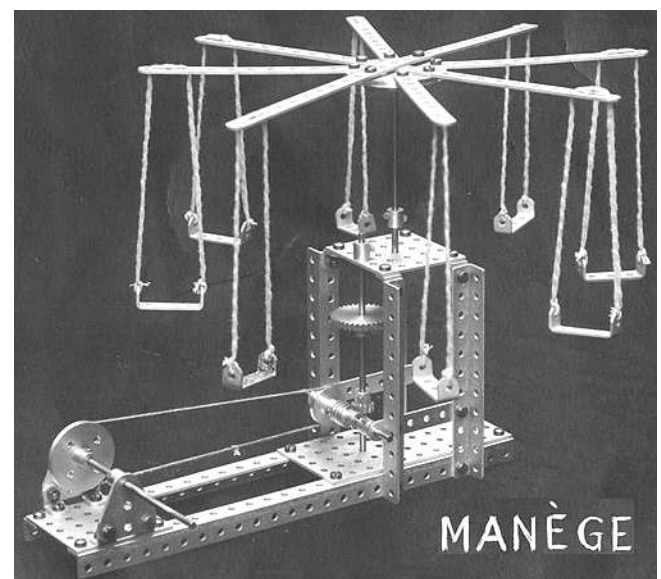
- **Strips:** 25h, 11h, 7h, 6h, 5h, & 3h {6,7,5,4,5,6}.
- **A/Gs:** 25h, 11h, & 7h {4,4,3}.
- **DAS:** 2*3*2h & 1*3*1h {8,5}.
- **A/B:** {11}.
- **Double Bracket:** 2*1*2h {2}.
- **Perf. Plates:** 11*5, 11*3, 7*3, 5*5, 5*3, & 3*3h {1, 2,4,2,2,2}.
- **5h Flat Trunnion** {8}.
- **Axles:** 150, 90, & 45mm long, 3.8mm Ø {1,1,2}.
- **Crank Handles:** 125 mm & 165mm o/a, also 3.8mm Ø {1,1}. They, and the Axles are a tight fit in the bosses & in the holes in the other parts.
- **Pulleys:** 24mm, 30mm, & 40mm with 4 face holes {1, 2,1}. There is also a 24mm **Loose Pulley** {1} which has an untapped boss on each side.
- **Collar:** 10mm Ø &



- **Worm:** 20mm long {1}.
- **Pinion:** 12 teeth, 4.0mm wide {2}.
- **Gear:** 36 teeth, again 4.0mm wide {1}.
- **N&B:** 7.5mm Ø, pan-headed brass Bolts, 7 & 13mm u/h {67, 8}. Hexagonal Nuts, 8mm A/F {99}. Some are steel, some brass.
- **Washer:** 19mm Ø {1}. (It may not be part of the Set but has a 3.8mm bore and no other questionable parts were found.)
- **A Screwdriver,** with an anodised aluminium handle.

Other Parts • A larger **Pulley** with boss. It is missing from the Set but is needed for some of the models and can be seen in the 2 models at the foot of the page. It has 4 holes like the 40mm Pulley, and 8 in an outer circle. • The vertical shaft in the Manège below appears to be made from 2 Axles joined by a **Coupling**. A Set Screw on either side can be seen, though they look to be nearly in line). No such part was found.

The **Manual** is 24*18cm and the cover is shown below (the 'C' is after Boite in the bottom right corner). Inside there is the Manège photo page (below) and 7 simple models on three other pages, all printed on one side only. One is the Windmill below left. It would be possible to build much more interesting models with the contents of the Set, but not the one on the label inside the lid.

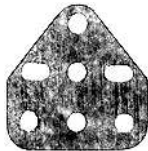


More on THE ENGINEER Since the notes in 12/328 Kendrick Bisset, David Hobson, Don Redmond, Richard Symonds, & John Wapshott have sent more information, including a leaflet showing the range of sets, and details of some of them. Thank you to all.

The sets in the Leaflet are the Junior, Senior, & De Luxe outfits mentioned in OSN 12, plus 3 theme sets – the Construction Set, the Truck Set, & the Farm Set. The manufacturer is given as Armstrong Bros. Engineering Co. Ltd., and the firm's address is the Toronto one given in OSN 12. So these sets date from after the Armstrong company changed its name (see 13/361), and in that occurred between 1941 & 1945 (from an interesting article on THE ENGINEER in the *Canadian MeccaNotes* magazine for June 1996). The *MeccaNotes* article gives details of Armstrong's history and the Dec. '96 issue has notes on John Stuart Sales, a firm which distributed the Sets at some point. It still isn't known though when THE ENGINEER was first made, or how long it was produced. At the time of writing it isn't clear either if there were wartime restrictions in Canada which would have made it impossible for sets to have been made before such restrictions were lifted. The first article also discusses the parts in some detail and points out that the Strips & Brackets were not well designed, a view echoed by those who have used them to make models. A pity that because the theme sets might be thought an attractive concept, especially the Truck Set with its realistic Cab.

An account of the different sets follows, after some notes on the parts not described before.

The PARTS • Strips A 5h, 2½" Strip is included in the theme sets. The 2h Strip has not yet been seen in a set. Possibly it was dropped when the Link (Flat Bracket) was introduced. A Formed 6" Strip is shown in the Truck set later. Holes in the Strips can be up to 5.3mm Ø, and in a few the holes are too small to admit the Shafts. Don has pointed out that Strips with a centre hole are slightly shorter than their 'even-holed' counterparts, and that this arises from the pitch of the 3 centre holes being about 11/16" or .7". So 1.4" for the outer ones of the 3, against 1.5" if the centre hole had simply replaced the 2 central holes of an even-holed Strip. (This can just be seen in the pair of 4" Strips shown in OSN 12.) The holes in the Flat Bracket are also at the .7" pitch but whereas that could allow the part to be used as a corner brace for 2 Strips at right-angles, it is hard to see what advantage accrues in the case of the Strips. The major disadvantage is that the group of holes at one end of a centre-holed Strip are not at standard pitch in relation to the group at t'other end. Even- & centre-holed Strips are found in some sets which adds to the model builder's problems. • **2*3*2h & 1*5*1h DAS**, as well as the 2*7*2h mentioned in OSN 12. • **A Flat Trunnion** (below) with its two slotted holes, and a **Trunnion** made from it. • **Other Brackets** made from the 5h Strip have been seen but they may be homemade - an A/B bent at the centre hole for instance, and another bent at hole 4. • **A 2 5/8" or 2 3/4" Ø Pulley**, with a rubber ring type **Tire** for it. It looks smooth in some photos but has also been described as 85mm o.d., 55mm i.d., & 13mm wide, with 5 ribs of tread. The Pulley & Tire can be seen as a back wheel on the Tractor shown later. • **A push-on rubber Road Wheel** similar to the one in OSN 12 but without the pulley groove. Most of the examples found are this type. • **The 1½" Shaft** is called a Stub Shaft in the inventories on the boxes. • **N&B**. A variety of different types & finishes have been reported, and no doubt use was made of whatever was available. Some have an 8-32 thread but most are 6-32 (and in one case 6-40, though it's always hard to be sure if such variations are genuine). A typical 8-32 N&B was described in OSN 12, and the most common 6-32 has hex pressed Nuts, 7.9mm A/F, and RH Bolts, 6.2mm Ø & 8.8mm u/h. Both are steel, some



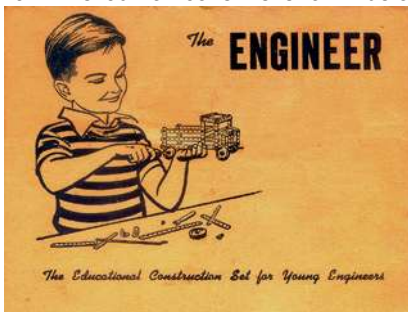
nickeled, & some with a dull finish. The Bolt is also used as a set screw. • The nickeled **Spanner & Screwdriver**, 1mm thick, and 64 & 68mm long respectively, are shown left. The jaws of the Spanner are 8mm to fit the 6-32 Nuts. • The **V & Straight Plow Blades**, 7" & 6" wide respectively, can be seen in the Farm set, also the 5" long **Engine Hood** with radiator, & a triangular **Seat** under the tip of the V Plow. • The **Conveyor Belt** is white canvas, 2" wide & 35" long, and is supplied with 10 shallow nickeled (or red) **Buckets**, 1*2" in plan, attached (sewn I think) to it. Below a section of it, as used in the theme set model. Part of

two **Rollers** can be seen too, they are wooden cylinders, 2 1/8" long, on a 4" Shaft. • **Colours**. Strips & Brackets are painted as well as nickeled: red, green, and less commonly yellow. A tinplated 5h Strip is also known, now mostly turned a metallic grey. The Flanged Plate too is painted in the three Strip colours. The 1 1/8" Pulley may be nickel, green, or red, and also brass; the 2 3/4" yellow or green. The Plow parts have been seen in red & green; the Hood in green & yellow; and the Cab in all three. It wouldn't be a great surprise to find parts in the 'missing' colours.

The SETS All that is known of their contents is summarised in the table at the top of the facing page. On the limited evidence available the Strips in the Junior & Senior sets are nickel, while in the theme sets they are painted, often in more than one colour. The Spanner in the Sets may be of either type, & sometimes a Span'driver is packed instead. The wire Screwdriver has been found with parts but not yet in a Set. **Manuals** are shown in the Leaflet for all three of the basic sets, and are specifically mentioned in the accompanying text. But no manuals are shown for the theme sets, and no mention is made of any. Actual manuals are now known for all three basic outfits but no theme set instructions have appeared so far. The Junior cover is shown below and the Senior & De Luxe are similar except they have the set name under ENGINEER – so perhaps the Junior was the only set at the beginning.

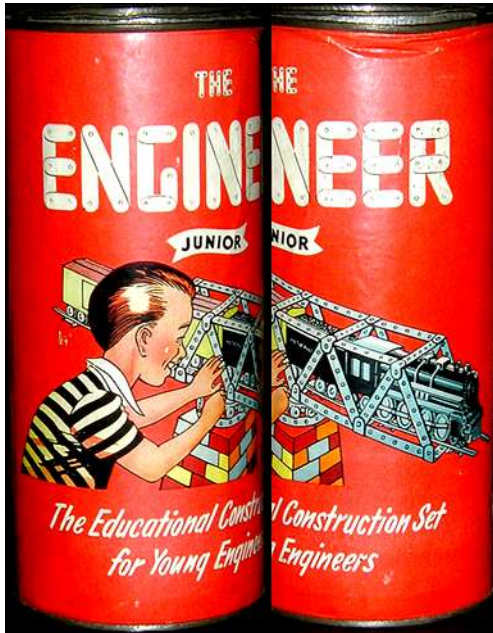
The JUNIOR Set is shown boxed in the Leaflet with a lid similar to the Senior one described later. All four known outfits though are in canisters, like the one at the top of the next page, 3 1/2" Ø & 8" tall, with a tinplate bottom & lid. A Contents panel on the back is like the one on the box lids, but in this case includes the price, \$1.98. Under this panel are details of the maker and also 'Distributed by John Stuart Sales – Toronto, Montreal, Winnipeg.' The main parts in the Set are

seen too, they are wooden cylinders, 2 1/8" long, on a 4" Shaft. • **Colours**. Strips & Brackets are painted as well as nickeled: red, green, and less commonly yellow. A tinplated 5h Strip is also known, now mostly turned a metallic grey. The Flanged Plate too is painted in the three Strip colours. The 1 1/8" Pulley may be nickel, green, or red, and also brass; the 2 3/4" yellow or green. The Plow parts have been seen in red & green; the Hood in green & yellow; and the Cab in all three. It wouldn't be a great surprise to find parts in the 'missing' colours.



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20 Strips and 4x 1 1/8" Pulleys.

The **manual** has 12 unnumbered pages, 165* 122mm, including covers. C2-4 have an intro, a list of additional parts, & competition details, as in the OSN 12 manual. The inside pages show 31 simple models (called Projects) from No.1, a Railway Train Signal, to No.31, a Factory Truck, with a single photo of each. Four are shown

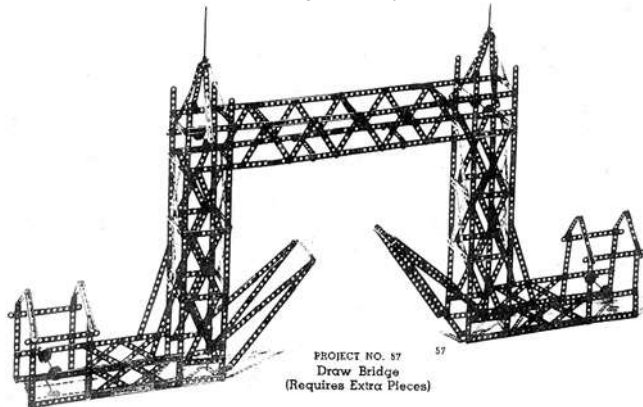
in MCS.

The **SENIOR Set** box known is about 14*12*1 1/4", and the sides of the base are light blue on the outside. The printed lid is red and to the right of centre has the same picture as on the canister, while the white Contents panel is on the left. The main extra parts in the Set are 20 Strips, 2 Flanged Plates & 2 Road Wheels.

The **manual** is the one described in OSN 12 and its cover is like the Junior but with **Senior Model** under ENGINEER. The page size is the same too – the size in OSN 12 was a mistake. The 12 inside pages have 39 models with again one photo of each. The first 23, Naval Gun to Factory Truck, on pp1-6, are from the Junior manual but with different numbers. The next 3 pages have 11 models that can be made with the Set, from No.24 Tricycle to No.34 Shop Seat. No.27, called a Wagon, is shown in OSN 12. Then Nos.35-39 are larger models needing extra parts, from Lathe to Large Bridge and Elevator Shafts. All five are in MCS.

The **DELUXE Set** is shown in the Leaflet with the top half of the lid similar to the theme ones shown later, but with DELUXE in a flash under it. Underneath to the left is the boy/train/Bridge illustration, and on the right edge is the white Contents panel. In terms of parts 4 Road Wheels can be seen, and 10x 1 1/8" Pulleys – also 2 Flanged Plates but 3 seem to be needed for some of the manual models.

The **manual** cover is similar to the Senior but with **De Luxe Model** under the name, and at 173*122mm the page size is slightly larger (from a photocopy). The 20 inside pages show 57 models, including all in the Senior manual, and all of those except the Large Bridge, No.39, can be made with the Set. In detail: pp1-10 are the Senior models Nos.1-36 with the same model numbers; pp11-14 & 16-18 have the 17 new De Luxe models, from No.37 Shooting Gallery to No.55 Stream Line



PART \ SET:	Junior	Senior	Deluxe	Constr'n	Truck	Farm
Flgd Plate, 5*11h	...	2	2?3	3	✓	✓
Strip, 8"	...	10	✓	16	✓	✓
Strip, 6"	10	10	✓	10	✓	✓
Strip, 4"	10	20	✓	20	✓	✓
Strip, 2 1/2"	...	...	...	20		✓
Formed Strip, 4"	...	2*	3	7		6
Formed Strip, 6"	...	...	...	...	1	
Flat Bracket	2	4	✓	7		2
Angle Bracket	10	10	✓	18		✓
Shaft, 9"	...	...	1			
Shaft, 7"	...	2	1			
Shaft, 5"	2	2	4	3	✓	✓
Shaft, 1 1/2"	2	2	✓	2		
Crank Handle	...	1	1	1		
Pulley, 1 1/8"	4	6	10	2		4
Pulley, 2 3/4"	...	...	...	2		2
Tire for 2 3/4" Pulley	...	...	...	2		2
Road Wheel	...	2	4			
Rubber Wheel, 2"	...	...	...	2	14	2
Collar	...	2	4	2?		18
Screwdriver	1	1	1	1		
Spanner	1	1	1	1		
Span'driver	...	...	...	...		2
Nuts & Bolts	Bag	Box	✓	✓	✓	✓
V Plow	...	...	...	1		1
Straight Plow	...	...	...	1		1
Wood Roller	...	...	...	3		
Conveyor Belt with Buckets	...	...	...	1		
Engine Hood	...	...	...	1		1
Seat	...	...	...	1		1
2*3*2h DAS	...	...	...	2	1	2
1*5*1h DAS	...	...	...	...		2
2*7*2h DAS	...	...	...	...	1	✓
Trunnion	...	...	...	1		
Flat Trunnion	...	...	...	2		2
Truck Cab	...	...	...	...	2	
Formed Fender (from 4" Strip)	...	...	...	...
Coupling	...	...	...	...

Set Contents

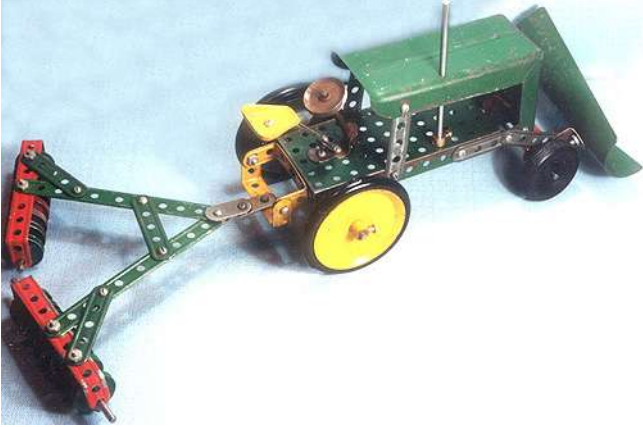
Notes (i) Junior & Senior sets: the inventories above are as printed on the boxes, except for the 4" Formed Strips found in Senior Sets. Construction: as found in Sets. The others: the parts listed are as seen in the Leaflet – a ✓ means the quantity isn't known.

(ii) Sets may contain 4,6,8" Strips with 8,12,16 holes, or with 7,11,15 holes, or a mixture of the two types.

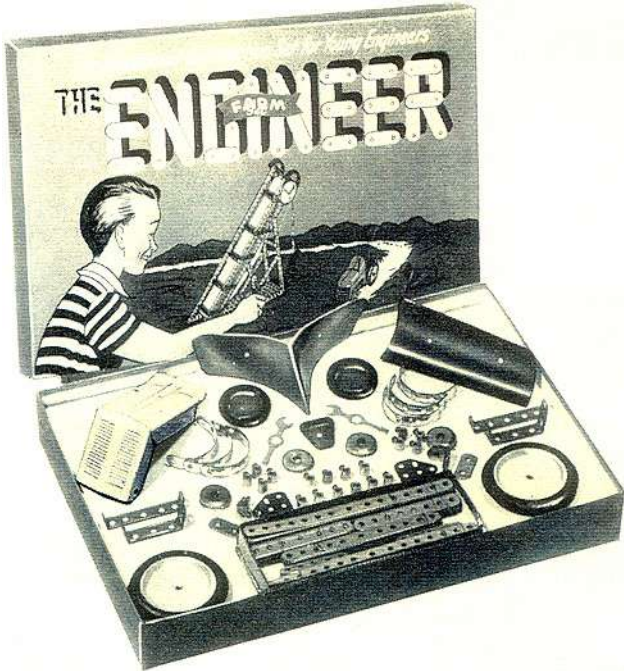
Locomotive; p15 has the Senior models 37 & 38, re-numbered 48 & 49; p19 has No.56, the Large Bridge (ex-Senior No 39) which still needs (lots of) extra parts; and p20 has another 'supermodel', the Draw Bridge, No.57, in the previous column. It says in the Leaflet that the Set contains 'parts to build all types of structures – train stations, signal block houses, trestle bridges to complete his model railroad, mammoth cranes and many other models too numerous to mention.' True no doubt but of those models only one, a Station, is included in the Manual. The new models are generally somewhat larger than before but similar in their skeletal style.

