

EDITORIAL The Index for OSN 1-30 & the revised Database are both now available. The Database has 56 pages, too many to staple together easily, so it is in two parts, with the basic alphabetical sort in one and every thing else in the other. For prices please see the Small Ads overleaf (the Database is cheaper than forecast because of an arithmetic misfortune on my part). The basic alphabetical sort of the Database is also now on the web site but I've yet to find a way of printing off the righthand side of the landscape A3 pages on an A4 printer. Expert advice welcome. Still on the Database, if you ordered a copy and haven't received it, please let me know (this time it was a spilt tea misfortune which made part of my list illegible).

My stock of some OSN back numbers has run out, and their replacements will be in the form of loose, double-sided A4 sheets made by scanning the original masters. As explained in 31/939 it is easy to make such sheets into the stapled, folded A3 style, and the quality of the scanned photos is nearly always better than the original photocopies.

I am now using the OpenOffice word processor for OSN, with .sxw ending files. There is no problem about opening WORD files in OpenOffice but OpenOffice users sending me files need no longer save them in WORD format. In passing, for anyone not familiar with OpenOffice, it is a free download suite including a spreadsheet, a drawing tool, etc. My experience of the word processor in producing this Issue is that although not perfect it is overall rather better & easier to use than WORD, especially with regard to graphics.

Shorter NOTES, with thanks to all contributors.

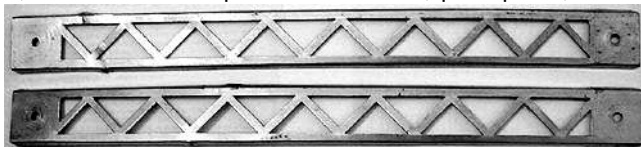
1. Don Redmond noted a Crank Handle, apparently **VOGUE**, with a diameter of 3.48mm, against the normal 3.66±.01. 1 of the 6 to hand here was anomalous at 3.57, and 1 of 6 Axles at 3.76, but I can't guarantee that they are actually genuine VOGUE parts.

VOGUE: S2 [32/940]

2. Don also wrote of some **MASTER BUILDER** parts, see 16/450. The 25h Angle Girder has 4.3mm holes in each, 15mm wide, arm, and square corners. The 5 & 25h Strips have large-radius ends. The 4h Disc, #19, is 3/4" Ø. All these parts, and a 5*11h Flanged Plate are tinplate, grey with age, but the Road Wheel, #30 (2 3/4" Ø, not the 3" in the Parts List), is black enamelled, and its 8 face holes are at 3/4" radius.

MASTER BUILDER: S3 [32/940]

3. Jacques Pitrat sent notes on early 12" **ERECTOR** Girders. The first ones in 1913 (they had edges with narrow flanges rather than the V-formed type introduced in 1914) were handed, as shown in the photo below. Most, perhaps all, handed



ERECTOR parts had separate PNs, but not in this case, and it may be that the handing was not deliberate but depended on how the part was handled in the production process. This could explain why the number of each hand found in lots/sets is never equal. Handed Girders with the new type of edge also

exist, witness those in the 1914 No.1 set on p51 in *Greenberg*, but this is the only example known and those in the 1914 No.7 on p52 are all of the hand seen in all later sets. No doubt a change in the production method eliminated the possibility of handed parts. However this meant that it was not possible to get 'double-bracing' by laying one Girder on top of another of opposite hand (see 15/400). It also meant that 2 sides of a model could not be made to match, in a Bridge for instance, although in most cases this would not matter. Going back to the 1913 parts, double-bracing could be obtained by placing 2 Girders of the same hand with their flat faces together.

ERECTOR [1 & 2]: S1 [32/940]

4. From John Wapshott. In addition to the parts mentioned in 31/909, John has a Canadian 'Eagle' **LIL'N'GINEER** set (see 27/782). The box measures 12 1/4" * 14 5/8" * 2" and its lid & model leaflet are as described in OSN 27.

LIL'N'GINEER: S2 [32/940]

5. Orion DreamDancer wrote that there are two types of 1" x 1/4"-20 Bolt in both of his Farmingdale Aircraftmen Mfg. Co. **TECHNICAL TRAINER** sets (see 19/528 & 23/658). They are similar but one has 'STRONGHOLD' across the top of the head in slightly raised letters, and is threaded all the way to the head, while the other head is unmarked and has about 3/16" of the plain shank under it.

Orion also kindly sent an example of the Hook mentioned in 23/658. It is a flat 'S' type, made of 2.7mm Ø dull plated wire, and is 30mm long o/a.

TECHNICAL TRAINER: S1 [32/940]

6. Werner Sticht has added to his web site about **STABIL**, www.stabilbaukasten.de.vu, with more on the parts, the Motors, the period 1921-28, the Inventor sets, prices of sets etc in many years to allow precise dating, etc, etc. Werner hopes to add an English version one day.

STABIL: S2 [32/940]

7. From Don Redmond, about two manuals for the Canadian **YOUNG ENGINEER** system. This system hasn't been mentioned in OSN before but like **CONSTRUCTO** (see 30/876A, 22/651 & earlier) which succeeded it in 1980, it consisted of 6 sets made up in Canada by Paramount Industries from 1978 to 1980, using **MERKUR** parts. (Another similar system not previously mentioned is **BUILD-O** which succeeded or ran alongside **CONSTRUCTO** in 1981-82.)

The Y E manual covers seen are all like the No.3 shown in MCS (with a Lathe on the front, **YOUNG ENGINEERS CONSTRUCTION SET MANUAL** above it and **MANUEL DE CONSTRUCTION DU JEUNE INGÉNIEUR** below— all in B&W but with the outfit number in red). All the models are shown as line drawings with names & numbers. Although the covers are bilingual the model names & notes inside are in English only.

The No.1 has a single sheet inside the covers, 9*13" in vertical format, folded once to give 4 landscape pages and stapled on the top long side to the matching covers. 37 models are shown but the model numbers are not in sequence, with Nos.1-7 & 12 on the last page.

The No.6 has 11 similarly folded sheets inside the covers with the No.1 sheet the outermost one. Model numbers on the

rest of the sheets run up to 267 but in no apparent order, save that models for the smaller sets are probably on sheets outside those with the larger ones. The largest appear on the 4 sheets in the middle of the manual, and the centre opening pages (there are no page numbers) show models 252-257. No indication is given of the set needed for any of the models.