The **CONSTRUCTION set** has a red box lid identical to the Farm one in the Leaflet (shown overleaf) – the lettering is white and the boy is the one on the Junior outfit. The blurb in the leaflet reads 'Now a complete ENGINEER Contractor's Construction set designed for youngsters who love to watch super streamline highways being built. These models are rugged and well constructed and actually could be used to build miniature highways in any youngster's back yard. The sand and gravel elevator stands 19" high and really lifts the sand up and a conveyor belt drops it into the waiting truck. The other model you can make is the heavy tractor with interchangeable plows. You can build two distinct models from this set and still have numerous parts left over.' Part of the Elevator (one of Richard's models) has already been shown and the Belt runs around a third Roller at the bottom. The Roller in the middle of the lower run serves to tension the Belt,

and it is driven from a Crank Handle by cord on 1 1/8" Pulleys. The Belt has very little 'wrap' around this Roller and I'd be surprised if the drive is adequate with the Buckets loaded. As can be seen from another of Richard's models, the Tractor below, the wheels are the 2 3/4" Pulley/Tire & the 2" Rubber Wheel. (The parts for the Implement, or at least its numerous 1 1/8" Pulleys, would not be in the Construction Set.)



The FARM Set illustration in the Leaflet is shown below.



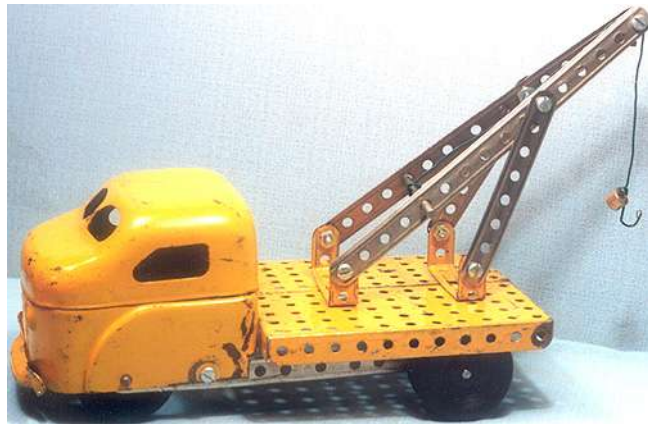
Despite the Elevator on the lid the parts in the Set are only sufficient to 'build his own big sturdy tractor to pull the farm implements of which he wishes to design. Perhaps it is a plow with two bottoms or shares of a cultivator, whatever he desires

there are enough parts for him to work with. Everything for the Junior farmer and lots of fun for Dad also.'

The TRUCK Set illustration below shows the 2 cabs in



the set, & the 14 Rubber Wheels. The parts top right & bottom left may be the 8 Flanged Plates (packed in pairs) needed for the load platform of the Low Loader on the lid. It would be over 2 feet long. The Wrecking Truck below is another of Richard's models and he also sent a photo of the bottom model on the lid. Like all THE ENGINEER models they are very simple mechanically but these look quite realistic to me. And, subject to correction, Armstrong was the first manufacturer to include a purpose-built Cab in a set. Come to that these theme sets were arguably the first of their kind too.



OSN 31/917

THE ENGINEER: S3

Snippet: the East German KONSTRUKTOR This small system was mentioned in 15/415 and the Crane shown there is on the lid left, & on the manual, or model leaflet, right (BAUVORLAGEN = building plans).



The words at the bottom of the lid are Metall - Baukasten, followed by what might be a '1'.

All that can be seen of the parts are 2 sizes of Pulley, probably without boss, & with some traces of 'gold' on them; some Strips; and, perhaps, under the Pulleys in the bottom right compartment, the Plate & Disc used in the Crane. Also there is a bright 3h Plate that looks to have a

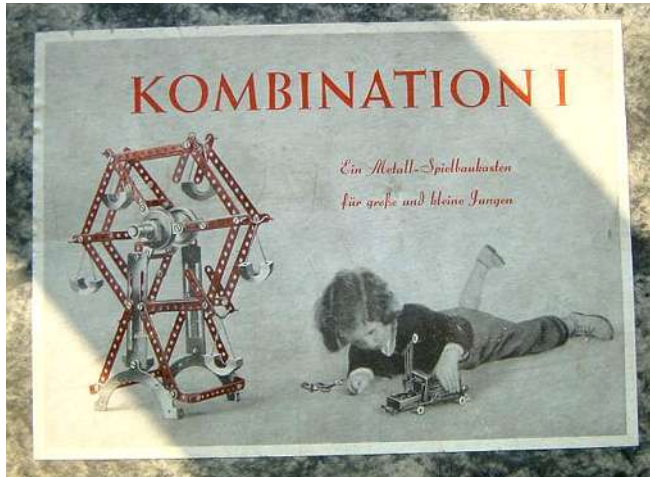
longer hole pitch than the other parts - if it were 1/2", the pitch of the other parts would be about 10mm.



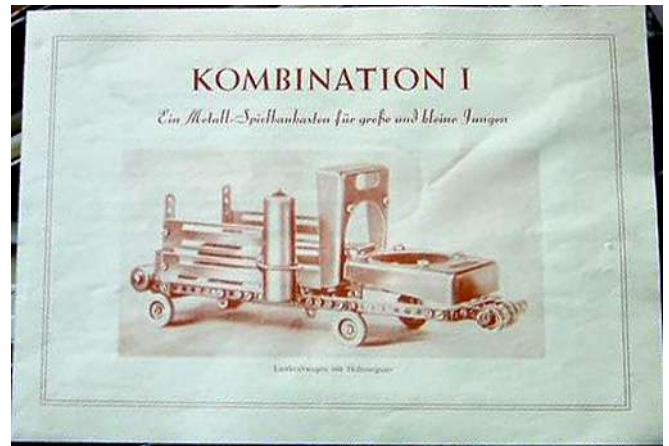
OSN 31/917

KONSTRUKTOR [7]: S1

Snippet: 'New' System – KOMBINATION The set shown here was sold on German Ebay, and it was said to have been found wrapped in newspapers dated 1930. The



words after the name on the lid label above, & the manual cover top right, are 'Ein Metall-Spielbaukasten für große und kleine Jungen' (A metal toy building set for children, young & old). The box is a dark grey mottle on the outside (the light corners are the lighting of the photo) and measures 42*29cm. The base with the parts in it is shown below, and underneath

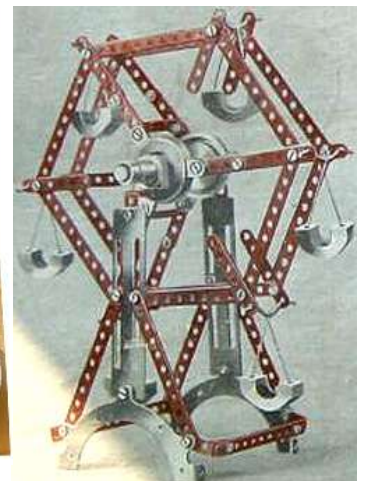
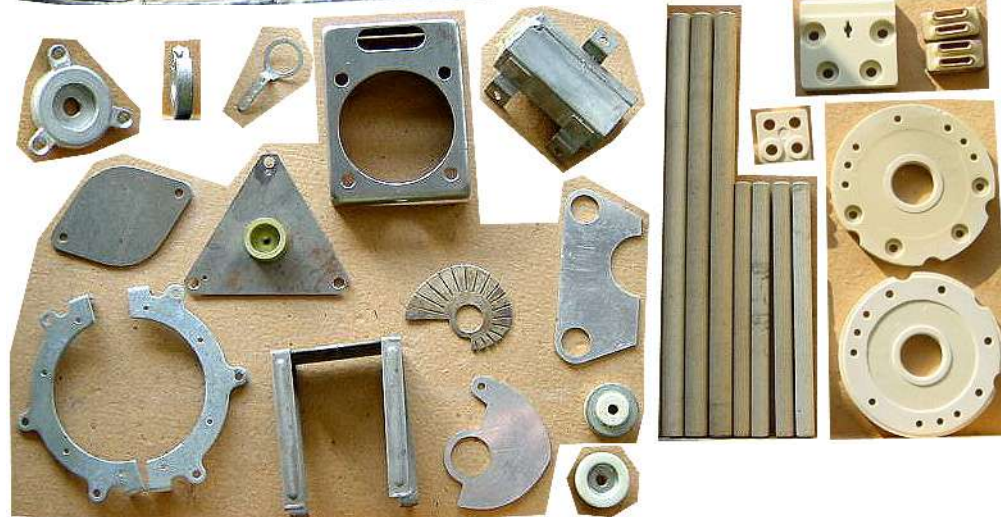


are photos of some of them. Assuming the box dimensions are correct, scaling the Strips gives a hole pitch of about 8½mm and a width of a little less, around 7½mm. The diameter of the holes could be 3-3½mm.

Some of the metal parts look as if they might be steel, with the lighter ones aluminium perhaps. The whitish parts at 'A' might be porcelain, like prewar insulating pieces, but the Rods 'B' could be wooden. Many of the Strips are brown but are probably still metal because the 2*1h Brackets, in the second from left compartment in the third row, are quite thin like metal and are also brown.



The use of many of the parts isn't obvious but some can be seen in the models on the label and the manual cover. The cab & bonnet of the Lorry are the part shown at '1', and the sides of the load platform can just be seen under the brown 11h Strips in the box. The vertical Cylinder is with the 'wooden' Rods at the LH end of the long compartment in the top row. The base of the Big Wheel (enlarged below) is a pair of the part '2', with the uprights the part used as the platform sides of the Lorry. The spokes at each side of the wheel are attached to a Hub '3', and I suppose a stub axle fits into its recess, but I can't work out how it is held in place or how a bearing for it is provided. The 'cars' are the parts in the first compartment in the middle row. The boy on the label is playing with a Lorry similar to the one on the cover of the manual.



'New' System from Colombia: MECANO – "THE BEST"

The name may be very similar to a system with rather more claim to be 'The Best', but the parts are much more akin to the German MEKANIK, both in design and in their 13mm hole pitch. The thread though is 5/32" BSW rather than M4. David Hobson found a near complete example of a No.2, the largest set, and kindly lent it for this account.

MAKER Christian Le Paliscot, Fábrica Franco – Colombiana "MECANO", Teléfono: 45 97 52, Bogotá. This is from the manual, it is not given on the box.

HISTORY No indication of date but the parts are similar to German MEKANIK, which appeared (then called MECANIC) in 1948.

SETS The contents of Sets A, 1, & 2 are given in the manual, and are shown right, with my names for the parts alongside. The quantities given for the No.2 are credible except that only 2 Spanners were in the Set; also the 28h Strips are actually 21 holes long, and the 5cm Axles are 4.3cm. The Set is very broadly comparable to the MEKANIK No.21 – it has more of some parts, including Strips & Gears, but fewer Brackets & Flexible Plates; the most significant differences though are that it has no A/Bs, nor a Bush Wheel.

The No.2 box is red, large, 60½*40½*3cm, with a label, 32*18cm, identical to the manual cover shown later except that it has a 1cm white border around it. The Set No. isn't shown on it anywhere. The parts are fastened with nickel clips to a cream card sheet and its right side & centre are shown below (the round brass clips are substitutes). The parts are laid out symmetrically on either side of the round N&B tin (8½cm Ø & 2½cm deep) in the centre, except that the bottom left corner has 6x 2h Strips instead of the 3x 2h high D/Bs on the right. There is no obvious home for the Crank Handle (shown on top of the Flanged Plate).

HOLES 4.3mm Ø at 13.0±.05mm pitch. There are no elongated holes.

MATERIAL/FINISH Most parts are painted steel but the Gears, bosses, & Flexible Plates are plastic. The green parts are as uniformly dark as the darkest

in the photo, and the Flexible Plates are purple.

PARTS Apart from the lack of elongated holes most parts are similar to their MEKANIK (MEK) counterparts but are of thinner gauge metal and are not as well made - there are some rough edges and many of the bends are less sharp, and are not at right angles. In the notes below only significant differences will be mentioned.

PIEZAS CONTENIDAS EN LAS CAJAS "MECANO"

DENOMINACION DEL A PIEZAS	NUMERO DE PIEZAS		
	CAJA A	CAJA I	CAJA II
N&B Tin	1	1	1
Axle, 5cm	1	2	4
Small? Pulley	1	1	1
Bolt, 5/32"x¼"	12	25	50
Bolt, 5/32"x1"	2	3	6
Nut	15	30	60
Pawl		2	2
Gear, small		1	2
Gear, large		1	2
Pulley	2	4	6
Tyre	2	4	6
Flanged Plate	1	1	2
Figd Sector Pl.		1	2
Trunnion	2	2	2
Flat Trunnion			2
Spanner	1	2	4
Screwdriver	1	1	1
Crank Handle	1	1	1
Axle, long	1	2	4
Plastic Plate	2	2	4
Corner Brkt	2	4	4
Curved Strip	2	2	4
Double Brkt		3	4
2h deep D/B		1	3
DAS 1*5*1h	2	4	8
Strip, 2h	2	2	6
Strip, 3h	2	4	4
Strip, 5h	2	6	6
Strip, 7h	2	4	8
Strip, 11h	2	6	8
Strip, 28h			8
T O T A L	61	122	225



The width of the **Strips & Brackets** varies from 12.2 to 12.8mm, and they have large-radius ends. The **Trunnions** have a little more metal around the curved top, with some 1½mm extra above the top hole. The **Flanged Plates** have sharp corners; the 5*11h is 68mm wide; the Sector Plate has straight ends and only 7 holes in the flanges, one roughly midway between each pair of face holes.

The **Pulley**, about 32mm Ø with a 5mm wide vee, is made from thin tinplate discs held together by a plastic boss. The **Tyre** for it is a black rubber ring, 50mm o.d. when fitted to the Pulley, & 10mm wide. No part was found which could be the Polea Transmisión but it is most likely a small Loose Pulley – the comparable MEK part is 14½mm Ø. The **Gears**, apart from their bosses (see below), are very like the MEK parts, but are not as crisply moulded and ran together with a slight tight spot. The tip of the **Pawl** is slightly rounded.

The plastic **Bosses** are integral on the Gears and separate on the Pulley (with

moulded 'peening'), and a bore of about 4.2mm They are single-tapped through an extension on one side of the boss (similar to the type in 9/211).

Axles are 3.96mm Ø, 43 & 98mm long, with slightly chamfered ends. The **Crank Handle** is 150mm long o/a with a 15mm handle offset 40mm; the MEK part is 155mm long with the handle offset 28mm, and its bends are near 45°.

Fixings Plain steel 5/32" BSW N&B, probably commercial items. **Bolts** are RH, 7.5mm Ø, and 1/2" & 1" u/h (the 1/2" instead of the 1/4" in the inventory). The **Set Screw** is similar but with a 7.2mm Ø head & 3/8" u/h. The **Nut** is pressed, square, 8.5mm A/F & 3mm thick.

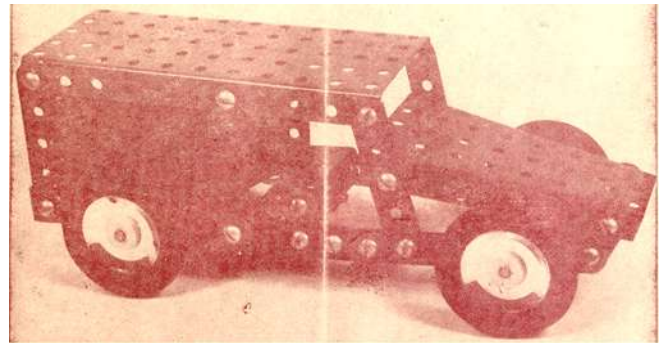
Tools The flat, dull grey plated **Screwdriver** is 89mm long; a wire one is shown in the No.1 set illustrated in the Manual. The **Spanners** are 85mm long, 1 1/4mm thick, & painted black. The one in the photo is slightly cranked at one end, the other is flat. The MEK ones haven't been seen but look similar in MCS except for their hex ends.

MANUAL The cover, below, is 292*164mm. C2-4 are pale green – C2 has a short introduction & the details of the maker; C3 has the Set Contents (Nos.A,1,2); C4 is blank. The 8 inside leaves are printed on one side only with 2

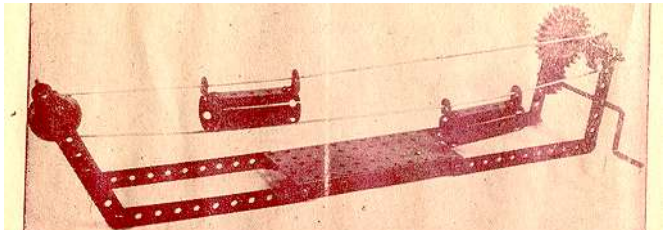


poor quality, dark red-brown tinted photos on each. The 16 photos are entitled Forma del Construcción Nos.1-16. No.1 shows the layout of Set 1 with the parts laid out individually as in the No.2. The remaining 15 photos include 11 small models, usually named, and 2 or 3 of them are similar to MEK models. The other 4, mixed up among the models, are basic constructions, and 2 are again in a MEK manual. The first of the 4, No.2, non-MEK & unnamed, consists of 2 Strips, overlapped 3 holes, with a 2h deep D/B at one end and a Trunnion at the other. The latter is attached by an A/B even though none seem to be included in any of the Sets. The first actual model is No.4, Columpio para 2 (Seesaw), and the last is No.16, Carretilla Manuable (Hand Cart). 3 of the 'original' models are shown in the next column. They are about 3/4 size but show all the detail that can be seen in the originals.

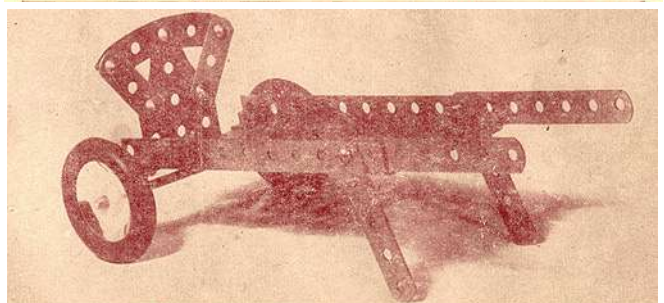
Apart from the Set Contents the only reference to sets in the Manual is in the Intro where it is claimed that more than



Automóvil Cubierto - Forma de Construcción No. 9



Carretilla de ida y vuelta - Forma de Construcción No. 13



Carretilla Manuable - Forma de Construcción No. 16

100 models can be made from MECANO No.1. Probably all the Manual models are for Sets A or 1; certainly none do justice to the contents of Set 2. The 'MEK' ones are from the small outfits 18 & 19, and given the fairly wide range of quite attractive MEK models that could have been copied, one wonders why more weren't.

REMARKS Most of the parts look useable despite their indifferent quality, but the scope of model building would be limited by the inexplicable omission of A/Bs & a Bush Wheel. And the Manual would surely discourage many beginners.

MECANO [2]: S2

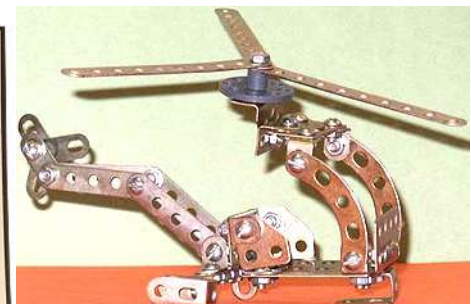
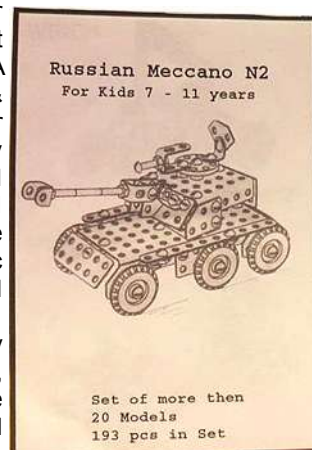
OSN 31/920

Snippet: Russian MECCANO The manual cover right shows the abuse of the Meccano name - this set seems similar to KONSTRUKTOR VOENNAYA TEKHNIKA (KVT, see 25/718), but with fewer parts & a manual in English. The significance of the N2 after Meccano isn't known. Apart from the cover, the Ebay item last Spring had 3 photos of an apparently unused set: the bottom with the parts in it, all the parts spread out, & the model far right. The box is one of the characteristic Russian moulded jobs in orange plastic with 3 compartments - the lid wasn't shown but I'd guess it would have KONSTRUKTOR on it.



All the KVT parts can be seen and they look identical apart from the Trunnion left, and the colour of the plastic parts - the Road Wheels black, also the Bush Wheel (but blue in the model).

The KVT contents are given on the MCS Extra Sheet X1.3/4/6; the parts that can be seen in this Set are: 3,4,1 of 10,5,3h Strips; 2 Curved Strips; 1 DAS; 3 Flanged Plates; 4,4,2 of 2*5,4,2h Plates; 4x 2*4h Plates with one 45° corner; 2 Trunnions;



4x 2*2h Gussets; 4x 3*2h Double Gussets; about 13 A/Bs (some may be Obtuse); 7 Flat Brackets; 4 D/Bs; 3x 2h deep D/Bs; 6 Road Wheels; 1 Bush Wheel; N&B; 1 Rod about 7cm long; 1 Spanner & 1 Span'driver. From the manual cover the Set has 193

parts, compared with 274 in the KVT outfit.

Neither the Helicopter above, one of the more than 20 models claimed for the Set, nor the Armoured Car on the manual cover are in the KVT manual.

RUSSIAN MECCANO: S1

OSN 31/920

OLYMPIA A brief note about this small-scale East German system with tiny M2 N&B appeared in 15/417. Now, courtesy David Hobson & Werner Sticht, some sets & manuals are to hand, and photos of others, mainly culled from Ebay. Werner also kindly provided some translations.



HISTORY The dates in the panel top right are from the reference books, and although some of the PR on manuals etc may seem to include a date there are too many inconsistencies to make most of them credible. Two phases though can be easily distinguished. In the first the box lid labels & manual covers were what I'll call the '5-ring' design, as in the lid above; in the second both were replaced by the 'Crane' design shown below as a manual cover.



Perhaps the OLYMPIA name was used to evoke the memory of the 1948 Olympic Games, the first after WW2.

Some of the Crane manuals have an official registration number of 6024/52 and this may indicate that the change from the 5-ring design was in 1952.

No mention is made of the Nr.00 set in the (very limited number of) extracts from the 5-ring literature available and most likely it was not in the original range of sets.

It is said in the Crane manual that some add-on sets were under development, to be used with the basic outfits. These would be for machines, vehicles, bridges, motors & gears, and plating (patterned as various types of roof tiling, walls & brickwork, road surface, etc.). As far as is known none of these went on sale.

Sets were exported to Russia and a leaflet in Russian to supplement the German manual is known.

The SETS The range is given in the panel top right: the 1N & 1S differ only in the type of box. Sets 00, 00/0, 0, 0/1, & 1N are in cardboard boxes, with the parts attached to a backing card by brass steel clips. The cards are usually red but green is also known. The other outfits have wooden bases with cardboard lids. Their bases have numerous compartments for the different parts and these are routed

Leading Particulars of OLYMPIA

Country East Germany

Maker Elektrobau Werner Gennencher, Löbau/Sachsen.

History 1949 to 1955.

Hole dia. 2.2mm. **Hole pitch** 7.0mm.

Sets Nos.00,0,1N,1S,2,3, & linking sets 00/0,0/1,1/2,2/3.

Material/Finish Nicked steel, with aluminium (& sometimes brass) Wheels, Collars, Couplings.

Boss Integral, 6.0mm o.d., 2.1 bore, d/t M2.

Fixing M2 N&B. Aluminium hex Nuts, 5.5mm A/F; plain steel Bolts with 3.7-3.9mm Ø CH.

Axles 2.00±.02mm Ø, nicked brass or steel.

Remarks No Gears or Motors.

out of a piece of solid wood. Each compartment has a red card in it, some loose with parts clipped on, some glued down with the parts loose above. In both types the small parts are in the circular boxes, #35.

The cardboard bases are black; the wooden ones are left as natural wood. The lids for both can be either red or a dark green, and a list of the contents of the set is pasted inside each lid. The two main types of lid labels have already been mentioned but there are three versions of the Crane one, and referring to the illustration of the manual cover these are: (i) Identical except that the bottom panel has the set number in it. (ii) Likewise but the round logo (shown later on the Parts Box lid) replaces the top panel. (iii) The bottom panel is blank and the set number is in a circle under the top panel.

Most sets seen include a printed card sheet the size of the box advertising the system and saying that the models fit in well with H0 scale trains.

On the limited evidence available there seems no difference between the bases used for the 5-ring & Crane sets. This is reasonable because the contents of the 0-3 sets in MCS, taken from a 5-ring manual are the same as those in the Crane version.

The sets to hand have the following dimensions: 00, 16*11½*2cm; 1S, 22*16*1.7cm (9 compartments); 2/3, 32*23*1.8cm (29 compartments). From Ebay a 1/2 has the same base as the 2/3, and the size of the Nr.3 is 47*34*3.5cm.

The Nr.3 is quite a large set and includes 10 Flanged Plates, 280 Strips, 135 DAS & Brackets, 20 Pulleys & Tyres, and about 300 N&B. Working backwards the Nr.2 has roughly 60% of the parts in the Nr.3, and the Nr.1 half the parts in the Nr.2.

The PARTS The 34 parts in the system (including 2 Spanners & 2 Screwdrivers) are shown in MCS, so the notes below give a few more details and clarifications.

- **Basics.** The parts are accurately made and nicely finished with most parts nickel plated. Holes are 2.2mm Ø at 7.0mm pitch, and none are elongated. Strips & Brackets are 7.1mm wide, .45-.50mm thick, and have semi-rounded ends of about 5mm radius.

- The 'strip' parts are: **Strips**, 2,3,5,7,10,15h; **DAS**, 1*5*1, 2*5*2, & 2*3*2h; **Brackets**, Angle, Double, Reversed Angle, & Double Bent Strip.

- The 5*5h **Flanged Plate** is .53mm thick and has corners of the same radius as the end of the Strips.

- The **Fast Pulley** #15 is 16mm Ø and 4.0mm thick. The **Bush Wheel** #16 is 20mm Ø and its 2mm thick disc has 4 holes at 7.0mm radius. Both are turned from aluminium with integral bosses, and are fitted with 3mm long **Grub Screws**, either brass or steel. The tiny **Loose Pulley** #17 is aluminium, 6mm o.d., and 2mm wide. Bores in these parts are 2.1-2.2mm Ø.

- The d/t **Collar** is 6mm Ø and 4.5mm long. The **Coupling** is

also 6mm Ø and is 13½mm long, d/t each end at 7.0mm pitch, with a centre cross bore at 90°, again d/t. All seen are aluminium except that one of the 3 Couplings seen is brass.

- The **Tyre** is black rubber with a V tread around the outside. It is 24½mm o.d. and 5mm wide.

- The **Axles** are 25, 39, & 54mm long, except for one 24mm & one 27mm. The **Crank Handle** is 66mm long o/a with a 48mm shaft and the handle offset by 14mm. The bends are near 90° but are larger radius than usual. All these parts are 2.00±.02mm Ø with sheared ends, and are brass or steel, nicked in both cases.

- The aluminium hex **Nuts** are quite large, 5.5mm A/F, and quite thin, 1mm. The **Bolts** are cheeseheaded, 3.7-3.9mm Ø, and look like plain steel but are probably treated against rust. (*Eisenzeit* mentions brass Bolts.) The 3 lengths are 3½, 5, & 7mm u/h. Two types of **Washers** were found in the Sets, brass & steel, both nicked. The steel are 5.0mm Ø, 2.3mm bore, & .65mm thick; the brass are 6.0mm Ø, 2.1mm bore & .3mm thick.

- The **Hook** is made from the 2h Strip. The **Cord** is a natural fawn colour and a little thinner than average.

- The **Screwdrivers** #31 & 32 are the same except that their tips are about 3½ & 2½mm wide respectively. Their varnished wood handles are of a tapering circular section, flatted on both sides, and are 70mm long including the steel ferrules. The blades are 3mm Ø steel, about 46mm long. Both tips are wider than the Grub Screw and both are thin enough to enter its slot, so it's hard to see why one of each are in all sets (except the 00). The **Spanners** #33 & 34 are both aluminium, flat, 80mm long, and identical except that they are 1.1 & 2.1mm thick respectively. The thin one is presumably meant to allow lock-nutting, a worthy thought but unfortunately it's a little thicker than the Nuts. And one wonders if the thicker one is really necessary with M2 Nuts, and whether an 80mm long Spanner was wise with that thread.

- A little circular **Cardboard Box** #35 is used to house the N&B, and other small parts. It is 35mm Ø with the lid covered by a label printed with the Olympia circular logo below. #36-39 are not illustrated anywhere. #36 & 37 are the Cardboard & Wooden **Boxes** used for the sets, the same number whatever the size. One **Pappetui** #38 is listed for each of the wooden boxed sets – the name translates as a cardboard folder but it isn't clear what it actually is. A #39 **Befestigungstafel** (board for fixing parts to) is in each of the cardboard sets, with

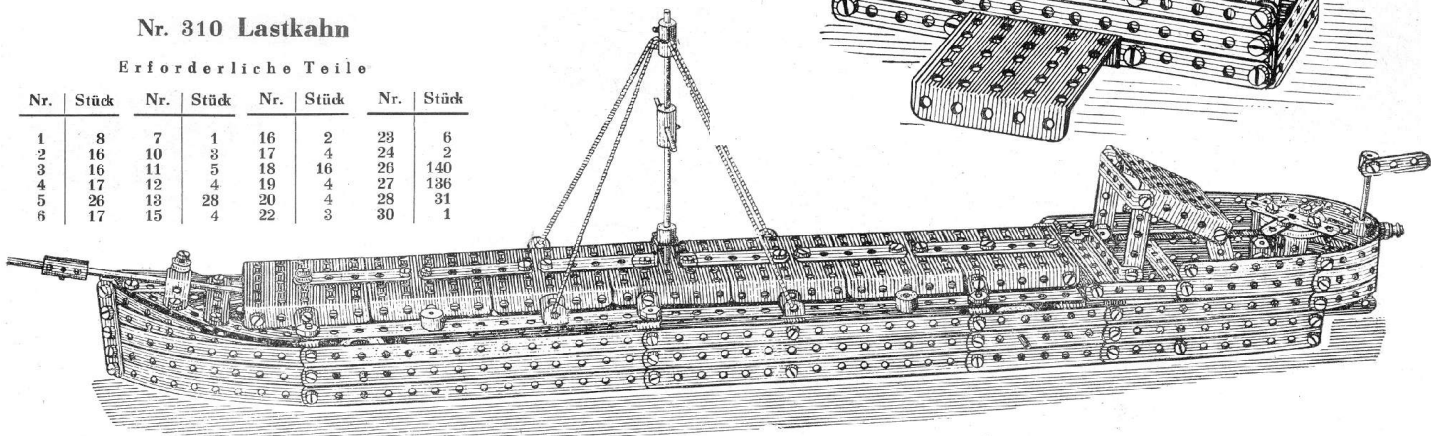
two listed for the 1N. An example of a 1N hasn't been seen and whether the 2x #39 indicates a 2-layer set isn't known.

The MANUALS The 5-ring manual has a cover similar to the 5-ring label but with ANLEITUNGSBUCH in the bottom

Nr. 310 Lastkahn

Erforderliche Teile

Nr.	Stück	Nr.	Stück	Nr.	Stück	Nr.	Stück
1	8	7	1	16	2	23	6
2	16	10	3	17	4	24	2
3	16	11	5	18	16	26	140
4	17	12	4	19	4	27	136
5	26	13	28	20	4	28	31
6	17	15	4	22	3	30	1



panel. No example of it has been seen but the MCS pages are taken from it, and it most probably covers sets 0-3. The Crane in MCS is in the later Crane manual, with the same model number but on a different page (34 against 32 later). 4 other pages in a photo have the same models as later but the page & model numbers can't be seen.

Two manuals with the Crane cover are known, one with 0-3 models, and one with 00 & 0 – full details are given in the summaries later. The 0-3 is about the same size as the 5-ring one but the 00-0 pages are only about half the area. In both there is a shaded line drawing of each model together with what looks like fairly full building instructions.

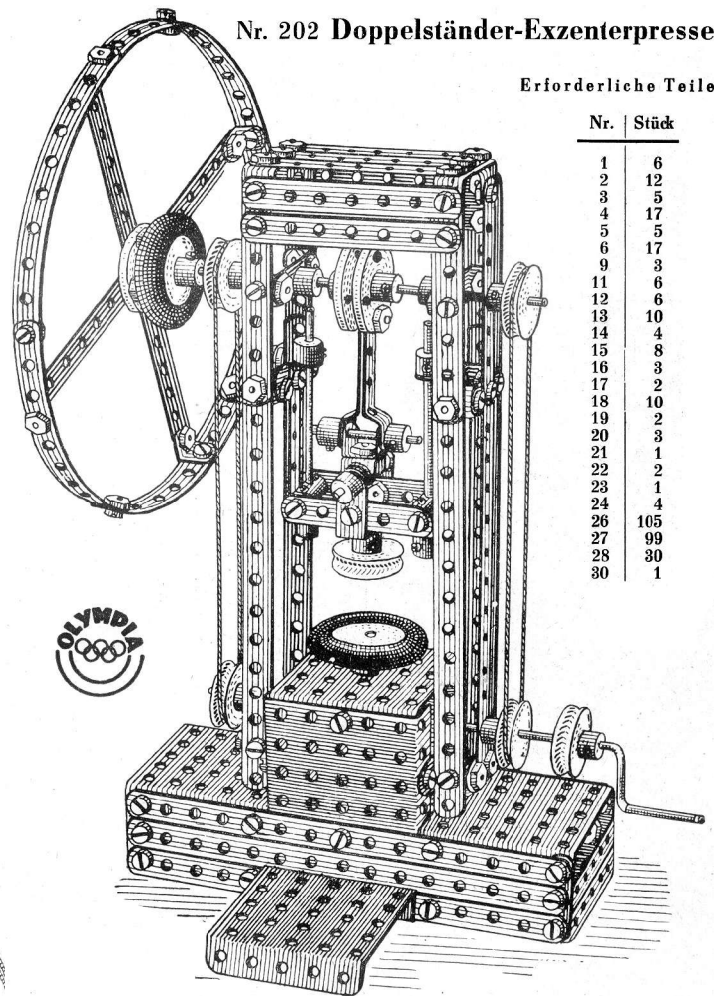
The 0-3 has a good selection of simple models for Sets 0 & 1 including some Railway Signals, Wagons, etc. There are only 3 models each for the larger sets, a Crane, a Drilling Machine, & a Press for the Nr.2, and a Bridge, a Barge, & a Crane (the one on the cover) for the Nr.3. They are all fair models but none use more than about half the number of parts in the sets. And there are no large railway models. The Nr.2 Press & Nr.3 Barge are shown below, natural size.

A few of the 00 models in the 00-0 manual are from the Nr.0 range in the 0-3 manual but the others are new, and quite

Nr. 202 Doppelständer-Exzenterpresse

Erforderliche Teile

Nr.	Stück
1	6
2	12
3	5
4	17
5	5
6	17
9	3
11	6
12	6
13	10
14	4
15	8
16	3
17	2
18	10
19	2
20	3
21	1
22	2
23	1
24	4
26	105
27	99
28	30
30	1



reasonable considering the size & nature of the set. Those for the Nr.0 are most of the rest of the Nr.0 models in the 0-3 manual but in a different order & with different model numbers. At the end are a few models from the larger sets.

SUMMARY OF 0-3 MANUAL •Name: Olympia •Details of maker: none. •Dates &/or Ref Nos: TRPT-Nr.6024/52 on C3; III/19/1 – H243 – 10 – 6161 on C4. •Page size: 210*148mm. •No. of pages: 32 inc covers. •Language: German. •Printing: models: shaded line drgs, blue on white with red text; cover, left. •Page Nos. of Illustrated Parts & highest PN: 6-7, 35. •Page Nos. of Set Contents & highest PN: 4-5,40. •Sets covered: 0,1,2,3. •No. of models for each set: 15,79,3,3. •Name, Model No., Page No. of first & last model of each set: 0: Warnungs+tafel,1,8; Rolltisch,15,12. 1: Bett,50,13; Windmühle mit Hammer,78, 24. 2: Säulenbohrmaschine,200,25; Doppelständer-Exzenterpresse, 202, 27. 3: Brücke,300,28; Fahrbarer Brückenkran, 302,30. •Other notes: Intro & details on pp2 & 31. Model 310 should be 301. An

identical manual doesn't have the C3 Ref. No., & the C4 one is III/19/1–12/451–1351. A 4-page leaflet in Russian has the 'circular' OLYMPIA name on the front (with О ЛИМПИА under it), the Set Contents on the inside pages, & the model names on the back.