YOUNG ENGINEER [1]/LE JEUNE INGÉNIUER: S1 [32/941]

8. Two similar UK **CONSTRUCTO** sets were described in 25/740 and now Jacques Pitrat has send notes and a photo (below) of one he has found. It is virtually identical, with the same manual, but it is complete with N&B, in the two little green boxes, and with the Brackets, Axles & Tools, in a plastic bag between one of the pairs of Flanged Sector Plates in the centre section of the box. The N&B boxes have UMAKIT on them, which confirms that the two systems came from the same manufacturer. As before there is no Set No. on the box but Jacques points out that one can build all the Set 4 manual models with the parts in the Outfit, and on the contrary, there are not enough Strips & Flexible Plates for those from Set 5. For instance, some require 9x5h Flexible Plates and there are none in the Set. One curious thing is that there are 6 Flanged Sector Plates (against 4 in the OSN 25 sets), and that no more than two are used in any of the manual models.



Another similar set has been seen on Ebay. It is far from complete but it does include at least three 5*9h Flexible Plates as well as examples of the sizes in Jacques' set. No balloon type Road Wheels can be seen but instead the 5 Pulleys fitted with Tyres left. The 3 smaller ones are about the diameter of those in one of the OSN 25 sets but their 1" Pulleys looks like the 6-hole type shown in 19/539. The larger ones scale at 2" Ø overall, or a little less, and have rather deeper Tyres fitted to larger Pulleys, similar in style to the 1" but with more holes, probably 8. Again there are 2 green boxes - the printing on them that can't be read but the main name doesn't look like UMAKIT, and is the right length for CONSTRUCTO. So was this a larger and perhaps later set than any of the 'No.4s'?



CONSTRUCTO [2]: S1 [32/941]

9. **Snippet - WERNER'S Metallbaukasten** This system was mentioned in 17/477 as being like TRIX and dating from soon after WW2. The Ebay picture heading the the next column shows parts that indeed look identical to TRIX and if the orangey look to a few of them is rust, then they are no doubt made of steel.

The words under the name on the box lid are 'Nr.1 Grundkasten Made in Germany'. The parts may be like Trix



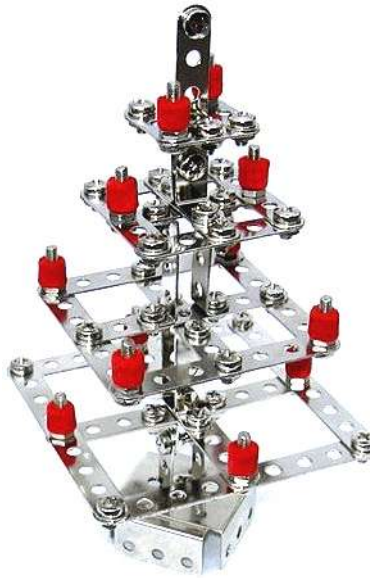
but what of the models? I don't remember the Tractor on the lid as a TRIX model.

WERNER'S Metallbaukasten: S1 [32/941]

10. **'New' System: MACHINO.** I have a note that this was an Indian system, and that a No.0 set had red & green parts strung to a backing card. I can't trace who sent me this information, so apologies to whoever it was.

MACHINO: S1 [32/941]

11 **Snippet - New System: STABILUS** Just one set with this name was offered for Xmas 2003 by www.Blechspielzeugladen.de to make the 17cm high Xmas Tree on the left. It is still available from the same site, price €12.50. At first I thought of the BRAL model (29/857) but from the dimensions given, 12cm across the diagonal of the lowest square, the hole pitch must be about 10mm. The parts could easily be from Eitech or Polylong though not all the Brackets can be seen. The Bolts look to be crossheaded. And I'm not sure what the part at the very top is.



STABILUS: S1 [32/941]

SMALL ADS [32/941]

For Sale Repro parts for the **PRIMUS Motor Chassis**, #161-2,167,210-5,214. Please contact R. Green, 21 Groveland Rd, Speen, Newbury, Berkshire, RG14 1ST; skyspot46@aol.com.

For Sale from the Editor – prices below include postage to UK/Europe & surface anywhere/by air elsewhere:

Index for OSN 1-30, 20 A4 sides, £2.30/2.90/3.80.

MCS Database, updated edition in 2 parts, 56 A4 sides in all, £6.50/7.00/7.60

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 on (in colour): £6/£7/£8. (All colour & some B&W issues are on loose sheets.)

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; insertion guaranteed in OSN 33 if received by the end of July (but repeats may not always be possible, please ask).

OSN – Your Credit Balance:

was	after OSN 31
was	after your remittance of
is	after this Issue

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

ALPHA from Shanghai One of the two ALPHAs in MCS is the prewar German system with Bakelite Wheels and a brass Gun Barrel, see 26/758; the other has mostly MECCANO-like parts, but with some differences including a 7-hole long Flanged Sector Plate. It was said to be German in the original MCS Part 1 but later the hole pitch was discovered to be 12.7mm and Frank wondered if it might be British. In fact it is Chinese, witness a new find by David Hobson - a manual (right) from a Shanghai firm for Sets 000-1, and nearly all the parts from a No.0 outfit. The manual also shows that it is connected to HAO WANG (H W henceforth), see 8/182, and that the MCS entry relates to a later phase of ALPHA. Both systems probably preceded the 12.5mm pitch WISDOM-type Chinese sets in which, though many of the parts were similar, none were identical, with slight differences in even the characteristic 7h Sector Plate & 7h Trunnions. The thread was changed too, from $\frac{5}{32}$ " BSW to M4.

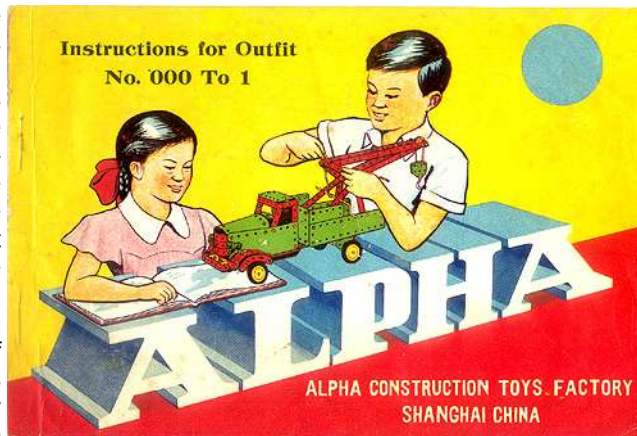
COUNTRY China

MAKER Alpha Construction Toys Factory, Shanghai, China (from manual cover).