SUMMARY OF 00-0 MANUAL •Name: Olympia •Details of maker: none. •Dates &/or Ref Nos: III/19/1–10/451–1352 on C4. •Page size: 146*100mm. •No. of pages: 36 inc covers. •Language: German. •Printing: models: shaded line drgs, blue on white with red text; cover, similar to the 0-3 above but with a 'circular' name top left. •Page Nos. of Illustrated Parts & highest PN: 8-9, 35. •Page Nos. of Set Contents & highest PN: 6-7,40. •Sets covered: 00,0,1,2,3. •No. of models for each set: 25,10,5,1,1. •Name, Model No., Page No. of first & last model of each set: 0: Warnungstafel,1,10; Balance,25,23. 0: Sägebock,26,24; Rolltisch,35,28. 1: Lastkraftwagen,65,29; Bett,50,13; Windmühle mit Hammer,78,32. 2: Doppelständer-Exzenterpresse,202, 33. 3: Lastkahn, 301,34. •Other notes: Intro & details on pp2 & 35.

OSN 31/923

OLYMPIA: S3

A DISTLER GIANT No.5000 Set David Hobson kindly lent me his recently acquired set, apparently complete & unused.

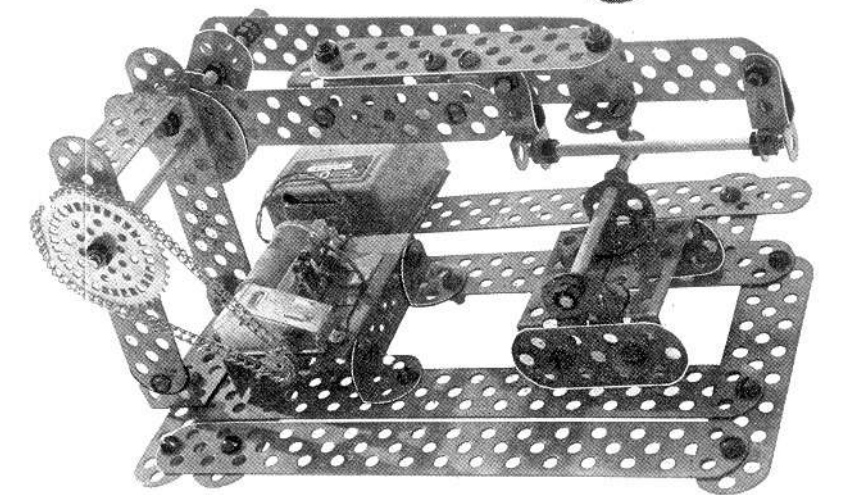
The sturdy **box** measures 52½*39*5cm and weighs about 6kg. It is white, printed in blue & black, and the lid, with a boy & a Mobile Crane, is shown in 2/14. The Set No. isn't anywhere on the box. The parts are housed in a white moulded tray with a transparent lid; the N&B are in the same type of clear box as in the 22511 outfit (see 27/808). There is no obvious place for the Feet (for the A/Gs) in the box but there is room for them under the longer A/Gs.

The **contents** are as in MCS except that it has 12 A/B, the quantity given in the manual with the Set. On the other hand the Manual gives 2 of the Perforated Spanners against one in MCS, and in the Set (plus a 'Black' Spanner, see below, in each case). The number of the Tyres, 4, isn't given in MCS. Essentially the 5000 is the 22511 plus: 12,4,4, of 17,19,25h Strips, 2,6 of 13,20h A/Gs, 4 Feet for the A/G, & the 'Black' Spanner.

The **parts** not seen before are: • The **A/G**, 33*34mm o/a with corner radii of about 5½mm. • The **Foot** for the A/G, 44*45*13½mm o/a, pushes onto its end and is moulded in grey plastic with DISTLER on the bottom web. • The nicked **Screwdriver** is shown below, the wire is 4mm Ø & it is 117mm o/a. • The single-ended **Black Spanner** below it can be seen in MCS – it is a commercial drop-forged item, 115mm long, with a chemical black finish, and is marked WEST GERMANY, DIN 894, & 10 (the jaw width)

The **manual** is identical to the one in the 22511 Set except that GIANT replaces GIGANT throughout (though the text remains in German), and the appropriate illustrated parts/set contents are given on p3 (and stated to be for the 5000 outfit). None of the models use the A/Gs in the Set. However there was a **leaflet** with the Set which shows the parts/contents of all the sets except the 22511, and a small selection of unnamed models for each. (It isn't explained anywhere but the Giant 2 models shown need Sets 1+2 and the Giant 3 models Sets 1+2+3.) There are 17 models on one side from a Chair to a Double Swing, and 9 on the other from a Low-Loader Trailer to a Derrick Crane. There is one photo of each and though not spectacular, most are generally better than the

Manual models. The finer points of the larger ones can't be seen in the photos. The Mobile Crane & Mechanical Hacksaw below (full-size) are among the more interesting models. The screw-operated luffing in the Crane relies on the flats of a Nut fitting closely between the arms of a U-Bracket.



OSN 31/923

DISTLER GIANT: S1

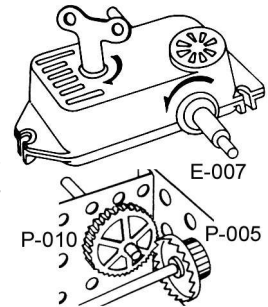
DELTA-X Jean-Louis Figureau kindly sent a photo of a Japanese DELTAX D-101 set he obtained recently, & some photocopies from the manual. Apart from the D-40 set mentioned in 11/288, and the pages in MCS about the D-180, this is the first information about the outfits sold in Japan - as opposed to DELTA-X sold in American & BUILD-X in Canada.

The D-101's box is about 28*18cm, & the lid, right, is in the style of the D-40 in OSN 11. The parts are in a white foam block and are in the colours given in OSN 11 (the Pulley & Wheel Disc do not have the pink colour shown on the lid). The contents can be seen in the table below, taken from the manual. All the parts can be seen in MCS under DELTA-X or BUILD-X except a C/W Motor, E-007, a 6-spoked Gear, P-010, both shown top right, & a 25mm Bolt, S-042.



The A5 size manual is for sets 100-400, and is all in Japanese. Its covers are shown under the box left, and the Tower on the front would be about 5ft high. On the back cover is a photo of a number of set boxes, and the list of them underneath includes all those in the Set Contents, plus D-40 & D-80. Four D-40 boxes can be seen in the photo, each with a different model on it, including the one on the OSN 11 box. None of the other boxes can be identified but it's possible that there is more than one box for one or two of the sets. At bottom centre are 6 boxes with a large letter on each (C,E,F,H,I,J) but it can't be seen whether they are constructional sets.

The Set Contents below show that the sets are not entirely progressive. The contents of the American DELTA-X, & Canadian BUILD-X sets are not known but from the parts list given for those sets' models (the BUILD-X Tower Crane on MCS Sheet X1.5 is an example), the contents below would not provide quite enough parts to allow any of them to be built. Possibly then this material is older than the North American sets, especially since no mention is made of a D-500 outfit, or the D-180 in MCS.



Parts\Set	D-100	D-101	D-150	D-200	D-300	D-400
S-001				2	2	2
S-002			1			2
S-004	2	2		4	2	2
S-005				2	2	4
S-006			2	2	2	2
S-007	4	4				2
S-008				4	4	4
S-009				2	2	6
S-010	2	2	2		2	4
S-011	2	2	2	2	4	6
S-012				4	4	4
S-013	2	3	4	5	6	10
S-014			2	2	2	8
S-015			4	5	5	6
S-016	2	2	2	2	2	8
S-017				5	6	
S-019			1	4	2	2
S-020	4	4	6	7	9	12
S-021				4	4	2
S-022				1	1	1
S-023					1	3
S-024			2	3	2	3
S-025	1	1			1	2
S-026		2				1
S-027	4		4	4	4	5
S-029		2	1	1	1	2
S-030						1

Parts\Set	D-100	D-101	D-150	D-200	D-300	D-400
S-031				1	1	1
S-033			1	1	1	1
S-034	7	7	7	8	10	17
S-035	31	31	31	95	105	105
S-036	40	40	40	105	120	120
S-038	2	2		3	2	
S-039			1			
S-040	1	1	1	1	1	1
S-041	1	1	1	1	1	1
S-042			2	4		
P-001	2	2		4	4	4
P-002	2	2	4	7	6	4
P-003				1	1	1
P-004				1	1	1
P-005				1	1	1
P-006	1	1			4	4
P-007						1
P-008			1	1	1	2
P-009	2	2	4	5	6	8
E-001					1	1
E-002					1	1
E-004	1	1	1	1		
E-005					1	1
M-002					1	1
M-003	1	1	1	1	1	1
M-004					1	1
M-005	4		4	4	4	4

DELTA-X: S1

OSN 31/924

Snippet: New System – Another CONSTRUCTION

This set was sold from Australia early in 2003 and only the lid, right, is known. It is entirely different from the earlier Japanese CONSTRUCTION TRUCK (see 27/803), and the parts look as if they are the Chinese CONSTRUCTION MODELS/WISDOM type. Perhaps it is a No.6 (see 10/238) in disguise, though the Cab at least is slightly different: the rear light of the Cab used to be circular (see 10/239). The Air Horns on top of the Cab are new too.

The smaller centre letters of the 'TRUCK' part of the name on the box have 'JIGSAW' above them, presumably to invoke the notion of assembly (even if jigsaw pieces are not usually



interchangeable). The slogan under the name reads 'CHANGE IN THOUSANDS OF WAYS'. The first word of the two under the last letters of CONSTRUCTION is FRICTION. The second might be POWERED – in any case no doubt the set includes a Friction Motor, another feature of the WISDOM No.6.

CONSTRUCTION TRUCK [2]: S1

OSN 31/924

More on STABA This is about the East German STABA: it follows the details in MCS, and the notes in OSN 8/195 & 15/418. It is based on late examples of 'Teuteberg' Sets A, B, C, & V to hand (with lids similar to the manual covers in OSN 8), an earlier A manual, possibly 1960, and on photos, mostly from Ebay, of various outfits from all periods. During STABA's life the basic parts, and probably the contents of the sets & manuals, did not change a great deal, but the history of its proprietors and where it was made is quite complicated. Some details are given in *Baukästen* & what is known is given later.

The PARTS The contents of the Accessory Packs Z1-14 are listed in the lid of one of the late sets and these include a number of parts from the K, R3, & V sets which are not in MCS. Most of the 'standard' parts are well shown there so the notes that follow only cover points about them which are not clear, and the 'new' parts.

- **Basics** All the metal parts seen, except the bosses & 'brassware' in aluminium, are nicely nickel plated. The ends of the Strips & Brackets are fully radiused, and the corners of the Plates & A/Gs are square or nearly so. Slotted holes are usually 6.0-6.2mm long with large-radiused ends.

- **Strips** are 12.2-12.3mm wide and about .9mm thick. The slots in the lugs of the **DAS** are 6.9mm long.

- The **Flat Bracket** is 24mm long & the **A/B** is made from it, with equi-length arms. The lower bends of the **Double Bent Strip** are rounded. The **Double Bracket** is 14mm wide o/a.

- The **A/G** is 13*13mm (±.5) in section

- The **Flanged Sector Plate** has straight ends.

- The **Pulley A12** is 30mm o.d. & 5.6-5.8mm wide, with holes at 8½mm radius.

- **Pulley Discs B30** is 30mm Ø with holes at 8½mm radius, and a pair give a 5mm vee. **B29** is 53mm Ø with a belled centre and two give an 8mm vee; the 3 holes at each side are not quite in a straight line - the outer 4 are at 12mm radius and the centre pair at 8½mm.

- **Discs A13** is 61mm Ø with holes at 8½ & 24½mm radii. **A14** is 22.2mm Ø. **B31** is 42½mm Ø and has 6.2 & 10.0mm long slots with large-radiused ends.

- **Wheel R1** 2 were found in a Set B, & 2 in a Set C, presumably they had been bought separately. The centre **Pulley** is like A12 but 6mm long narrow slots, tangential to the circle at the base of the vee, replace the 2 face holes. The tabs on a

Hub Cap, left - a 24mm Ø dome, 7mm deep - are a push fit into them. This part is not mentioned in any of the known literature, and has only been seen in the later Wheel Sets. The **Tyre** is black rubber, 52mm o.d. & 11mm wide; it has STABA moulded into both sidewalls and has an X-pattern tread around the top



face, on each side of the centre line. It may be the Z5 type mentioned later. • The larger **Wheel R2** in MCS has not been seen but the o.d. of its Tyre scales at about 100mm. The R1 Wheel above and a matching 100mm Wheel, both with Hub Caps, can be seen on the cover of the F manual in OSN 8.

- **Gears** The Gears have 16, 32, & 48 teeth (13.4, 25.4, & 37.2mm o.d.) with a slightly coarser pitch than MECCANO. As shown in MCS there are 2 versions of each, with & without a boss. In the late Set C to hand all are one disc thick, not the 2 & 3 discs held together by the boss for the 16 and 12t bossed parts shown in MCS. Also none of the discs are pierced, and in all but the 32t non-bossed part they are yellow plastic, 1.6mm thick. The 32t non-bossed is nicked steel, .95mm thick. No doubt originally all the discs were steel. The **Worm** is not like the TRIX-style wire helix in MCS but is machined steel, nickel plated. It is 9.8mm long (it has no boss) and is only 8.2mm o.d. That means it won't mesh with any of the Gears at standard spacing, and Strips set at an angle, held by one N&B each, are used in the manual models to give the

Leading Particulars

Maker/History Made between 1948 to 1967 by, in turn, the Gebr. Ehrlich, Otto Hörseljou, & Karl Teuteberg KG. More details are given in this article.

Hole pitch 12.0mm.

Hole dia. Most 3.2mm but some 3.1-3.3mm

Sets Basic Set A, with add-on Sets B & C. Vehicle Set F. Gear/Motor Sets G, G1, & G2, later replaced by Sets I, & K. Wheel Sets R1, R2, R3. Set V with Plastic Plates. A beginner's set, Liliput.

Material/Finish Nickel plated steel with aluminium 'brassware'.

Bosses Aluminium, 8.0mm o.d., 3.1mm bore, 8mm long, s/t M3, with a narrow ring of peening.

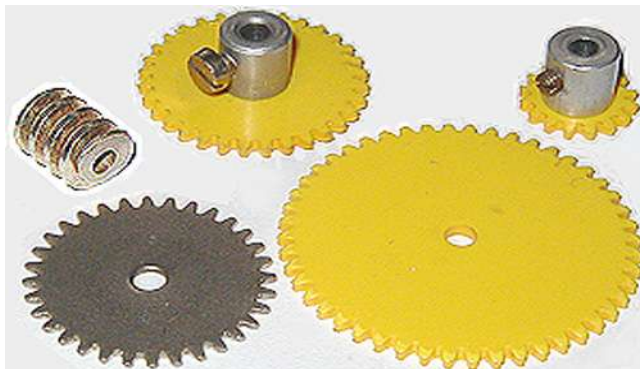
Fixing M3 N&B, nicked (but late ones may be BZP). Hex Nuts, 5.5mm A/F. Tapered CH Bolts, 5.4mm Ø, 6, 8, & 20mm u/h.

Axles 2.98-3.05mm Ø with square or domed ends.

DP Mod .75 (34 DP).

Motors At least one 4.5v electric

required spacing. A selection of the Gears is shown below.



Misc. The **Collar** is 8.0mm Ø, 8-8½mm long, and single-tapped. The **Threaded Boss** C43 is 7.9mm Ø, and 8mm long, with no cross tapping. The **Crank Handle** is 132mm long o/a with a 100mm shank and a 22mm handle offset 20mm. The **Hook** is 24mm long. A wire Hook with the same A19 PN is shown in the '1960' manual. Although they look like spring cord loops in MCS the 3 **Driving Bands** C44 seen are made circular section 3.4mm Ø black rubber, scarf jointed. They are about 22, 34, & 47cm in circumference. 3 are listed under the same PR in Pack Z12, as 70, 100, & 150mm.

- **N&B** Although only one short Bolt, A20, is in MCS, sets actually contain 2 lengths, 6 & 8mm u/h, & both are listed for Pack Z5. Most bosses are fitted with a neat **Set Screw**, 5mm Ø CH & 4mm u/h, but some have a 4mm long **Grub Screw**.

- **Tools** The **Spanner** to hand is the type with a tapered body and no centre hole, but it has a ring opening at the 'straight' end. It is 118mm long and each end is cranked by 4mm. Another variant with a blunt 'straight' end can be seen in the first K set shown later. The **Screwdriver** is 116mm long with a 4-grooved black plastic handle. The wooden-handled type can be seen in earlier sets, and the wire one in Set F.

The K, Z, & V 'New' PARTS No illustrations of most of these parts are available but a few of them can be seen in the sets etc shown later.

- **The 'K' Parts** **K8 & K9** are 2 & 3mm Abstandsscheiben, Distance Washers perhaps. **K10** is a Collar (Stelling), and is in the same Pack as the Collar A15. **K20-22** are Axles, 32, 45, & 60mm long. **K23 & 24** are Thread Ended Axles, 110 & 135mm long (C41 is also 110mm long). **K25** is a 15mm Ø

Riemenscheibe (Pulley probably). **K27** is a 30mm Pulley.

• The '**Z**' Parts **Z1** is a 75mm Ø Radscheiben (Wheel Disc?). **Z2 & 3** are Pulleys, 42 & 75mm Ø. **Z4, 5, & 6** are Tyres, 40, 50, & 100mm Ø. **Z4** is held between a pair of 22mm Discs, **A14**, and **Z5** between 30mm Pulley Discs **B30**. **Z6** is about the same o.d. as the Tractor Wheel **R2** but is much fatter and goes between two 50mm Pulley Discs **B29**.

• The '**V**' Parts are described in the Sets section below.

The SETS First the **history of the manufacturers**, based on what is in *Baukästen*, and some later information. STABA was made:

• First at Erfurt & Coburg (1948-49) by Gebr. Ehrlich. A known address was Mohrenstraße 10, Coburg, which was in fact that of one of the Ehrlich brothers, Wolfgang. But the system seems to have been the brainchild of the other brother, Hans-Heinz, and he received royalty payments from the later participants, Otto Hörseljau & Karl Teuteberg KG.

• Then at Erfurt (1950 to 1952), by Ehrlich & Hörseljau. The H.H initials before the Ehrlich name on the boxes of this time are those of Wolfgang's brother, Hans-Heinz, but both were still involved. Wolfgang started a new business making scooters in 1952 and Hans-Heinz was also involved in it. Otto Hörseljau had a craft workshop with punching machines at Erfurt in Marstallstraße, and most of the parts were made there. He also made some parts for the scooters.