HISTORY The manual dates from after 1954 because, as with H W, some of the models are clearly taken from the MECCANO 1954-61 manuals. Of the manual models below the 100. JETPLANE looks like a late-1940s, early-1950s Mig 15 (apart from its wing roots), & the flag on 86. AUTOMOBILE (actually a Motor Boat) is the Chinese People's Republic flag adopted in Oct. 1949.

SETS Nos.000, 00, 0, & 1 are covered in the Manual, but the MCS manual has Nos.2 & 3 as well.

HOLES: Most are 4.3mm with a few 4.4, and 4.5mm in the



Flat Trunnion. **Slots:** only in the Flat & Angle Brackets, 8.5mm long, and in the Curved Strip, 6.5mm. **PITCH:** 12.7mm.

MATERIAL/FINISH The main parts are painted steel - Strips & the Trunnion are light red, Plates & the Flat Trunnion, apple green (near the PALIKIT shade), and the Pulley & Bush Wheels are orange, including their bosses.

PARTS Basics: • Most parts look like the H W ones shown in 8/182 (but #25,33,34,55 have not been seen). The few exceptions are noted below along with some

dimensions and other points of interest. • **Widths** Strip parts vary from 12.8 to 13.0mm. • The **Ends** of the Strips are near fully rounded; the **corners** of the Plates are fully rounded. • **Bosses** are 9.6mm Ø steel with a bore of about 4.2mm; they are 9½mm long, double-tapped, with a narrow ring of flat peening. • **Quality** The parts are generally well made with quite good paintwork.

• **DAS:** 64½mm o/a with lugs about 13mm deep. • **Flat Bracket:** very like M10 but is ½mm shorter at 22½mm o/a. **A/B:** made from the Flat Bracket, 11*13mm. • **Trunnions:** the Flat Trunnion is 37½mm wide & 38mm high; the Trunnion is made from it but one is 27*12½mm and the other 25*14½mm.

• **Flanged Plate:** 66½mm wide with 12½mm deep flanges. **Flanged Sector Plate:** flat across its front/back top edges; 14mm deep flanges. • **Flexible Plates:** about .4mm thick and not easily curved.

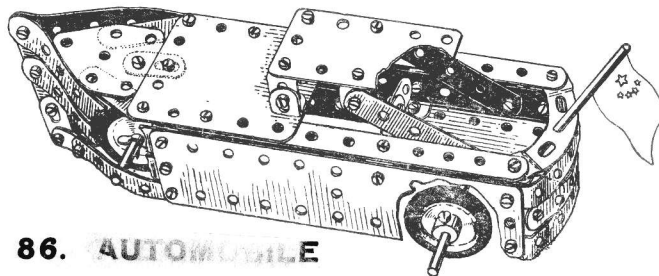
• **Pulley:** 24.3mm Ø, with narrow 3.5mm wide vee. Its **Rubber Ring** is black, 4¾mm wide. • **Bush Wheel:** 36mm Ø.

• **Axles:** 3.96mm Ø, 52 & 89mm long, nicked, with slightly rounded ends. **Crank Handle:** as Axles but 136mm long o/a with 85mm shaft & 28mm handle offset 16mm.

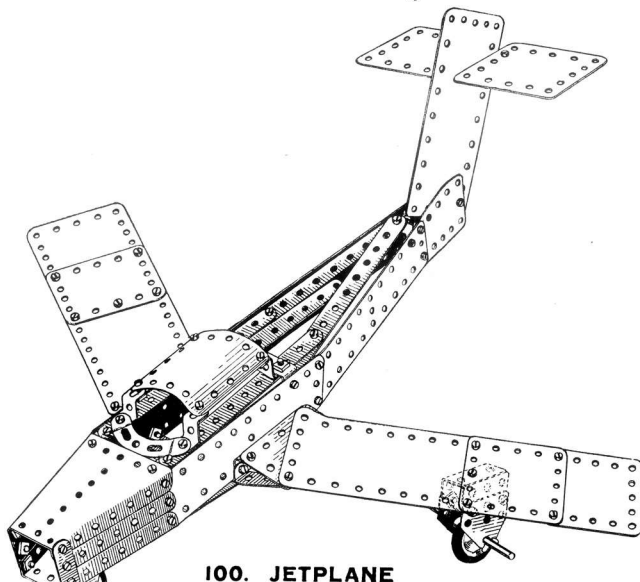
Fixings Brass steel, $\frac{5}{32}$ " BSW N&B. **Nuts:** square, pressed, 6.5mm A/F & 2mm thick. **Bolts:** 6.8mm Ø RH, 6½mm u/h. Also used as set screws. **Spring Clip:** nickel, 5mm wide with 5mm long wings.

Misc: • **Screwdriver:** 3.96mm Ø nicked wire, 113mm long. • **Hook:** unpainted zinc, flat, 30¾mm long, very like the MÄRKLIN pattern but at 2-2¼mm thick, a little thinner. • **Cord:** a short length of red cord was found with the parts.

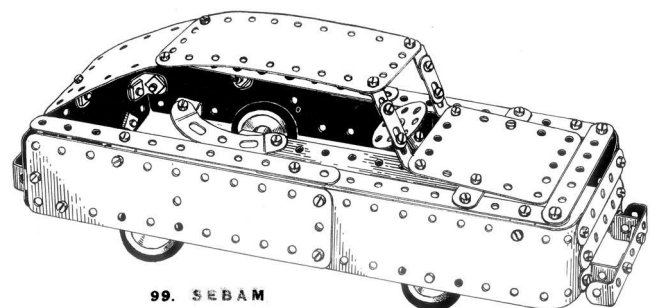
SET CONTENTS As given in the Manual they are the same as Sets 000-1 in MCS except that they contain no Driving



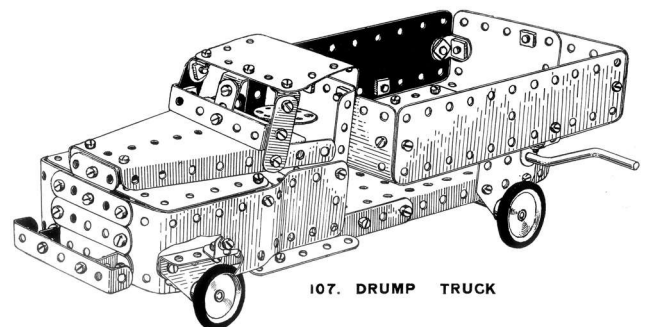
86. AUTOMOBILE



100. JETPLANE



99. SEBAM



107. DRUMP TRUCK

Bands (Light) and have the following for Sets 000/00/00/1: Hanks of Cord, 1/2/2/2; Bolt & Nut, 22/25/50/100 of each.

The other parts in Sets 000/1 are: 0,2,0,4/6,12,10,6 of 3,5,7,11h Strips; 2/6 DAS; 2/4 Curved Strip; 4/8 Flat Brkt; 4/15 A/B; 0/4 Rev A/B; 2/6 each of Flat/Trunnions; 1/1 Flgd Plate; 0/2 Flgd Sector Plate; 0/19 Flex Plates; 2/4 Pulley & Rubber Ring; 0/1 each Small Pulley, w & w/o Boss; 1/1 Bush Wheel; 0/1 Wheel Disc; 2/4 Axles; 1/1 Crank Handle; 0/1 Hook; 4/8 Spring Clip; 1 each Spanner & Screwdriver.

MANUAL SUMMARY •Name: ALPHA •Details of maker: ALPHA CONSTRUCTION TOYS FACTORY, SHANGHAI, CHINA. •Dates &/or Ref Nos: none. •Page size: 227*153mm. •No. of pages: 42+covers. •Language: English. •Printing: dark blue with ½-tones of 'Meccano' models & line drgs of others. •Page Nos. of Illustrated Parts & highest PN: 2,72a. •Page Nos. of Set Contents & highest PN: 3,74. •Sets covered: 000,00,0,1. •No. of models for each set: 29,38,9,33. •Name, Model No., Page No. of first & last model of each set: 000: GARDEN SEAT,15; BOXTER TRAINING,29,13. 00: INVALED CHAIR,30,14; CRANE,67, 23. 0: CHEVALIER,68,24; PEDICAB,76,25. 1: SWIVEL CHAIR,77, 26; HWA-PIAO (CHINA PALACE PILLAR),109,42. •Other notes: C2-4 blank; Intro on p1. Some, but not all, of the incorrect model names have had new names pasted over them (and some of those have been torn off).

So, quite a thick manual with a page size a little larger than A5. All the text is English and in the Intro it is said that 'ALPHA runs a special service department to satisfy the desires of the young engineer as to the manner of construction and purchase of extra parts. All letters will be given special attention.' But the only address given is the Shanghai one on the front cover.

The 67 models for Sets 000 & 00 are all MECCANO models from the H W manual, with the same presentation of a halftone plus a parts list for each. After that there are a few MECCANO models but most are a fair range of original, simple designs with a clear line drawing of each. Four No.1 models were shown on the previous page, the Boat is full-size, the Jet 75%, & the others 50%. No list of parts is given for any

of the 0 & 1 models.

REMARKS There are several links between ALPHA & H W. Both were made in Shanghai. Their Illustrated Parts pages are identical, with the same PNs except that the former has '72a' under the Bolt. Also the 00 Set Contents match except that a Spanner & 2 more Rubber Rings have been added to the ALPHA outfit. And as has already been noted the H W models are used in ALPHA. Perhaps ALPHA came a little later than H W, or perhaps it was improved a little for export.

The original MCS ALPHA with its sets up to No.3, is no doubt a later phase. The cover is completely different and has 'ALPHA CONSTRUCTION MODEL 1' in the centre with a boy and 6 models around it. One of the models is the Lorry on the present cover, and two are larger models of a Gantry Crane & a Railway Breakdown Crane. The range of parts has been doubled and new 3- & 4-figure PNs have been introduced, but the illustrations of the parts common to the present ALPHA are identical except that the MÄRKLIN-type Hook found in David's set is shown. 2 unusual spellings have survived: Flate Trunnion & Screw-Driver. The contents of Sets 000-1 are unchanged except that 2 of Driving Band (Light) are added to Sets 0 & 1; 2,4,4,4 Hanks of Cord replace 1,2,2,2 in the 4 sets; 3 extra Bolts have been added to Set 000, and 5 extra N&B to Set 00. Finally, the page (20) of 4 models in MCS has identical model photos to those on a page (19) of the present manual (the Model Nos. differ & the PLs have been changed somewhat).

A different manual cover is shown in the /FB MCS and it is identical to the present one except that it has no text on it, just '00' in the top right corner. It isn't known if the 000-3 Set Contents also relate to this manual, but most likely not.

Very few WISDOM etc models look similar to the ALPHA designs and it's probably fair to say that they are generally not as attractive.

OSN 32/943

ALPHA [1]: S2

Snippet – A MECANIC Set This Ebay item was a set said to be Belgian. The lid, right, scales at 5¼*6¾" and there is probably an '0' is the cream circle. The models on it seem to be made of green Strips. Like the lid, the bottom of the box has red sides, and in the Ebay photo it is full of MECCANO & TECNIC parts, plus a red Pulley Disc that looks like the 39mm MERCATOR one described in 29/851, and a red 3*3h Plate, possibly flanged, and possibly also MERCATOR. Below some model sheets, each with a front like the lid picture but in B&W. Not much else of interest can be seen except that the few legible words are in French.



There are brief details of a Belgian MECANIC in MCS. It is said to be from the same family as MERCATOR and to have polished steel parts with 5mm holes at 12.4mm pitch. The MCS manual



cover shows a typical MERCATOR scene with a boiler-suited boy waving a spanner and flying through the skies astride a floatplane. So it remains to be seen, I think, whether these two MECANIC's are one and the same.

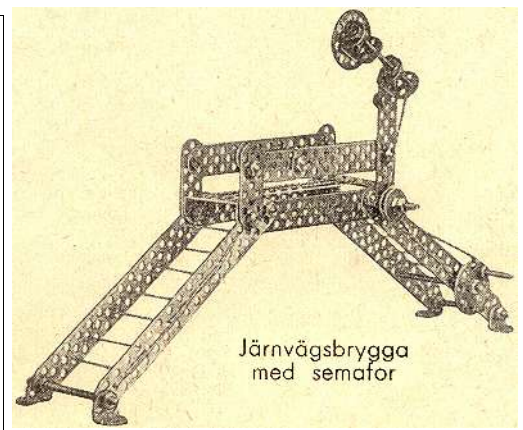
OSN 32/943

MECANIC [6]: S1

TEKNOSET There is a short MCS entry for this TRIX-like system and now, courtesy David Hobson, I've been able to examine an unused No.6 set. The first point is the country of origin: MCS has it as Denmark but all the 'paper' so far seen is in Swedish, 2 sets are shown on a Swedish web page, and the maker that was added in MCS/FB Part 4 is the one that made the Swedish 'X' system. So pro tem it's Swedish. However there is no mention of a maker on the material to hand.