• Then at Erfurt (1953 to 1960) by Hörseljau. His workshop closed in 1972 on his retirement.

• Then at Eisenach (1961 to 1967), by Karl Teuteberg KG (under licence).

Some details of known sets are given below; exactly when most of them were introduced isn't clear.

The EHRlich Sets Sets A, B, C, R2 are known from this period, and also the small Liliput outfit. Most boxes seen are red but blue & natural cardboard also exist. The **A to C** labels are similar to the one below except for the colours - the



backgrounds of the B & C are dark green & a yellow-brown respectively. The name(s) in the bottom panel vary. An early form has GEBR. EHRlich ERFURT, with H. H. EHRlich & O. HÖRSELJAU in very small letter. Another set has ERFURT-COBURG as the towns and just one (unreadable) name under it. Another, no doubt later, has just H. H. Ehrlich & O. Hörseljau, Erfurt. All the boxes have cardboard partitioning, and Sets B & C have 2 layers of parts.

A Price List of this time bears the names H. H. Ehrlich & O. Hörseljau, & the Marstallstraße, Erfurt address; the sets listed are A, B, C, Liliput, R1, R2, G, T, & F. This is the only known reference to a Set T, it cost 11.85 against 10 for Set A. There is no price given for the Set F, so perhaps it was a new item.

A typical manual cover from the period is shown at the top of the next column - the A version looks more yellow, and the B is pink. Again the wording along bottom varies in a similar way to the lids. The 2 models seen from these manuals are identical to those in the much later OSN 8 manuals, and the number of models in the B manual remained the same.



The **R2** set is shown left, and the Wheels look like the picture in MCS, though it isn't clear if the Tyres are treaded or smooth.

The dimensions of the red, partitioned box of the **Liliput** outfit is 19½*13½*2cm, and its lid is shown below. It was intended for beginners and the main parts in it are 3,5,7,

& 11h Strips, 30mm dia. Pulley Discs, Thread Ended Axles, A/Bs, a parallel pattern Spanner, and a small (plastic?) handled Screw-driver. The model leaflet is a single folded sheet



with the parts in the Set illustrated on the front, together with the number of each in the Set.

The HÖRSELJAU Sets Sets A, B, C, F, R3, & Liliput are known from this time. All the boxes are red and the B, C, & F have 2 layers of parts (though the B in the ad in MCS has only one). Other sets listed in the '1960' A manual (from the end of this period if that date is correct) are G, G1, G2, R1, R2, & V.

The **A to C** labels have models set against real backgrounds, all in rather muted colours, & with no mention of the maker or town.



The B is shown left & the Loco is a much elaborated version of a model in the OSN 8 B manual. The A lid has 2 Machine Tools in a factory setting and neither of

them is in any of the OSN 8 manuals. The C has a Tractor, similar to an F manual model, pulling a Mowing Machine similar to the B model of 8/236. Most probably the models are not related to those for the sets in question, and no evidence has been seen of any significant changes to the contents of the sets. The A-C manual covers are like the earlier ones except that the maker & town have disappeared, and the colours vary. For instance, a very pale green B has been seen, as well as several in pink, and the '1960' A is light grey. This A has the same page size and number of pages as the A in OSN 8, and the same models too, but most of them are not in the same order. The first two and last two are the same, and so are Nos. 7-9 & 22, but the rest differ: As an example p12 of the '1960' has Nos.10 & 11, Elektrokarre & Traktor, and p12 of the OSN 8 version has No.9 Tafelwagen. The PR of the '1960' is V-15-3 Rs 304-60 August Jüttner K.-G., Saalfeld (Saale), and C2-4 & pp31-32 are blank.

The lid of the **F set** is rather brighter and has 3 Cars (all in the OSN 8 F manual) going over & under an arched bridge. There is a good photo of it on p222 of *Bk*, but the manual cover (right) is not shown there. The box measures 30*37cm. The 100mm



Wheels in the Set are the type shown in MCS, not the type in the R3 Set below with the Z6 Tyres

The **R3** box is red and measures 26*35*4cm. The lid label is yellow and is similar to the earlier C cover already shown except that the wording under STABA is: RÄDER-BAUKASTEN / mit Profilrädern / für Fahrzeuge aller Art / O.HÖRSELJAU – ERFURT [Wheel Set / with treaded wheels /



for vehicles of all types]. The Tyres can be seen on a page from the manual above; they are not shown in MCS and are believed to be the Z4, Z5, & Z6 already mentioned. The Set contains 2 of the large Z6 Tyres and 4 each of the others, with the appropriate numbers of the different Discs. The manual cover is similar to the lid label but has a white ground, the maker's name & town are not included, and the other small print is a little different.

Early TEUTEBERG Sets? Two sets, an A & a C, have been seen with the different lid label shown at the top of the next column. As will appear, it seems likely that they came after the Hörseljau sets and before the yellow-lidded Teuteberg type. Both sets are single layer and are probably the same size. Later A & C yellow boxes are also the same size. The boxes are red as before but the partitioning is white, and this has been seen in a few Hörseljau outfits & a few Teuteberg yellow sets. The manual covers are as before

except that the A is a different colour, blue. Also there are some words bottom left on the C cover (the bottom of the A can't be seen) which could well be KARL TEUTEBERG KG – EISENACH, the same words as on the back covers of the later, OSN 8 manuals. One other point, the Tractor & Trailer on the lid label look as if they have the Hub Caps already mentioned, so they may date from this time.



Another outfit that may be from this period is a Gear/Motor Set K. The lid is shown right and the box is red with white partitioning. Unfortunately the parts in it are all TRIX. None of the 'G' sets have been seen, nor an 'I', nor



any of the Gear manuals. Thus it is difficult to know when the various Sets were available, and what they contained. A '1963' V manual (described later) still lists the G outfit but also an I and a K. In 2 of the OSN 8 '1967' manuals only the I & the K are listed, but one '1967' & the '1966' have only the G, G1, & G2. Perhaps an out-of-date printing block was used in these last cases, or the assumed dates from the PRs are not reliable. Another thing is that the descriptions of the sets are not consistent in the different manuals, so their contents may have changed with time. More evidence is needed from actual sets & manuals.

The Yellow TEUTEBERG Sets All these outfits have yellow lid labels with, usually, a B&W photo of a model on it. The labels on Sets A-C & F are very similar to the manual covers in OSN 8, but have KARL TEUTEBERG KG – EISENACH in small letters along the right edge. Initially red boxes with partitions were used but then the boxes were variously red & blue and the parts were housed in white or yellow formed plastic trays.

The 'partitioned' Sets Those seen are the **A, C, F, K, & Liliput**. All have a single layer of parts except the F with two. The A & C boxes look to be the same size as those of the plastic tray sets, 38*28½cm. Only 2 of the known sets have a manual, one has a cover identical to the 'Early Teuteberg' C above, and the other a yellow OSN 8 type. The 100mm Wheels in the F outfit are still the MCS type and not the 'better' ones in the Hörseljau R3 set.



The **Liliput** box is the same as the Ehrlich one but with the modern lid right. The parts look as though they are the same too except that a 5*5h Flanged Plate can be seen. It may be a foreigner though because the models on the inside of the model sheet are as before. The manual cover is similar to the lid.

The **K set** lid is identical to the one on the next page for the plastic tray set. The box, right, has the same partitioning as the K set



described above. The Motor can be seen in the bottom right corner, and the Plate under it with a semi-circular top is probably part of the Motor mounting. It, and other associated parts (top right & bottom left), can be more clearly seen in the Set I right. The top centre parts are probably Driving Bands, and various Gears & Pulleys can be seen but are not clear enough to identify.

The Plastic Tray Sets Sets **A, B, C, I, K, R2 & V** have been seen, though the R2, shown later, has just 2 Wheels in it, and so might equally be from the 'partitioned' period.

The **A-C** boxes are 38*28½*2½cm, and the N&B are in small plastic tubs with yellow lids. The sets seen are substantially complete and their contents match those on MCS X1.6 except that some mistakes crept into said page. The corrections are as follows. The nearest MECCANO PN for B27 is 11. In Set B: 0x A15; 2x A16; 0x C41; 0x C42. In Set C: 5x B32; 2x C41; 2x C42. In Set F: 1x B33; 1x B34; 1x B35; 2x B36; 1x C41; 1x C42. The manuals are as in OSN 8.

A **Set K** is shown below, with its open manual under it. Underneath again is one half of a similar box with the Gears more clearly shown. To its right is its manual cover (with another manual over it at the top), the only one of this pattern seen. Some details of the parts can be seen in the original photo of the 'half box'. The Gears in the bottom row all have 42 teeth, and in the next, 35. In the row above are 2 Pinions of different sizes (with 2 parts in one recess above them that can't be seen clearly), then the largest yellow part with about 31 teeth, probably a Sprocket, & then what looks like a Pulley. Above the Pulley is a Black Contrate, with a Worm (as shown earlier) to its left. Above again, a Pulley like A12. A red Gear, possibly another Contrate, can be seen in the other box half, in the space next to the Motor. All the toothed parts appear to have bosses, and, apart from the Worm, and perhaps one of the Pinions, none match those in MCS. On the Contrate, a Kronenradgetrieben (crown wheel drive) is mentioned in the description of the K set in the '1963' V manual.

Set I has the same design of lid as K and the open box is



Below the **Set R2** box, with Hub Caps & presumably the



R6 Tyres. The Hub looks recessed & not like the B29 Pulley Disc. No F sets from this period have been seen, but this Wheel & a smaller version of it seem to be fitted to the models on the cover of the F manual in OSN 8, possible date 1967. The models in the Manual still have the MCS type but this may just mean the illustrations were never updated. So were these 'super' Wheels ever in the F outfit? Another R2 outfit has blue Hub Caps, and one Wheel with a blue Hub Cap is shown on the lid of both sets.

The **Set V** has a red box, 26½* 18½*3½cm, and the lid has a red stripe and 2 Plates, one blue & one white. The parts are in a yellow tray, as follows, with the quantities & colours in curly brackets. 3,5,7,11,20h Strips with fully radiused ends. {4 white, 4 blue, 4 blue, 4 red-brown, 6 white}. Plates: 7*11h Perforated; and the same overall size, 84*132mm, but Unperforated; & a Flat Sector Plate, 5 & 7h wide with edge & centre line holes. All corners are square and the holes on the long edges are slotted – the Rectangular & Sector Plates are just like flattened A11 & B28. {2 red-brown, 2 pale green, 1 blue.} Flexible Plates; 5*5h with fully radiused corners & 5*11h with corner radii of about 4mm. Slots join the 3 centre 'holes' in all sides, and also 'holes' 1-2, 3-4, 8-9, 10-11 along the 11h sides. {4 blue, 4 white.} In another Set the tray is pale green and the colours of the various parts differ, with most of those above, plus some in yellow.

The parts are accurately made. Holes are 3.2-3.3mm. Strips are 12.2-12.4mm wide. At 1mm most parts are too thick to allow much curvature, but some are only .8mm, the 11 & 20h Strips for instance, and the 11h long Flexible Plate – the 20h can be bent into a circle, and the 11h into a semi-circle.

4 of the parts are in Pack Z13: V5-7, Strips with 7, 11, & 20 holes; and V9, the Rectangular Perforated Plate.

The V manual has just 4 unnumbered pages 211*150mm, plus covers, and the front is like the basic yellow one but with 3 Plates on it instead of a model. C2 is blank; p1 has a short introductory paragraph and the PR: V 15-3 Rs 105-63; pp2-3 shown the parts & quantities; pp4-C3 have a list of the different sets (A,B,C,F,G,I,K,R1,R2,V,Liliput, Z1-15, & a pack of 20 N&B) with a short description of each. C4 just has the name of the maker as usual. No model are shown, nor any examples of using the parts.

Thank you to David Hobson for lending me his STABA sets, and to Werner Sticht for his help in translating *Baukästen*, and his research into the history of STABA.



shown at the top of the next column. The manual cover is similar to the K box lid.

More on CLIP-CRAFT Some notes on a set & parts from this post-WW2 American Rod & Clip system were given in 21/594, but now more is to hand, particularly about the range of sets available. This account is based on two canister sets to hand, a Midget & a No.3; on information kindly sent by Kendrick Bisset, including details of an earlier No.1 outfit in a normal box; & on some Ebay material,

The SETS the **No.3** canister is shown right. The only indication that it is a 'No.3' is 'CLIP CRAFT CORP. / SET No.3 / MADE IN U.S.A. / YONKERS 4, N.Y.' impressed into the lid. It was wrongly described as a No.1 in OSN 21 because the lid of that set was missing and the manual with it had 'SET No.1' on its cover. The manual with this No.3 is identical and both have the 'Empire State Bldg.' address blacked out.

The **No.2**, seen on Ebay, has a canister that looks the same diameter as the No.3 but is about 3/4 the height. The label design is the same except that it doesn't have the bottom ring of models. The lid is as the No.3 apart from the changed Set No. There is a large Model sheet with the Set and the models are printed white on black as in the 'No.1' manual.

The **Midget** canister is again the same diameter, but still shorter, 185mm high; the label is the same but this time without the bottom 2 rings of models on the No.3. The lid has 'MIDGET SET' instead of the Set No. The Clips are in a card box, 60mm Ø & 33mm deep, with the push-on bottom & lid red. The Model Sheet is 427*329mm and is printed black on white on one side only. The 8 models (plus Letters A, B, & C) are shown as line drawings, from ATOM GUN to MAN FROM MARS. Some are in the No.1 manual, some are simpler versions from it, and some are new models. A postal address is given: 630 Central Park Ave., Yonkers 4, New York. The set's name is not mentioned on the Sheet but Sets 2 & 3 are advertised, and Set 3 is said to have a 'beautiful instruction book containing 30 large models' – the 'No.1' manual has 28 models (and not all of them large).

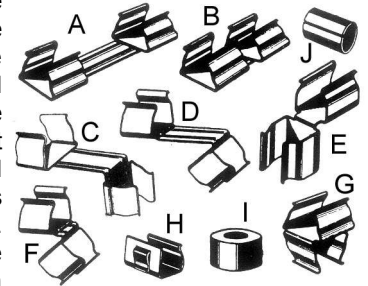
The **boxed No.1 Set** (13 1/2" x 16 1/4" x 7/8") is shown right (the set number is on the lid's side aprons). Details of the contents as found are given later but the main parts can be seen in the photo and their quantities are the same as in the No.3 canister set. The Set's manual is again the No.1, and its being with a No.1 set explains why it has No.1 on its cover! However in this case the Empire State Bldg. address has not been blacked out, and this is another reason why this Set is thought earlier than the No.3. It remains to be seen if there were any other boxed sets, the Tyres on the model Jeep shown in 14/390 are still unaccounted for.

Said Tyres are still on the same model in an Ebay item, a



trade ad said to be from 1949. It shows the 3 sizes of canister and while their names can't be read they look as if they could easily be Midget, No.2, & No.3. After them is what is clearly the No.1 boxed set, and again the words by it are unclear, but they could end in Set 1. If Set 1 was the name of the boxed set at this point it might explain why the smallest canister set was called Midget instead of No.1. It would still be strange though to have two sets, the boxed No.1 & the canister No.3, with much the same contents and the same manual.

Set Contents The parts found in 2 Midget sets, the No.3, & the boxed No.1, are listed below. A '+' means that there are 5 broken clips which could be any of type A, C, or D; an asterisk means one broken, which could be either E or F. Only 4 of the Small Pulleys are needed for the models on the Midget model sheet so it may be that the second Midget set contains parts from more than one outfit. For ease of reference the small parts, right, have been lettered.



Clip A: 2,2+;8;8. Clip B: 0,0;8;8. Clip C: 4,3+;8;13. Clip D: 8,0+;16;10. Clip E: 6,8*;12,18. Clip F: 0,3*;0;0. Clip G: 12,14; 24;22. Clip H: 4,4;8,8. Rubber Axle Stop I: 7,9;10;6. Sleeve J: 0,0;8;9. Rod 24cm: 0,0;4;4. Rod 16cm: 2,2;4;4. Rod 12cm: 4, 4;8;8. Rod 8cm: 6,8;8;8. Rod 4cm: 7,0;17;12. Rod 2cm: 9,10; 21;17. Rod, 1/2-circle: 2,2;4;4. Rod, 1/4-circle: 0,0;8;8. Pulley, Small: 3,6;4;4. Pulley, Large: 0,0;4;4. Sheet, 16*4cm: 2,4;4,4.

The PARTS Now some points not covered in OSN 21. The 'finger' on the **Clip H** is actually on the top, not at the side as shown. The **Sheet** is aluminium, 4*16cm, & .16mm (6



thou) thick. It could easily be cut to size with scissors and fits easily & firmly under the finger of Clip H, but kinks very easily even with careful use. The rolled **Sleeve** closes up to less than the diameter of a Rod when pushed into a Clip, as the free edges slide over one another. In most cases though a Clip by itself can act as an adequate bearing for a Rod to run in. The blue **Small Pulley** is 27mm Ø, about 9½mm thick, and is recessed on one side like the larger one. The **Axle Stop** is red rubber, 7mm Ø & 4mm long.

The MODELS The No.1 manual has a single photo of each model and in many of them it is not easy to see which parts, and particularly which Clips are needed. The line drawings on the Midget's Sheet are easier to follow and all the Rods in them are marked with their lengths. No doubt it was produced later than the No.1.

I made the No.1 manual Windmill shown at the bottom of

the previous page from with my No.3 set. It was reasonably easy to push the Rods into the Clips, and rather less easy to take them out, especially in the middle of a model. Suitable Clips could be bent when necessary to give a different angle but pliers were needed for this. The finished framework was quite rigid except for the single point attachment of the blade arms. But that was easy to improve with other parts from the Set, following a method used in another of the manual models. The built-up bevels worked well enough after careful adjustment and a cord drive from an extra Pulley near the base was possible, again from the parts in the Set (plus a few extra Clips).

As a rod system CLIP-CRAFT has the virtue of neat Clips which allow Rods to be set at angles to one another fairly easily. All but simple models though would be more difficult to make than with MECCANO style parts.

CLIP-CRAFT: S2

OSN 31/930

The SONNEBERGER PIONIER Sets The parts in most SON sets (East German, 1948 to after 1971, 4.2 & 5.4mm holes at 10mm pitch) are plain aluminium but coloured parts were noted at 15/418, & a set with certain coloured parts in it at 18/504.

The **two Pionier sets**, not referenced anywhere before as far as I know, have all the main parts in colour, anodised in blue, gold, & red (apart from MECCANO the only system I think to have this colour scheme). The basic set is No.I; the second, an add-on outfit, is No.II. This note is based on a near complete No.I. Both sets have a red box with almost all the top of the lid printed in colour as below, and this lid hasn't been seen on any other SON sets. The name PIONIER I is in the centre of the blue hexagon. The No.I box is 35*45*2cm and the parts are housed in a white moulded plastic tray, with a separate recess for practically every part.



The Set & the Parts The set isn't very large despite the size of the box, and it's a strange mix of parts with relatively few Strips, only 2 of which are longer than 8h - a 10h & a 14h. The No.II only adds another of each of those plus 2x 9h. On the other hand there are more A/Gs & small Plates than might be expected. A list of all the parts is given below (from the manual) with the quantities in Sets I/II in curly brackets, and a note where the actual content differs. Differences from the parts described in 18/504 are also mentioned.

• 2,3,4,5,7,8,9,10,14h **Strips** {2/0, 2/0, 2/2, 0/3, 6/5, 2/0, 0/2, 1/1, 1/1}. • 5,9,18h **A/Gs** {6/4, 4/2, 2/2}. But my No.I has 4x 18h & no 9h. • 1*2*1, 1*5*1 & 2*3*2 **DAS** {0/1, 2/0, 2/2}. The 2*3*2, not seen before has large holes either side of the bends. • **A/B** {8/3}. 2*1*2h **Double Bracket** {2/1}. 2*2h

Corner Bracket {1/0}. • **Trunnion** {2/0}. Missing from the Set but the later triangular pattern is shown in the manual models. • **Flanged Plates**. 7*9h, 5*5h, 3*3h {1/0, 1/0, 2/1}. The 7*9h is a new part with large holes in its flanges. • **Perf. Plates**. 2*8h, 3*5h, 3*9h {4/2, 6/3, 2/1}. • **Flanged Disc** {1/0}. This part is 52mm Ø with a flat flange. • **30mm Pulley & Tyre** {4/2, 4/2}. The Tyre is black rubber & has no markings on its side walls. • **Gears**. 18t, 30mm Ø, & 35t, 56mm Ø {1/0, 1/0}. They are Mod 1.5. • **Collar** {5/2}. 6 were in the Set. **Hook** {1/0}. Flat, 24½mm long. • 70 & 110mm **Axles** {1/0, 2/1}; **Crank Handle** {1/0}. All are nicked steel with slightly rounded ends. 30 & 75mm plain steel **Screwed Rods** (2/2, 2/0). The 75mm were missing from the Set and there were 2x 70mm Axles. • **N&B**. Nicked steel and very similar to CONSTRUCTION parts. The pressed Nut is 7.0mm A/F, and the 7.0mm CH Bolt, 6mm u/h {80/40, 70/30}. The **Set Screw**, again nicked steel, has a 4.9mm CH & is 5mm u/h {20/8}. Only 12 were in the Set, one for each (s/t) boss & Collar. • The **Spanner**, nickel plated, is the later type (see MCS/FB), cranked at the ring end and 91mm long o/a {1/1}. The **Screwdriver** was missing but is shown in the manual as the wooden handled type in MCS/NZ {1/1}.

Colours. It is explained in the manual that all the round parts are anodised red, all the flat parts are yellow (actually a pleasant gold), and all the angled parts, the A/B for instance are blue. The colours are metallic except that some of the blue parts are almost matt & quite dark.

The Manual. It is the same size as the one described at 18/503 but is a completely new production for the Pionier sets, printed in full colour throughout, & none of the models have been carried over from any of the earlier known manuals. SONNEBERGER is on the first page but not on the cover (right). Of the 12 models in it only two can be made with Set I. They are a Pair of Scales & an Electric Cart, fair



small models but not very exciting, especially given the size of the box, and neither of them do justice to the Set. All the other

models need Set II as well, and two of them are motorised and need a Motor/Gears Set (Elektromechanischen Getriebekasten) as well.

SUMMARY OF MANUAL
 •Name: SONNEBERGER (on p1).
 •Details of maker: VEB INJECTA, STEINACH IN THÜRINGEN.
 •Dates &/or Ref Nos: V/5/24-Si 15/68 on p28.
 •Page size: 200*190mm deep.
 •No. of pages: 28 unnumbered + covers.
 •Language: German.
 •Printing: all in colour.
 •Page Nos. of Parts Lists/Set Contents: 24,27 (PNs are given but differ between the Sets. The Sets' layouts are on pp25,26.)
 •Sets covered: Pionier I & II.
 •No. of models: 2 for Set I; 10 for Sets I+II.
 •Name, Model No., Page No. of first & last model of set(s) (no Model Nos.): I: BALKENWAAGE,10-11; ELEKTROKARREN EIDECHSE,12-13. I+II: SCHLITTEN, 6-7; DREHMASCHINE,22-23.
 •Other notes: C2,3 blank. 2 models, the Drehmaschine & a Bandsäge, also need a Motor/Gears Set. pp4-5 have Standard Constructions.

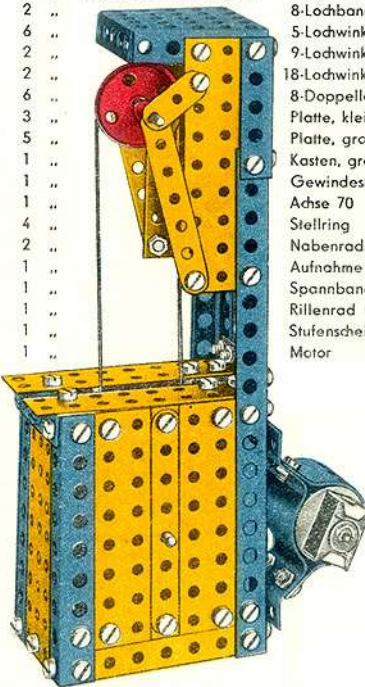
One or two of the I+II models are very simple but most are reasonable given the size of the Sets. The better ones include a Gantry Crane, the Crane on the lid, the Lathe on the cover, and a Dumper Truck. There is one large illustration of each model, plus a parts list & some descriptive text. The latter would certainly be needed in some cases. The Lathe & the Dumper Truck are shown bottom left.

The motorised models are the Lathe & the

ERFORDERLICHE TEILE:

BANDSÄGE

2 Stck.	3-Lochband
8 ..	7-Lochband
2 ..	8-Lochband
6 ..	5-Lochwinkel
2 ..	9-Lochwinkel
2 ..	18-Lochwinkel
6 ..	8-Doppellochband
3 ..	Platte, klein
5 ..	Platte, groß
1 ..	Kasten, groß
1 ..	Gewindestift 75
1 ..	Achse 70
4 ..	Stellring
2 ..	Nabenrad
1 ..	Aufnahme
1 ..	Spannband
1 ..	Rillennrad 50
1 ..	Stufenscheibe
1 ..	Motor

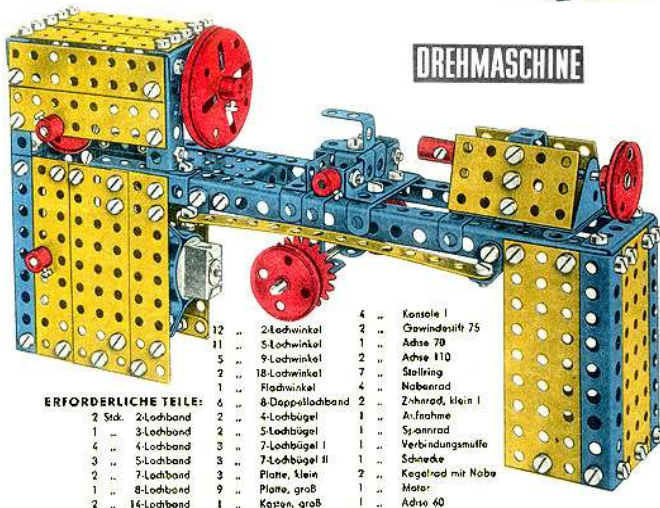


Band Saw below, and the brush end of the Motor and its Mounting Plates can be seen in them. Both need other parts from, & only in, the Motor/Gears Set. They include the 50mm Flanged Disc Pulley and the Coupling, both of which can be seen in the Lathe, a Worm, and a pair of Bevel Gears (as in 18/503). No Motor/Gears Set with coloured parts has been seen but an Ebay photo of one with plain parts is available. The lid is the boy/girl/Navvy type described in 18/504 & in addition to the parts already mentioned it has a 7*9h Flanged Plate, 3 & 5h Strips, and one each of the Gear Wheels. Also a round part a little larger than the Small Gear, with a boss carrying 3 spokes to a rim – it looks as if it could be a Steering Wheel.

Given that all the interesting models in the manual needed more than my Set I, I used nearly all the parts to make the little Tower below, some 35cm high. The 3*3h Flanged Plate lift is operated by a Crank Handle at the back of the base. The parts are accurately made, and nicely finished, but washers were needed to prevent the N&B scratching the anodising. The large holes were useful

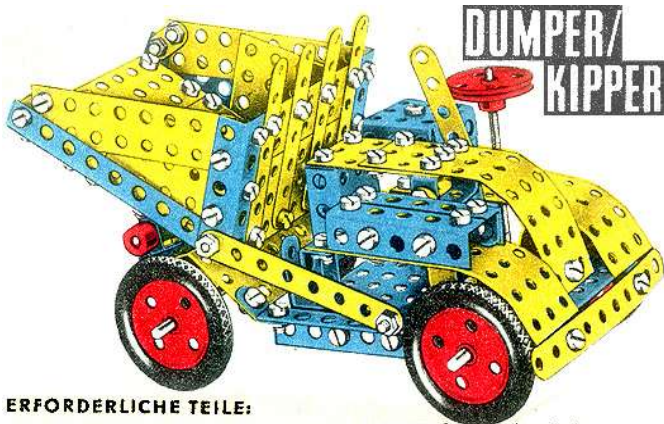
and don't I think look out of place. The Plates though were too thick (.85mm) to allow them to be curved to any extent without kinking. But of the manual models, only the Dumper requires any parts to be curved.

History. The PRs on SON material do not seem to be helpful in providing dates. Most likely the Pionier sets came towards, or at the end of the VEB Injecta period - the Artikel Nr. on the lid is 6310/3/5, compared with 6310/3/4 on the boy/girl/Navvy lids in OSN 18 & Eisenzeit. But it isn't known if they overlapped with the 'standard' sets. Not many seem to be offered on Ebay so perhaps the blue/gold colour scheme didn't prove popular, or perhaps it was a last ditch attempt to stay in business.



DREHMASCHINE

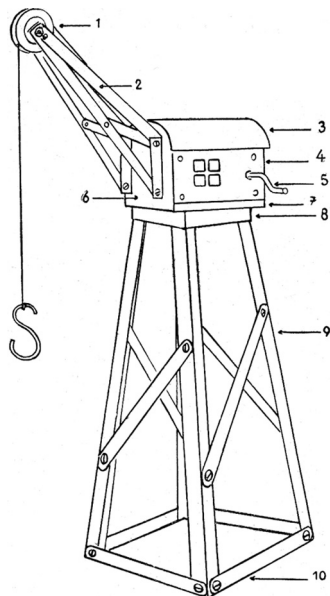
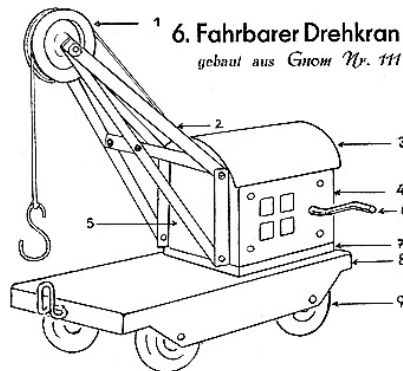
12 ..	2-Lochwinkel	4 ..	Konsole I
11 ..	3-Lochwinkel	2 ..	Gewindestift 75
5 ..	9-Lochwinkel	1 ..	Achse 70
2 ..	18-Lochwinkel	7 ..	Achse 110
1 ..	Flachwinkel	7 ..	Stellring
6 ..	8-Doppellochband	4 ..	Nabenrad
2 Stck.	2-Lochband	2 ..	Zahnrad, klein I
1 ..	3-Lochband	1 ..	Aufnahme
4 ..	4-Lochband	1 ..	Spannband
3 ..	5-Lochband	1 ..	Verbindungsmuffe
2 ..	7-Lochband	1 ..	Schwerde
1 ..	8-Lochband	2 ..	Kegelrad mit Nabe
2 ..	14-Lochband	1 ..	Motor
		1 ..	Achse 60



DUMPER/ KIPPER

1 Stck.	4-Lochband	3 ..	5-Lochbügel	2 ..	Konsole I
5 ..	7-Lochband	2 ..	8-Doppellochband	1 ..	Gewindestift 30
2 ..	8-Lochband	2 ..	4-Lochbügel	2 ..	Gewindestift 75
1 ..	10-Lochband	3 ..	5-Lochbügel	1 ..	Achse 70
10 ..	2-Lochwinkel	1 ..	7-Lochbügel I	2 ..	Achse 110
6 ..	5-Lochwinkel	1 ..	7-Lochbügel II	4 ..	Stellring
3 ..	9-Lochwinkel	3 ..	Platte, klein	5 ..	Nabenrad
2 ..	8-Doppellochband	9 ..	Platte, groß	1 ..	Grundplatte
2 ..	4-Lochbügel	2 ..	Kasten, klein	4 ..	Gummiprofilreifen

ANDERS Sets The name was mentioned in 17/477, with some very brief details. Now more is available from an ad leaflet, some Ebay photos, & the information in *Baukästen*. The Leaflet, 302*141mm, folded into three, is about the **Gnom** sets and its PR is 'Oeding CGF 138 Bswg 11549 30000 9.48 Kl.A.'. *Bk* gives the maker as Georg Anders of Braunschweig, the dates as 1945-50, and the names of two types of set - Gnom (Anders Metallbaukasten für kleine Konstrukteure), & Gigant. On Gnom there is a photo of a Nr.113 set but no other details. **Gigant** is said to have 160 parts, painted red, blue & yellow, and add-on sets were available. Little else is known of it but a few details of one set are given on p939.



7. Turm-Drehkran
gebaut aus Gnom Nr.112 oder 113

Gnom Sets The Leaflet is headed Gnom Nr.112-113 but also gives some details of Sets 111 & 114. The parts are designed to allow certain featured models to be made, and have only the holes needed for them. The scope for other models is therefore limited but some are possible and 10 are listed for the Nr.113, from 1. Wartehalle to 10. Fahrbarer Montagekran. They include the 111 & 112/3 Cranes right.

Set 111 Most of the parts can be seen in Model 6 for the 111 set, above right. Although the jib looks to be made of several Strips each side may be one complete Frame.

The **Nr.112** allows the Model 7 Crane above to be built and the main new parts are the A/Gs & Strips used in the tower, and the near square Flanged Plate at its top. However it is likely that the Set does not contain the Wheels & Long Flanged Plate in the Nr.111.

Judging by the Leaflet and the photo below, the **Nr.113** set seems to contain all the 111 & 112 parts. The box is



22*16cm and the blue A/Gs are in a full width compartment at the back, mostly hidden by the lid. The (blue) end of a Jib Frame can be seen under the left end of the Large Flanged Plate. The rectangular brownish (gold lacquered?) part next to the red Roof is probably a Plate used for the base of the cabin. The *Bk* photo shows a similar set, but apart from the

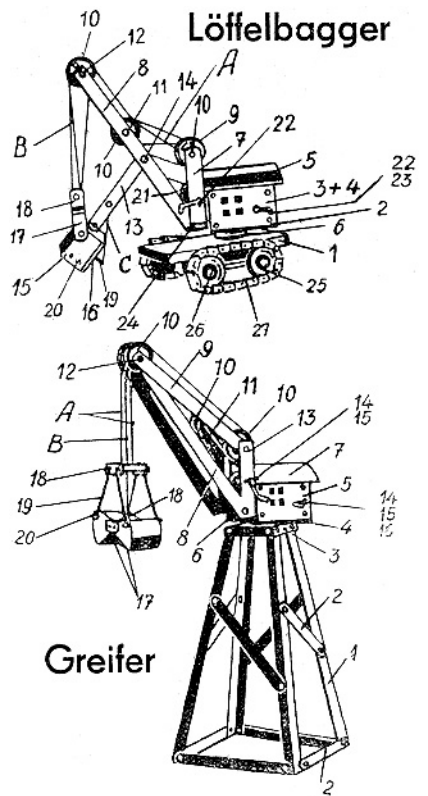
Wheels, all the parts are red or blue. By scaling, the Large Flanged Plate measures 15*5cm; the Wheels are 3cm Ø; and the Pulley slightly less.

The **Nr.114** is only known from the 2 models below. New features are the Track, Bucket, Grab, & the heavier jib members in the Digger.

Earlier? Outfits

Although the Leaflet is about the Gnom series, neither the name, nor an outfit number, can be seen on the lids of the two sets illustrated in it (though there is some small print that can't be read). Instead the name of a model is prominent across the top, below the words 'ANDERS SPIELWAREN', and over a photo of the actual model. One lid features the Nr.111 Crane & the other the 112 Crane, both as already shown left, and the same names are used.

The lid of an actual set with this type of lid, below, looks just like the B&W photo in the Leaflet, and the box is similar but a little longer. After the model name on the Instruction Sheet with this set, is 'Modell ??1', where the first two figures are not clear, but neither is a '1'. It looks then that the two sets illustrated in the Leaflet were probably the equivalent of the Gnom 111 & 112 sets, and perhaps predated them. But a word of caution, the box of the Set below is said to be 15*13cm and if correct the Large Flanged Plate scales at 10cm long, against the 15cm for the Set 113 part. As can be seen in the photo, all the main parts are the brownish colour, and the Jib Frame looks ready made.



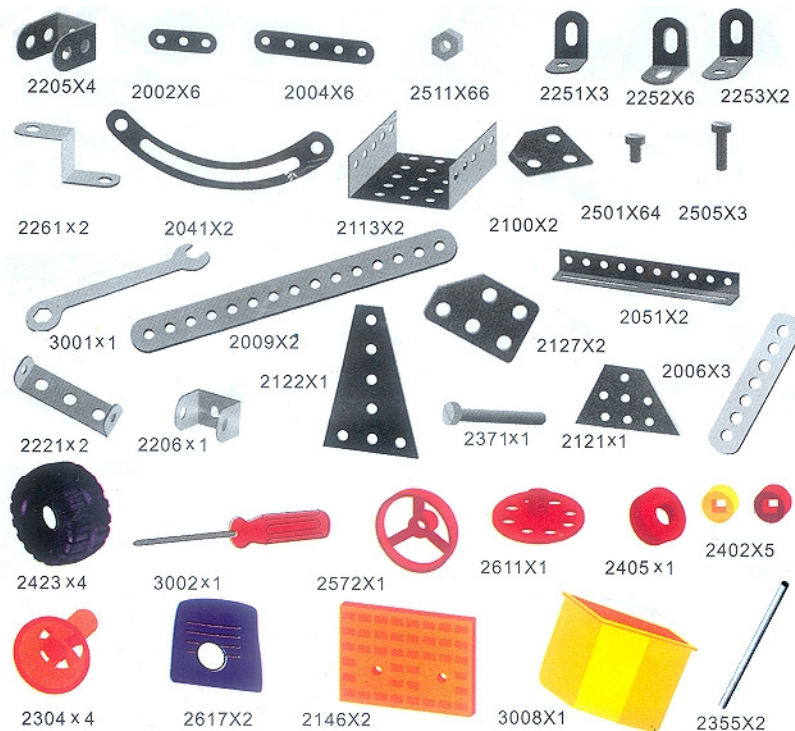
New System: METALLICA Only one small set is known, bought from a London company called Ackerman in January, 2003, but almost certainly made in China (The box is marked 'Foreign Made', and the Model Leaflet 'Made in China'.) One flap of the box carries a PR of '2002-07-09'. Most of the parts look like CONSTRUCTION (CNN from now on), but there are a few new ones, and the crossheaded Bolts predate Eitech's adoption of them.