The box, 34¼*24¼*2½cm, is a mottled dark green outside and the lid is shown below. The contents amount to two each of TRIX Units A & B, except that there are only 2 Spandrivars. (TEKNOSET Nos.1 & 2 are

Leading Particulars
Name TEKNOSET **Country** Sweden
Maker Kooperativa Förbundet (MCS).
History Possibly 1935-1940s (MCS).
Hole pitch/dia. 7.8/3.9mm
Sets Nos.1,2,6,7 known.
Material/Finish Steel painted dark red & dark green.
Boss none. **DP** No Gears known.
Fixings 5/32" BSW nickled steel N&B. Hex Nuts 6.3mm A/F. 6.0mm Ø CH Bolts.
Axles Screwed Rods.
Motor TRIX-type on box lid.
Remarks TRIX-like parts but 5/32" BSW

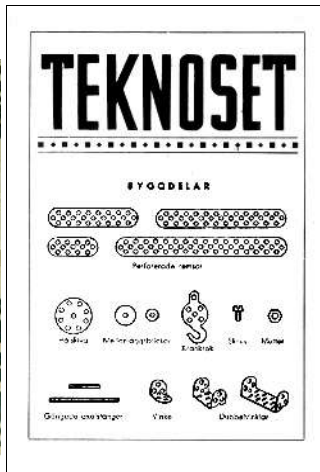
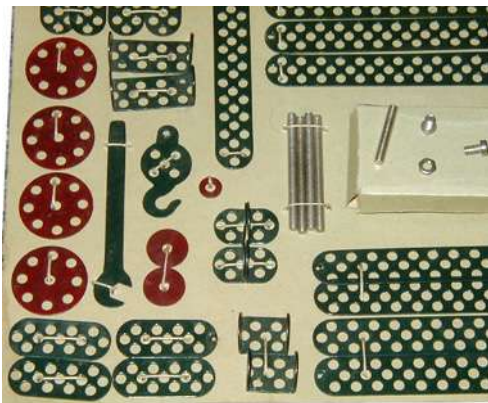


smaller, and its holes are at 10.3mm pitch. {29mm; 10.5mm} • The Washer is only 9.0mm Ø. {10mm}

The **model leaflet** with the Set is a long beige sheet folded 4 times to give 8 panels 127*187mm deep. It is all in Swedish and the front panel, next to the parts below, and shown here in B&W, is like the one in MCS except that the reference to Sets 1 & 2 has been replaced by the decorative band. On the reverse side the first panel shows basic constructions and on the other three are 22 models for Set 1, from Stege (Ladder) to Flygmaskin (Aeroplane). Back on the 'cover' side, two panels show 14 models for Sets 1+2, from Radiomast (Wireless Mast) to Järnvägsbrygga med semafor (Signal Bridge). The final panel shows 2 models needing 4 each of Sets 1 & 2, Flygmaskin (Monoplane) & Ångmaskin med regulator (Steam Engine). The English names above are those of the same models in the prewar TRIX Book 1 – in fact all the models are in Book 1, though the line drawings there have been replaced by photos, sometimes from a slightly different viewpoint, and in a few cases the model has been changed slightly. One such is the Signal Bridge above (natural size) with a different signal arm.



probably equivalent to TRIX A & B.) Most of the parts are individually strung to a card – one corner is shown below, and shows all three different

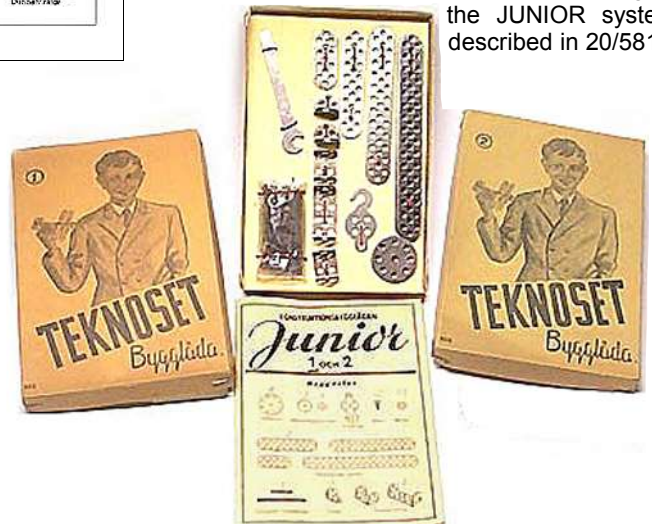


parts painted dark red (including the Washer). All the others are very dark green except the threaded parts - they are nickled steel. The little box, 6½*4¼cm, stuck onto the board, contains the N&B and the 25mm Screwed Rods.

Apart from their finish **the parts** are mostly just like TRIX - exceptions and a few notes follow. TRIX comparisons are given in curly brackets. • **Holes** are slightly larger than TRIX, 3.9mm probably though some may be less (the paint makes it hard to be sure). {3.8mm} • All the **threaded parts** are 5/32" BSW. {3.5mm or 4BA} The Bolts are 3.9mm o.d. and are really too large for the holes - some have to be 'screwed' through. The Screwed Rods at 3.8mm or a little less are just OK. • The pressed, hex **Nut** is 6.3mm A/F and 2mm thick. The **Bolt** has a 6.0mm Ø CH and is 6½mm u/h. • The longer **Screwed Rod** is 50mm. {55mm} • The **Spandriver** has no holes in its shank. • At 28.5mm Ø the **Wheel Disc** is a little

As no models are included for the No.6's 2+2 units, & as a good selection of such models are in the Book 1, perhaps there was originally another leaflet with the Set.