The **BOX**, 25*14*7cm, has end openings – its top & bottom are similar, and both show the same Item No., but one face has the Repair Truck (right on facing page) which can be made with the parts in the Set, and the other (below) has a Shovel which can't. In the former case the little white rectangle under the model has a tick in it. Subtle stuff, but of questionable legality I should think. The METALLICA name isn't very prominent on the box but appears top left and again, in very small letters, bottom right. The company's name & address is on one of the sides.



Some 40% of the inside of the box is taken up by a block of expanded polystyrene at each end. Between them is a plastic bag with all the parts in it, and also, rather crumpled up, the model leaflet.

The **PARTS** All the parts in the Set, and their quantities, are shown below (as on the Model Sheet, but slightly rearranged). Most look like CNN but a few have no CNN counterparts known to me (but I may not have full details of all the parts in the numerous CNN sets produced in the last few years.) The 'new' metal parts are the **Corner Brackets** 2100 &



Leading Particulars

Name METALLICA

Country UK

Maker (or agent) Ackerman Group plc, London E4 9JB.

History PR indicates 2002.

Hole dia. 4.2mm.

Hole pitch 10.0mm.

Sets One set, Item No.D66968 (to make a Repair Truck), & probably another for a Shovel.

Material/Finish Metal parts nickel, but BZP Axles & N&B. Plastic parts red, yellow, black, & blue

Boss Road Wheels are a push-fit on the Axles.

Fixing Steel/BZP, M4 N&B. Hex Nuts, 6.9mm A/F, 3.1mm thick. 6, 9, & 30mm u/h crosshead Bolts with flat button head, 7.7mm Ø.

Axles BZP, 4.00 Ø, 75mm long with square ends.

DP No Gears.

Motors None.

Remarks Parts are very similar to CONSTRUCTION.

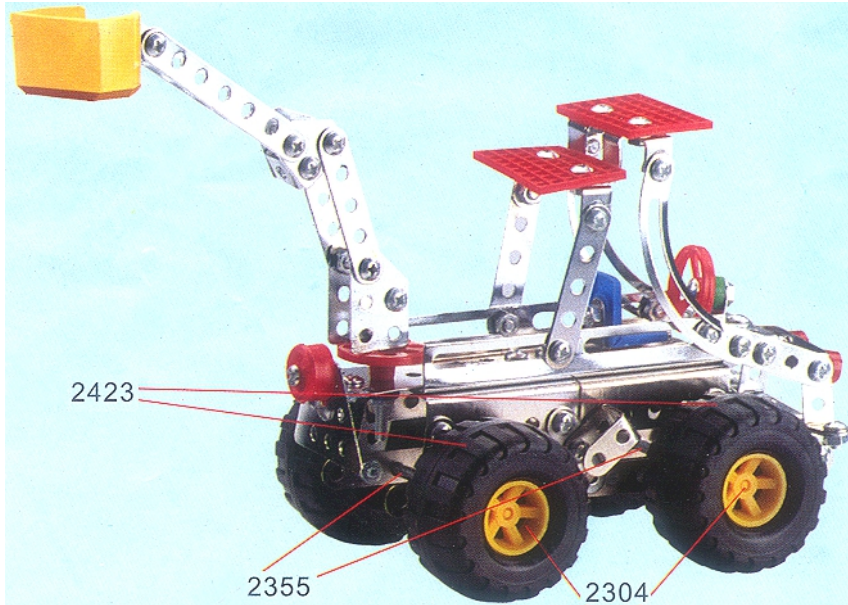
2127; while the plastic ones are:

- The 8h **Bush Wheel**, 2572, 27.7mm Ø, with 4.8mm holes & bore, and a short, untapped, tapering boss.
- The '**Blob**', #2405, 17mm Ø & 9mm deep, a hollow cylinder with one end closed except for the 4.8mm bore of a sleeve inside the cylinder, supported by 4 webs.
- The **Seat** 2617, 19*19mm, a smaller version of the CNN part.
- The **Bucket** 3008, 36*26mm, and 22mm deep – in plan the part is rectangular but for 45° corners on one long side. There is a centre hole in the face between these corners.

Most of the other parts differ a little from the CNN parts I have but usually the difference is very small, and CNN parts have themselves varied a little over the years. For instance the corners of the METALLICA Triangular Plates are slightly rounded and I thought that all the corresponding CNN corners were sharp, but then I found some with the same rounding as METALLICA. But the following differences seem worth noting, with the CNN details in brackets.

- The **2h High D/B**, 2205, is 20(25½)mm high.
- The **A/B** 2251 is 12*14(11*15)mm.
- In the **A/G** 2051 the width of metal outside the round holes is 3¼(3)mm.
- The lugs of the **DAS** 2221 are shorter and so the overall length is 34mm (32½mm).
- The **D/B** 2206 is made from a 3h Strip and is 13¼mm wide (23¼mm).
- The **Wheel** 2423 is made from 2 pieces which push together. The centre hole in the Hub 2304 does not break through the outer face, and the part is very, very difficult to push onto an Axle.
- The crosshead **Screwdriver** 3002 is 102mm long o/a, and the 55mm long handle is grooved lengthwise over 31mm. The **Spanner** 3001 is thinner than the CNN part (1¼mm against 2mm), with less metal around the jaws.
- The rim of the **Steering Wheel** 2572 is 4½(4)mm deep.

The parts are well made apart from a touch of burr here & there, and some bends not quite at right angles - but such faults are not unknown in CNN parts. The nickel finish is duller than the current CNN plating, but many early CNN parts were duller still. The plastic parts are in the colours



shown except that the Wheel Hub & Steering Wheel are yellow, and the Axle Stops, 2402, are blue & red.

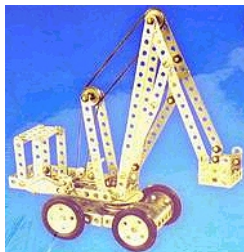
The MODEL LEAFLET It is a single sheet folded to give 4 sides 130*186mm deep. The front is purple at the top, shading to dark blue at the bottom, and has a photo of the model, similar to the view left. Above it is 'RIG OUT ONESELF | WIT MODEL REPAIR TRUCK | 58387', and below, 'MADE IN CHINA'. The name METALLICA isn't anywhere on the Sheet. The back has the parts as shown earlier. On the inside pages are 4 subassembly steps used in constructing the model (left). With some difficulty it can be made more or less as shown but it wasn't clear if the Bucket arm was meant to be articulated. Not enough Nuts were provided to allow lock-nutting and joints made by screwing Bolts into 'spare' Axle Stops weren't really stiff enough to support the arm. Long Bolts passing through 2 Axles Stops between the sides would have solved the problem.

METALLICA: S2

OSN 31/934

Snippet: New System - KONSTRUKTOR This is about 2 sets which were offered on American Ebay in November 2003. They were said to be European, and nearly all the items in the seller's extensive range of different objects were from Russia.

Below a picture of the manual cover from the 'Mechanical' set, and below it the model on the box lid. Said lid is in landscape format but otherwise is similar to the cover, apart from the Excavator replacing the Lorry. The word before KONSTRUKTOR means child's or perhaps junior, and in the white star is 'more than 53 models'. There is nothing to indicate whether the parts for the two 'plastic' models on the lid & cover are in the Set, but I expect not.



Also the pale green (!) Tyres. They are used on the Field Gun, perhaps fitted over two of the Road Wheels, back-to-back.

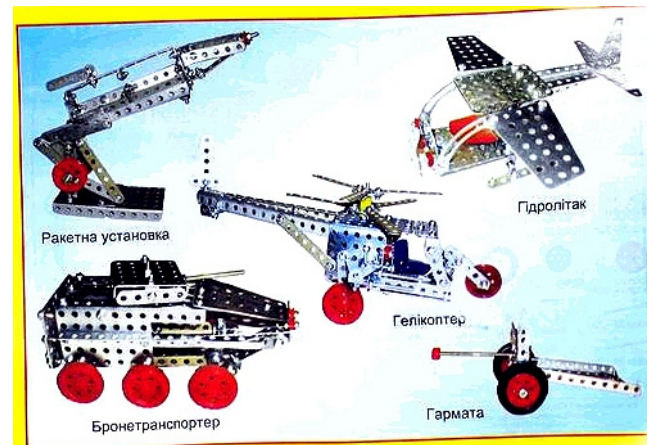


To the right are pictures of the 'Military' set: the lid label, the open box, & some models, perhaps a manual page. The same 'junior' word is under KONSTRUKTOR.



And that is the only obvious evidence that the two sets are from the same manufacturer, except perhaps that both boxes look to be made of blue plastic. But there is one other similarity. The letter 'i' appears in both the word for Military and for Mechanical, and it is not a usual letter in the Russian alphabet. My language notes say it was used in old Russian and in Ukrainian, so, discounting the first possibility, perhaps the sets come from the Ukraine.

The parts in the sets have the air of having a hole pitch of 10mm, and some, like the Curved Slotted Strip, and the orange Axle Stop in the top right corner of the left compartment, look like CONSTRUCTION. Others though do not, the 5*5h Flanged Plate for instance, and the red plastic push-on Road Wheels.



Note - The set on the left is KONSTRUKTOR[3] and the one on the right is TECHNOK

KONSTRUKTOR[3]: S1

TECHNOK: S1

OSN 31/934

More on HANDY CRAFT These notes are based on:

- Some parts, probably most of a No.3 or a No.4 outfit, and the manual for Sets 1-4 with them (identical to a copy of one kindly sent earlier by Kendrick Bisset).
- Two hitherto unknown outfits from Ebay snippets, one described as a 'Sail Scooter Set' and the other as an 'Airplane Set'.

THE PARTS Most were described in 15/426, 16/453 & 18/506, but variations, and 2 'new' parts are noted below.

- The **Flanged Plate** has 4.2mm Ø holes, against 4.4mm in the other parts.
- The **Wheel Disc** is 36.6mm o.d., likewise the 8h **Bush Wheel**, a part not seen before. The other new part is a 24.8mm o.d. **Bossed Pulley**, about 4.8mm wide across its vee. The **bosses** on both parts are brass, with recessed peening; they are 8.0mm ($\frac{5}{16}$ ") Ø, single-tapped 6-32, and the bore is about 4.1mm.
- The $\frac{3}{2}$ " **Axles** are 3.96mm Ø; the $\frac{1}{2}$ " and the **Crank Handle** are 4.00mm. The latter is the $\frac{4}{8}$ " long type described in OSN 18.
- The parts contained one **Span'driver** & a wire (3.8mm Ø) **Screwdriver**, $\frac{4}{16}$ " o/a. The latter is the only part in the lot which may not be genuine.
- **Coloured parts.** The Flanged Plates in the lot are dark red; all the other parts except the blued Axle Stop, are nickel. A No.4 set is shown in colour on the back cover of the manual (it is on p7 of MCS in B&W), & the coloured parts are the Flanged Plate & 1" Pulley in red, and the Triangular Plate & Wheel Disc in green. The propeller of the Airplane model shown, a 5h Strip, is also red.

THE No.4 SET The picture mentioned above shows a black box with a label similar to the manual cover below, except that it has 'SET No.4' in both bottom corners, and 3 models in the centre orange circle. Two layers of parts clipped to green cards occupy one end, and at the other about one third the area is a compartment with 'Bolts, Nuts and Small Parts on its black lid. The other two-thirds is empty but a simple No.1 set Monoplane, the one with the red prop, is shown above it, and looks as if it might fit into it. So did the Set include this model ready built?

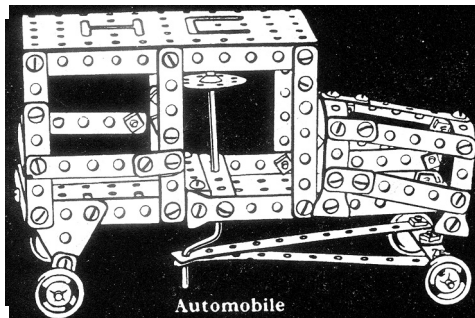
The difference between Sets 3 & 4 isn't clear as all the relevant models in the manual can apparently be made with either outfit. So perhaps the No.4 had different packaging, additional parts not needed for the manual models, and/or the made-up model.

It isn't clear from the picture of the No.4 set how many of most of the parts were in it, but 3 Flanged Plates are shown, a Bush Wheel, and 4 each of Wheels & Pulleys.

THE No.4 MANUAL is similar in style to the one for Sets 1 & 2 described in 18/506, but covers Sets 1-4, and judging from the PR on p2, 'E.R.H.Co. 4-27-7500', it is a year later. The front & back covers are as in MCS – the front one is shown left, & as with the OSN 18 manual, it has nothing on it to indicate which sets are covered. (All manual covers seen are identical except one offered on its own on Ebay. Its only difference is that the centre circle is white with orange lettering in it. Two pages of No.1 models from it were also shown and they match those in known

manuals.) The 28 unnumbered pages (including covers) of this manual are the same size as the '1-2', and apart from a few very minor layout changes, the first 14 pages are identical except that all the model pages have 'Made from Handy Craft Set Nos. 1' at the top (note the 'Nos.')

Then on pages 15-19, headed 'Made from Handy Craft Set No. 2' are 11 Set 2 models that are not in the OSN 18 manual, from Swivel Crane to Traveling Derrick. Pages 20-27 are all headed 'Made from Handy Craft Set No. 3 & 4', and the 16 models on them go from Traveling Crane to Railroad Lift Bridge (the model in MCS).



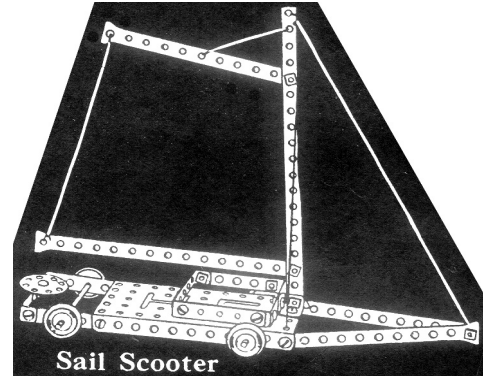
Automobile

The new models are nothing special – the 3/4 ones include the Air-plane right, and the Automobile left with its slightly novel steering linkage.

THE SAIL SCOOTER SET was said to be © 1926. The lid, below, is similar in



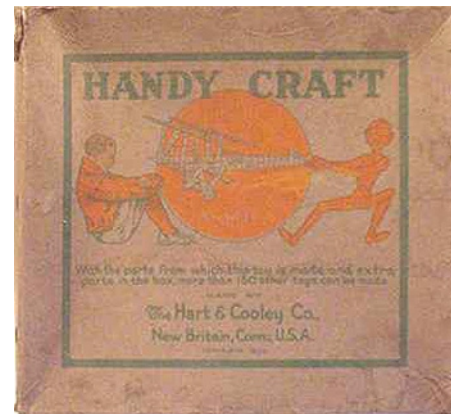
style to those of the Windmill & Auto Truck outfits described in 16/453 & 18/506, but is longer & narrower. The picture of the model in the centre is not very clear but it is undoubtedly the No.1 set model below.



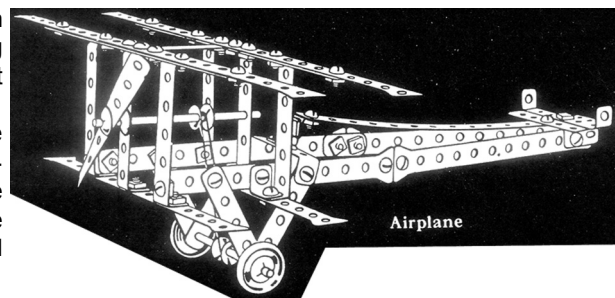
Sail Scooter

The main items that can be seen in the Set are a manual with 'standard' cover, a red Flanged Plate, and in nickel: 2,4,10 of 15,11,5h Strips (though some of the latter are DAS), 2 Triangular Plates, a Wheel Disc, & 4 Wheels.

THE AIRPLANE SET is in a box, perhaps 11 or 12" square, with the lid



above. In the centre is the No.3/4 model below. All that can be seen clearly in the box is a manual with standard cover, 2 red Flanged Plates, & a nickel Wheel Disc.



Airplane

A No.0 EL MECANICO Outfit

MECCANO had a strong following in Argentina before WW2 but government restrictions after the war prevented its importation. To fill the gap several home grown systems appeared. Most, including EL MECANICO (EL MEC henceforth), were more or less copies of MECCANO, but EL NUEVO INGENIERO ARGENTINO was similar to ERECTOR, see 15/421. The MECCANO type generally had sufficient parts for sets up to the equivalent of the MECCANO No.6 of the time, and most of the manual models were inspired by the post-1937 MECCANO designs, with a good many just straight copies.

The EL MEC No.0 to hand, courtesy David Hobson, is unused & complete with a 0-1 manual. What follows is an account of it in relation to the details given in MCS.

MAKER Not known, and the only clue is 'Marca Registrada bajo el No.244.165 INDUSTRIA ARGENTINA' on the box lid & manual cover (bottom left in the photo above).

HISTORY MCS gives 1945-55 as dates.

SETS The MCS entry is based on a 0-6 manual, and includes the contents of Nos.0-6 & linking sets 0-1 to 5-6, identical to those in the present 0-1 edition. Outfits 0-10 are mentioned on a manual page about better models, but it's unlikely that sets larger than No.6 were ever produced.

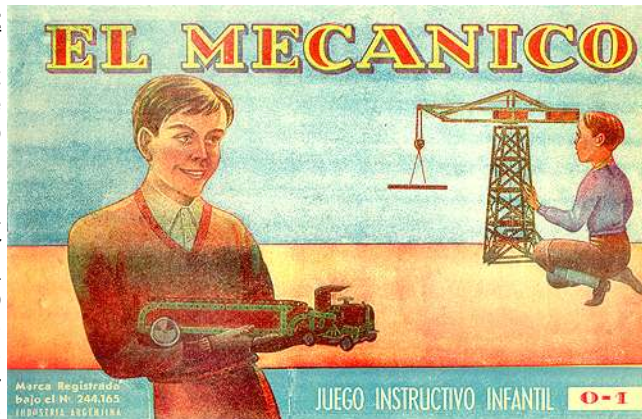
The **No.0** is in a red box, yellow inside, 25¼*19¾*2¾cm. The lid is covered by a label identical to the manual cover above except it has '0' in the white panel bottom right, and a thin white edging along the top & bottom. The parts are strung to a yellow board with thin yellow cord. The small parts are in a red end-opening box 10¾*4*1¼cm, as below, glued to the board.



HHOLES: Most are 4.4mm with a few 4.2. The only **slots** are in the Flat Bracket*, some 6½, some 8mm long. (Starred parts can be seen in the photo above.) **PITCH:** 12.7mm.

MATERIAL/FINISH The main parts are painted steel - Strips are 1950s MECCANO green, & the Flanged Plate* a lightish red, between the 1950s & 1960s MECCANO shades. The finishes of other parts are given below.

PARTS Basics • All the parts in the Set are mentioned below - most look like MECCANO, exceptions are noted. • **Widths** Strips are 12.7mm but the DAS is 13.2mm. • **Ends** of Strips are near fully rounded; the **corners** of the Flanged Plate are fully rounded. • **Bosses** are unusual zinc die castings*, 10½mm Ø with a 14½mm flange, and a bore of about 4.2mm; they are 12½mm long including the flange, & double-tapped



about 14½mm deep. • **Flat Bracket***: 23 or 24½mm long, nickeled. **A/B***: made from the Flat Bracket, 12*12½ to 10½*14mm. • **Trunnions**: both are the 7h type though the M126 pattern is shown in the Manual. The Flat Trunnion is 38½mm wide & 40mm high; the Trunnion*, 13*26mm, is made from it, and is a darker shade of green. • **Flanged Plate***: 5*11h, 66mm wide with four 14mm deep flanges. • **Flexible Plates**: none are included in the Set 0 but the parts are shown in the Manual with unusual corners (right). • **Pulley***: 23mm Ø, with a vee about 4mm wide, painted a lightish turquoise. Its **Rubber Ring*** is N.* 36 al 40 - Placas flexibles black, 4½mm wide, and EL MECANICO is moulded on one side, with 49 diametrically opposite. • **Bush Wheel***: 37mm Ø with nickel disc. • **Axles**: 4.00-4.07mm Ø, 51 & 102mm long, nickeled, with square, sheared ends. **Crank Handle**: 4.11mm Ø, 131mm long o/a with 98mm shaft, & 23mm handle offset 18mm. • **N&B**: Plain steel, 5/32" BSW. • **Nut***: square, pressed, 5.9-6.2mm A/F & 2mm thick. • **Bolts***: pan headed, most 7.1-7.5mm Ø, 7¼ & 9mm u/h. • **Washer***: 10mm (but one 12mm) Ø, nickel. • **Spring Clip***: 1mm thick steel, badly blued, 6½mm wide with 6mm long wings. The Clips aren't springy and couldn't be pushed onto an Axle. • **Screwdriver***: nickel, 4.00mm Ø wire, 132mm long o/a. • **Spanner***: nickeled, 73mm long - the M34 type is shown in the Manual.

SET CONTENTS The parts found in the Set correspond to the inventory in the Manual. The contents of Sets 0-6 given there (and in MCS) are similar to 1937-41 MECCANO outfits but with a few extra of a small number of parts. However in the larger sets some of these compensate for certain parts not in the EL MEC range, the 25h Strip Plate for example.

MANUAL SUMMARY •Name: EL MECANICO 0-1. •Details of maker: none. •No dates; the only reference is 'Marca Registrada bajo el No.244.165 INDUSTRIA ARGENTINA' on C1. •Page size: 255*167mm. •No. of pages: 16, unnumbered, + covers. •Language: Spanish. •Printing: dark blue on cream with ½-tones of models. •Page Nos. of Illustrated Parts & highest PN: 16-C3,66. •Page Nos. of Set Contents & highest PN: C4,72. •Sets covered: 0,1. •No. of models for each set: 21,18. •Name, Model No., Page No. of first & last model of each set: 0: BANCO,1-0,2; MUÑECO EN LA BARRA,21-0,8. 1: CARRO PARA ARENA, 22-1,9; PULIDORA,39-1,14. •Other notes: C2 has Intro, p1 Basic Constructions, p15 has 3 models from larger sets.

For each model there is one large but not always very clear photo, and a list of the parts required. Some models are identical to MECCANO but many have been changed a little. Even in those most of the Trunnions & all the Curved Strips are MECCANO pattern (as in the No.1 model right - it is about 2/3-full-size). In some cases the Flanged Plate is shown

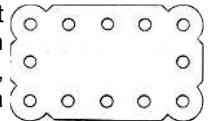
5/32" BSW. The **Set Screw*** is like the standard Bolt* (see below) but shorter, 6mm u/h.

• **Quality** The parts are generally well made with quite good paintwork, but the Brackets are poor, badly dished, with ragged holes, some off centre. 1 of the 2 Trunnions has ragged holes too.

• **Strips**: 5 & 11h. • **Curved Strip***: as M90a but round holes replace the slots (slots are shown in the Manual). • 1*5*1h **DAS**: 62½mm o/a with lugs

about 14½mm deep. • **Flat Bracket***: 23 or 24½mm long, nickeled. **A/B***: made from the Flat Bracket, 12*12½ to 10½*14mm. • **Trunnions**: both are the 7h type though the M126 pattern is shown in the Manual. The Flat Trunnion is 38½mm wide & 40mm high; the Trunnion*, 13*26mm, is made from it, and is a darker shade of green. • **Flanged Plate***: 5*11h, 66mm wide with four 14mm deep flanges. • **Flexible**

Plates: none are included in the Set 0 but the parts are shown in the Manual with unusual corners (right). • **Pulley***: 23mm Ø, with a vee about 4mm wide, painted a lightish turquoise. Its **Rubber Ring*** is



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with no end flanges.

REMARKS Manual covers like the 0-1 have been seen for Sets 0-4 & 0-6. Also, from Ebay, another, below, with the



same registration number in the top right corner. 2 of its model pages were shown, one identical to a page in the 0-1 manual, and the other identical to MCS/FB p5, with two No.6 models.

A 0-6 manual from a related Argentinian system, **DU-EN-LOZ**, is to hand and it has a cover very like the EL MEC one left but with JUGUETE MECANICO DU-EN-LOZ in the blue bottom panel, and a registration number of 326.243 top right. (I wondered about the name DU-EN-LOZ but my dictionary gave nothing useful.) The contents are very similar in style to EL MEC with much of the text the same and, very minor details apart (the pages are headed DU-EN-LOZ instead of EL MECANICO for instance), the model pages are the same as all known EL MEC pages. The Illustrated Parts pages have the same PNs but show the modified pattern of Curved Strip, Trunnions, & Spanner, and Flexible Plates with normal corners (the fancy type are still shown in the models). So perhaps these changes, and the higher registration number, indicate that DU-EN-LOZ appeared later than EL MEC.

OSN 31/937

EL MECANICO: S2

Snippet. 'New' System: GENIAL New to OSN though the firm concerned, Genial-Spielwaren of Vienna, is listed in *Baukästen*. Jacques Pitrat kindly alerted me to the Ebay picture below which was being sold from Austria. It can be seen that the parts look exactly like DUX (see 20/558), and so do the models on the manual cover. I haven't actually found any of them in the couple of DUX manuals to hand but there are certainly a number of others I've never seen. The models on the lid are less obviously DUX but can't be seen at all clearly. Another possible DUX connection is the booklet above the manual, with 'DUX' in the top right green box, but it may of course not belong to the Set. It looks like the first manual described in OSN 20. The B&W symbol in the red ring on the lid label & manual cover is the maker's logo, a stylised man with legs apart holding a white semicircular annulus above his head, with GENIAL printed on it.

Another Ebay item showed a similar set but the covers of the 3 manuals with it were like the lid label below, but printed in plain B&W.

The BK entry says that the firm existed from 1946 to around

1951 and sold a Metallbaukasten in 3 sizes, plus an Electric Motor. Also mentioned are constructional sets for a clock, railway items, as well as house & garden, but I'm not sure if these were in any way related to the Metallbaukasten, and there is no mention at all of a DUX connection.

In fact there seems to have been GENIAL sets which did not have DUX-type parts. One such belonging to Dr Ansgar Henze is shown in the photo below, from the Swiss AMS Club N/L 1/2003, reproduced here by kind permission of the editor. The lid again has models all over it and they look similar in style to the ones on the DUX set, but are probably not identical. The label though is exactly the same design. Half way down the right side of the lid is what looks like a red circular sticker with a white '1' on it. No manual is shown. The parts, a rather strange selection with seemingly more Plates than Strips, are presumably in their original arrangement. Notice that not all the holes in the Plates are pierced, and that the end holes in many of the parts are closer together than the others, as in DUX Beams.

If in fact there were two types of GENIAL, could it be that the one below came first, perhaps DUX inspired to some degree, and with a selection of the original models on the box lids. Then a change was made to DUX parts, but using the same boxes, or at least the same style of lid.



OSN 31/937

GENIAL: S1

New System: METAAL CONSTRUCTIE SET Unused examples of this set, apparently Dutch, were being sold on Ebay last autumn. The only company name is on the EC label, Evora B.V., Renswoude NL, but of course this firm might only be an agent. Bottom left on the underside of the box below is a small 'Tup' logo. There is nothing to indicate where the



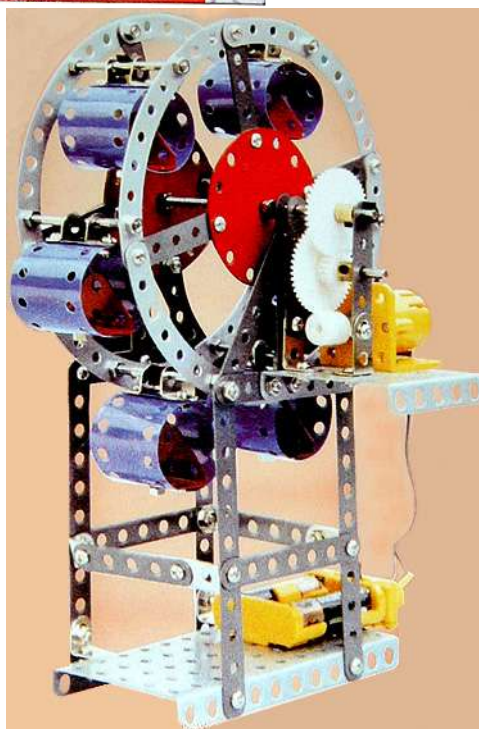
parts were made but they are not the usual, for these days, 'Chinese' copies of CONSTRUCTION. And although at a glance the Strips are like MECCANO, the hole pitch is 12.3mm, and none of the other parts are exactly MECCANO pattern.

The end-opening box measures 28½*42*5¾cm and right is an enlargement of the main model on the underside of the box (less some of its background). The small blue panel in the bottom right corner shows the parts & their quantities. Nearly all the text is in Dutch, and apart from 'SET', & 'MECHANIC' on the ends in small letters before the METAAL CONSTRUCTIE SET name, the non-Dutch wording is in French under the name 'Jeux de construction metallique' on one of the long sides. The top of the box has the name along the bottom and the Big Wheel in the bottom left corner, with the rest cut away to show the parts through a formed, lidded clear plastic inner box, against the red inside bottom of the outer box. The inner box has recesses for the different parts, with the N&B, Axles, & small parts in clear plastic bags.

The PARTS Most of the 45 different parts are shown right. All are listed below, with notes as necessary, & quantities in curly brackets (where different, those actually found follow a slash).

- **Generalities.** The metal parts are .75-.95mm thick, with most about .85mm. Ends/corners are all fully radiused. Slotted holes are 6½mm long. Strips/Brackets are 12.2mm wide with a few down to 12.0mm. Except where noted metal Strip Parts & Plates are painted silver-grey & Brackets are nickel plated.

- **Strips** 3,5,7,11h long with the 3h



are 3*5, 3*7, & 3*11h {8,6,6}, and the 3*5h has no centre hole. They are .5mm thick and the 11h can just be bent into a circle without kinking. The **Triangular Plate** {4} is .6mm thick.

Leading Particulars

Name METAAL CONSTRUCTIE SET. Also on the box: **Jeux de construction metallique, & MECHANIC.**
Country Perhaps Holland.
Maker or agent: Evora B.V., Renswoude NL.
History New sets sold on Ebay in 2003.
Hole dia. 4.4mm. **Hole pitch** 12.3mm.
Sets Only one known.
Material/Finish Fairly soft steel painted silver-grey or red, but small parts nickeled. Blue Plastic Flexible Plates.
Bosses 8.8mm o.d., 4.2mm bore, 8.8-9.0mm long, s/t M4. Brass on Gears, nickeled steel on Bush Wheel.
Fixing Nickeled steel M4 N&B. Hex Nuts are machined, 7.9mm A/F, & 3.0mm deep. Crosshead Bolts with 6.7Ø RH, 6mm u/h (the 10mm u/h are 6.3mm Ø).
Axles 4.00±.02mm Ø, nickled steel, with sheared ends.
DP Mod .8 (32 DP). **Motor** One 3v d.c.
Remarks Parts generally accurately made and well finished.

- **Circular Parts** The **Bush Wheel & Wheel Disc** are 35mm Ø {1,1}. The centre hole of the latter is 6½mm. The **Circular Plate** {2} is 70mm Ø & has 15 (!) equispaced edge holes at a radius of 29½mm. The red plastic **Loose Pulley** {1} is 18mm o.d., 6mm wide, and the 14mm Ø bottom of the vee is flat. Both its sides are recessed.
- **Gears** All are plastic moulded onto a brass bush with boss. The 16t **Pinion** {1} is 14.3mm o.d. with a 5mm wide face, and it meshes well at 2h spacing with the 46t, 38.1mm o.d./2.5mm face **Gear** {2} – its disc has an 11¼mm Ø, 2½mm deep boss on the outer face to give extra support to the brass bush. The **Worm** {1} is 14.0mm o.d. & 12.7mm long (about 5 turns), excluding the boss.
- **Axles** are 49 & 69mm long {1,1}. The **Rods with Screwed Ends** are 130/91mm long with 74/25mm of thread at one end, and 60mm long with 10mm of thread at each end {1,1,6}. The smooth parts of all three are 3.4mm Ø.
- **Fixings Nuts** {120} for the 6 & 10mm **Bolts** {110,10}. The single turn **Spring Washer** {120!}, 6.5mm o.d., is chemically blackened. The black plastic **Spring Clip** {10} is 5mm wide, 7mm deep o/a, with 2½mm wings, and grips well on the Axles. The black **Grub Screw** {10} is 4mm long with a flat end and a

normal screwdriver slot.

- **Tools** The nickel **Spanner** {1} is 78mm long o/a. The **Screwdriver** {1}, 93mm long o/a, has a 44mm 4-fluted handle and normal blade tip.
- **Misc.** The white plastic **Axle Stop** (above the Spring Washer in the photo of the parts) {1} is 8mm Ø & 8mm long, and is a push-fit on the Axle. The plastic jelly mould shaped **Cone** is 47mm Ø & 15mm deep {3 blue, 3 white}.
- The **Motor & Battery Box** (2x AA batteries, with reversing switch) are similar to MECCANO/STEEL TEC items, but unlike the other parts, neither is well made. The boss on the end of the motor is loose in the 1mm too large hole in the front face of the casing, and the switch on Battery Box is inoperative in one of its 2 'ON' positions.

The MODELS There was no manual with the set to hand and no mention is made of one on the box. So perhaps the 7 models on the underside of the box are all the guidance provided, but on the other hand, apart from the Big Wheel, it is difficult to see much detail in most of the others, even using a magnifying glass. These 'small' models comprise a Swing and various types of Roundabout & Chair-O-Planes.

OSN 31/939

METAAL CONSTRUCTIE SET: S2

Snippet - New System: MECHANIC This may well be the same as, or very similar to, METAAL CONSTRUCTIE SET. Examples, apparently new and unused, of a set bearing the name were sold on Ebay from July to December 2003 by someone in Australia. The description read 'Mechanic Metal Construction Set. 544 Pieces with wind up motor included. Ages 7+', and the only illustration was the lid right. The words under the model can't be deciphered but those under 'METAL CONSTRUCTION SET' are 'Only one model can be made at a time', and under the '7+' at the bottom is '2003'.

The 544 parts is the same number as in the METAAL CONSTRUCTIE SET outfit above and it will be remembered that the word 'MECHANIC' was on its box. Another similarity is the apparently identical model on the lids. Both are driven from the same yellow Electric Motor despite the C/W Motor claimed for MECHANIC. The final similarity is the model on the yellow star on the MECHANIC lid – it is identical to one on the under-



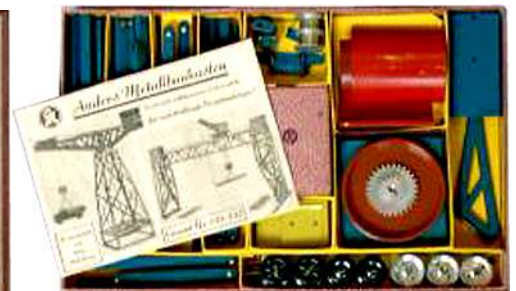
side of the METAAL CONSTRUCTIE SET box.

OSN 31/939

MECHANIC [2]: S1

An ANDERS Gigant Set Since the notes on p932 were written the **Gigant Nr.132** shown right has been seen on Ebay, a larger outfit with more ambitious models than any of the Gnom sets.

Assuming the Wheels and Pulleys along the bottom are the same size as the Gnom parts, the box scales at some 42*27cm, and the Jib Frame, far right, would be the same size as before. Also the compartment on the far left would be the right length to take the A/Gs in the 112 set. Other parts which can be seen are 2



bright, flanged Winding Drums at top centre, and the bright Gear on top of the large red Disc or Pulley.

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ANDERS: S2

This is the last page of OSN 31.

Correction

In the diagram of the ASSEMBLO Plate in 30/877, the dimensions C & D should be interchanged. Thanks to Don Redmond for pointing this out.

All MECCANO & Compatible Parts

Thanks to Howard Somerville there is now a web site, www.hsomerville.com/IPL/, which has links to about 24 sources of these parts, and many of them give details of what is available or offer downloads of parts lists, etc.

Binding OSN Pages

Now the pages are double-sided there's a simple way of making them into the old B&W style, stapled N/L. Lay the appropriate sheets edge to edge & join each pair with a strip of 19mm Scotch tape. Then staple the resulting A3 sheets with a long-arm stapler, or make suitable holes with a pin and push staples through. Fold over.