3 other TEKNOSETS can be seen at www.fotomuseetiosby.nu, the Swedish Osby museum web site. One is a No.7 in a red box with a label just like the No.6. Nothing is said of its contents. The others are shown below: '1' & '2' can be seen on the lids but the parts, though apparently strung to a card, don't correspond to either a TRIX A or B. They are also not painted. The leaflet too is something of a puzzle. The parts are as the No.6 Leaflet, though the top & 2nd rows have been transposed, but the Junior name is a puzzle. Was there a TEKNOSET outfit called Junior? Or does the Leaflet, and perhaps the contents, belong to the JUNIOR system described in 20/581.



CORUS The name of this 1920s French system was mentioned in 16/444, and now to hand are a manual with some parts, probably nearly all of a No.00 set, and, thanks to David Hobson, a No.1 set, without a manual but otherwise fairly complete. The parts are wood & metal; they are intended to make architectural models with a 'rustic' character. The manual though also includes a few other simple models. The sets covered by the manual are Nos. 00, 0, & 1, and no mention is made of any others. The only possible references to the manufacturer are 'Le Jouet Batimetal, Paris' in the manual, and the MAE logo in the centre part on the box label right.

The PARTS These are shown below, from the manual, with a few actual parts bottom right. The use of the main parts is shown bottom left – the Beams are 12mm square with narrow slits on all four sides; the Panels push into them and hold the Beams together (my names, the manual is all in French). Most of the Panels have tiny pushed-through dimples in their corners, no doubt to help to hold them in place. In the models the centres of the Beams are at multiples of about 4.9cm, and the pattern of squares below shows only the number of bays the parts span, not their exact size. The longest Beam measures 33cm; the largest Panels seen (#15,18,19) are 140*91mm o/a - #16 isn't included in any of the sets but is

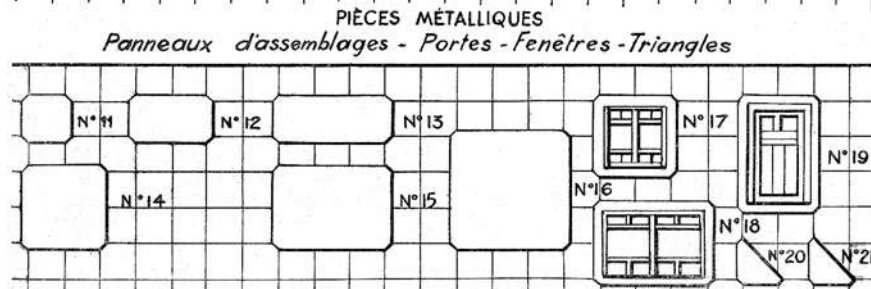
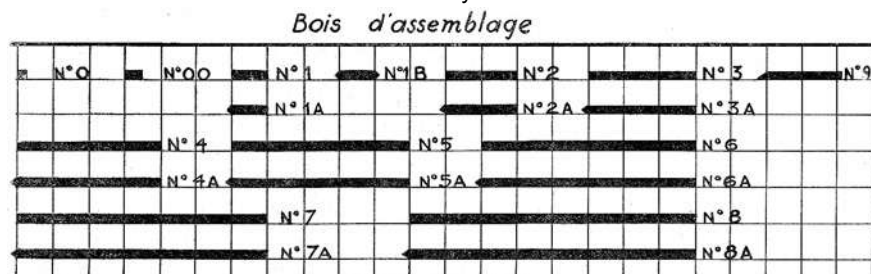


dull yellow on the other. There are actually 2 types of #12 & 13, though this isn't mentioned in the Manual - one has the rows of bricks lengthways and the other has them crossways. In the No.1 Set the bricks on the crossways Panels (also on the Small Triangle #21 & around the door on #19) are brown; on the other Panels, and on all the 00 parts they are orange-red. The Window and Door Panels have a similar design on both sides except for the surround (yellow or brickwork) and the colour of the woodwork. The design of the Windows in the Sets differs from that in the Illustrated Parts, and another variant can be seen in the No.1 model on the next page. Likewise the model on the lid has a different Door. The Roof Tiles, 25*36mm, are brown and push onto the roof Battens, 33 & 34, The latter, 6 & 12cm long, are 4mm square, and are joined by #35. #36 & 37 are used to join Beams, mostly in the small models, lengthways or at right angles, or to reinforce joints. The No.1 Set Panels and Tiles are aluminium, the 00 parts are all steel except the Window #17.

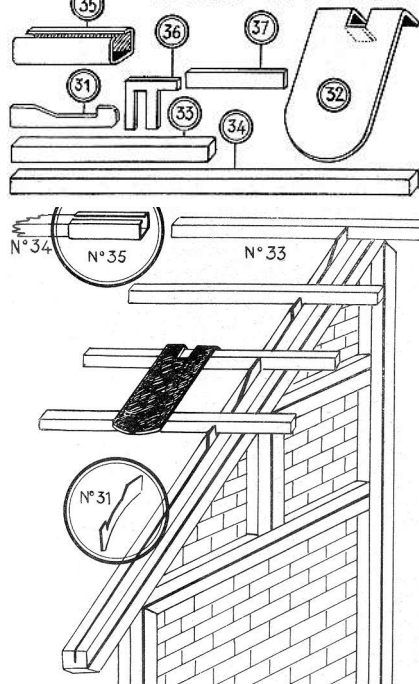
The SETS The No.1 is in a large light yellow box 54*39½*5½cm, with a red label, 45*30cm. As already mentioned its centre, 28*21cm, is shown above. The contents are given on a label inside the lid as follows: 9x #00; 9x 0; 66x 1; 30x 1a; 24x 1b; 10x 2; 20x 2a, 20x 3; 4x 3a; 4x 4; 8x 4a; 8x 5; 7x 5a; 10x 6; 4x 6a; 10x 7; 2x 7a; 4x 8; 2x 8a; 4x 9; 60x 11; 10x 12; 20x 13; 5x 14; 4x 15; 3x 17; 4x 18; 4x19; 40x 20; 20x 21; 40x 31; 400x 32; 30x 33; 90x 34; 120x 35. #36 & 37 aren't mentioned but are needed for some of the models.

The parts found in the '00' lot were: 4x #00; 4x 0; 16x 1; 6x 1a; 2x 1b; 2x 2; 8x 3; 8x 3a; 6x 4; 2x 5; 14x 11; 10x 12; 1x 17; 1x19; 4x 20; 2x 21; 24x 31; 90x 32; 24x 34; 15x 35; 18x 36; 18x 37. They were sufficient to build the 'Cottage' shown on the next page, the only 00 House in the Manual.

The MANUAL as found consisted of 14 loose unnumbered sheets, 245*155mm, pierced for a ring binder on their left edges. Their order given below is as found (it is obvious except for the non-outfit models at the end), and there is no reason to think that it isn't complete. The cover is as in OSN 16 with the large letters yellow, edged in brown. p2 (=C2) has some general assembly instructions and suggests that more parts should be bought if needed. The parts are shown on pp3-4; & then on pp4-9

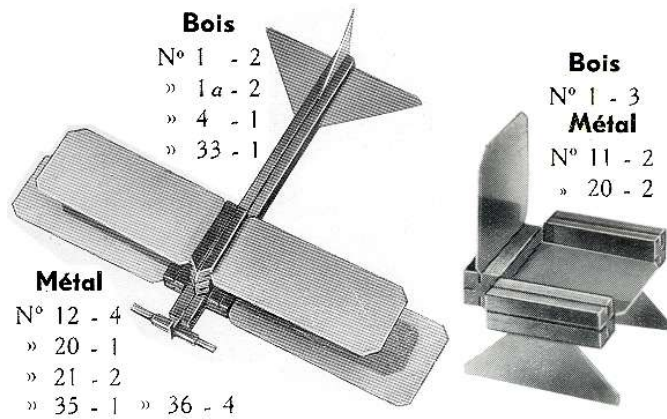


ELEMENTS DE TOITURE ET PIÈCES SPECIALES



needed for some of the non-outfit models in the Manual. The Panels have the brick pattern on one side and are a

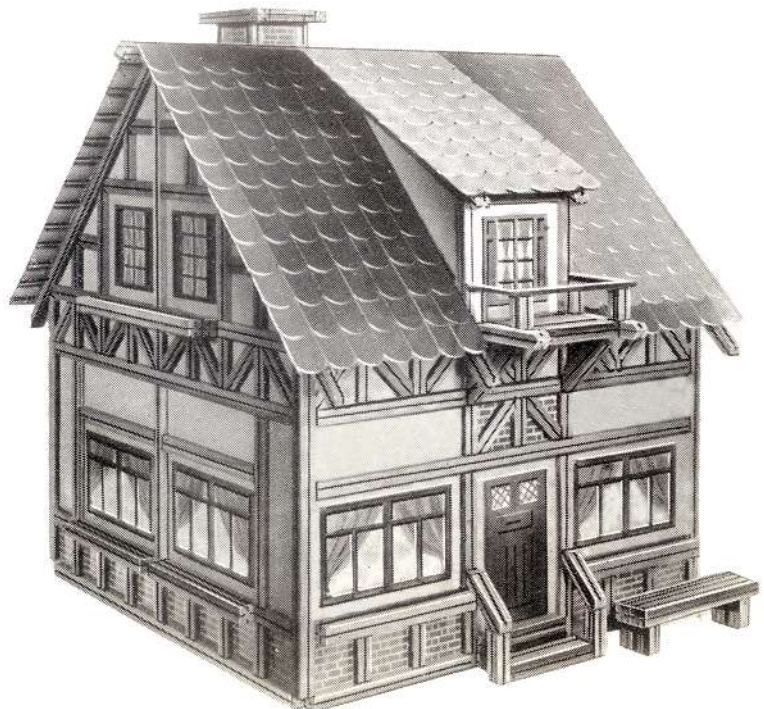




are 9 examples of how to use them. p10 is blank except for 'LE JOUET BATIMÉTAL | PARIS'. pp11-25 have photos of models on good quality paper, with one photo for each plus a list of parts. p26 & C3-4 are blank. Most of the models for the Sets are not named. Set 00 models are 3 small Aeroplanes on p11, 13 other small models, mostly Furniture, on pp12-13, & the Cottage already mentioned on p14. 2 of the small models are shown above, & the Cottage, my model, on the right. The 3 Set 0 models are a House on stilts with a dormer window on p15, an ÉCURIE (Stable) on p16, & a double-fronted House on p17. The three No.1 models are also Houses, first the one right, then one with a veranda, and finally a 2-storey example with a flat roof & large balcony. Next 5 models on pp21-25 with no set specified but they all need parts not in the No.1. In order they are a PASSERELLE (Footbridge); INTÉRIEUR ET AMEUBLEMENT (Furniture in a Room); CHALET SUISSE; MAISON DE MONTAGNE (Mountain House); the one on the lid; and below (¾ f-s, the others are near 100%) the largest model, ÉGLISE NORMANDE (Norman Church), about 60cm long with a bell tower some 75cm high.

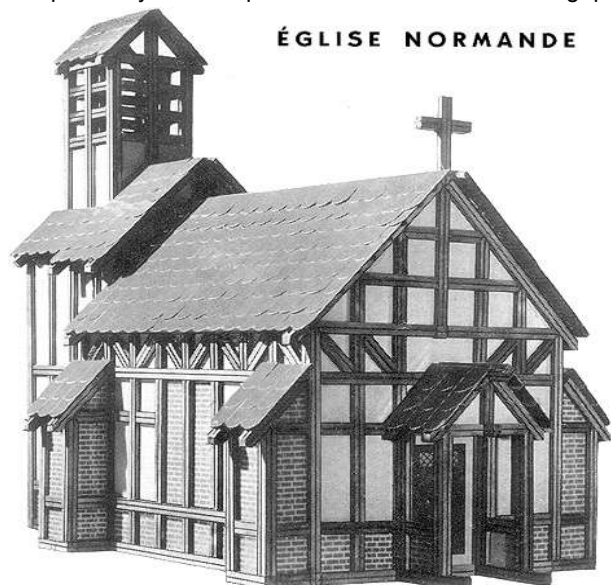
With the Manual was a large pale green Sheet, 61*49cm, printed on one side with a grid of pairs of lines to represent Beams at 4.9cm pitch. The layout of Beams needed for part of a wall is superimposed on part of it, and at the top it is suggested that before starting to build a wall the Beams for it be laid out on the Sheet.

Using the Parts The parts are accurately made and the wood hasn't warped. It was quite easy to build the walls of the simple Cottage and the structure was rigid enough. The roof was another matter, the Battens are not positively fixed in position and the Tiles do not grip



Modèle réalisable avec la boîte N° 1

Bois		Métal	
N° 1 - 66	» 3a - 4	» 7a - 2	N° 11 - 60 3 portes n° 19
» 1a - 30	» 4 - 4	» 8 - 4	» 12 - 10 4 grandes fenêtres n° 18
» 1b - 24	» 5 - 8	» 8a - 2	» 13 - 20 4 petites fenêtres n° 17
» 2 - 10	» 5a - 7	» 9 - 4	» 14 - 5 400 tuiles n° 32
» 2a - 20	» 6 - 10	» 00 - 9	» 15 - 4 40 attaches n° 31
» 3 - 20	» 6a - 4	» 33 - 30	» 20 - 40 120 raccords n° 35
	» 7 - 10	» 34 - 90	» 21 - 20 20 pièces spéciales n° 36



them very well. Real tiles are heavy enough to stay where they are put but these are not and even when, with great care, the roof was finished, a small knock could be (and was!) a disaster. Eventually I put slivers of Bluetack between the Tiles and the Battens to hold everything in position.

I suspect that some of the larger models would require rather more thought than the Cottage.

My Panels were a good fit in the Beams but David's parts look as if they may be more difficult to use – the aluminium Panels are slightly thicker, and some of the slits in his Beams look a little narrower.

I thought the finished model rather attractive and though the Windows are flat, a feeling of depth is created by the surround of Beams around each window.

A 1915 UK ERECTOR No.0 Outfit This set, near complete except that all the N&B are missing, was kindly loaned by David Hobson. The New Haven packing slip in it is dated OCT 15 1915. The Set is interesting for two reasons – the contents, not shown in *Greenberg* for any No.0 of this period, are on a label inside the lid, and the man on the lid label is not the one used on American sets.

Opposite **the label**, 7¼*6"; an enlarged view of the man; & the inventory. The equivalent man on the American label can be seen on p51 of *Greenberg* and is younger, not smoking, and wears a dark grey suit. Both are quite stern looking though the 'Englishman' does perhaps appear a little more benign. Otherwise the labels are identical except that the present one has 'LONDON, ENG.' under 'MYSTO MFG. CO.'; 'U.S.A.' has been added to the American 'NEW HAVEN, CONN.' address; and an additional line at the bottom reads: 'Patented in U.S.A., July 8, 1913, by Mysto Mfg. Co., British Patents Pending'.

The 'US man' was changed in 1920 to have up-to-date clothes and a half smile (*Greenberg* p62), and I think I remember reading somewhere that the two 'US Men' resemble to some extent the then current US presidents. Does anyone recognise the 'Englishman'?

The Box is black, 10¾*6¾*8", and the parts were clipped to a black card with the usual bifurcated 'T' clips (#P41). The Perforated Strips are the P35 'braced' pattern shown in 3/47 and not the P21 5h type in the Contents List, but otherwise the parts are as expected with small cutouts in the 3" Girders and all the parts either nickel or bright steel. An empty brown envelope, 3½*2¼", with Mysto ERECTOR on the front, would have contained the N&B.

The Model Sheet with the Set, 12*9", is printed in brown on both sides, and bears only the New Haven address. The top half of the front starts with 'Hello Boys and Girls: Here's FUN' and 'You Can Build 69 Toys / All for 50 cts'. Underneath are 8



CONTENTS OF ERECTOR NO. 0

Cata. No.	No. of Pieces	Parts
P32-3	4	3 in. Girders
P32-6	4	6 in. Girders
P21	12	Perforated Strips
P 1	6	Small Right Angles
P 2	8	Right Angles
P25-S	14	Short Screws
P26	14	Nuts
P27	4	Set Screws
P 8	4	Small Wheels
P22-4	2	4 in. Axle Rods
F19	1	Base Plate
P29	4	Washers
P33	1	Screw Driver
P41	22	Paper Fasteners
	1	Set of Directions



simple models, from #62 Stretcher to #66 Truck. The lower half has talk of larger sets with illustrations of the P58 Motor and 6

models including a 3-funneled Warship & a nice Street Car. Overleaf, in land-scape, are the remaining even simpler models, unnamed & unnumbered, and none of them use any parts other than 'braced' Perforated Strips P35, matching A/Bs P1, & 7/8" Discs P29. They include the Alphabet & the Numbers 0-9, while the rest are mostly furniture & other domestic items. Only one has wheels – 4 Discs on a little Trolley.

OSN 32/947

ERECTOR [2a]: S1

Another ONADO Puzzle A somewhat puzzling No.4 set with red & green parts was described in 29/865, and now David Hobson has kindly lent me another acquisition which, at a glance, also looks like a No.4, and this time with the expected semi-matt blue & red parts. Said parts appear to be as new, still attached with the usual clips to the backing cards. There was no manual with the Set.

Like the previous No.4 it has 2 layers of parts, one, with very minor differences, has the No.3 parts on it (see 25/728), and the other is just like the layer illustrated in OSN 29 (apart from the colours that is). But the box is the same size as the No.3's in 25/728, and the lid (right) has a white disc stuck on the apron with 'No.3' printed on it in red. Also although the parts match perfectly in colour between the 2 layers, the 'No.3' layer has a yellow backing card (which matches the paper covering on the sides of the bottom of the box), while the 'No.4' parts are on a light blue card.

So it seems fairly certain that the card of the extra blue & red parts needed for a No.4 did exist, but what is not clear is how it came to be in a No.3 box (there is just room for it above the No.3 layer). One can speculate. Did the owner of the No.3 then buy a No.3A and discard its box? - but there is no evidence to even suggest that 'A' sets ever existed. Or did the No.4 layer come from a No.4 set and got put into the wrong box by a careless shop assistant? Or

Another point, 2 N&B boxes were found in the Set and one contained 50 Nuts & 48 Bolts, about the expected number for a No.3. The other had & 11 Nuts & 26 Bolts – too few Nuts to make the number up to a No.4. Also there is no obvious place for a box on the No.4 card.

There is one further mystery, the lid of the box is quite unlike the other known pattern, so did it come after that type



or was it a short-lived (perhaps) introduction at an earlier stage?

Now points of interest from **the parts**. • The No.3 card has 2 **Crank Handles**, one through each of the 2 clips that held the single part in other No.3's. The only manual model which needs 2 is the No.4 Army Truck. • **The N&B** are 4BA, plain steel, with pressed hex Nuts, 6.3mm A/F & 2mm thick, and 6.3mm Ø RH Bolts, 6½mm u/h. • **Boss tappings**. The 58mm Pulley, the only bossed part on the blue card, is 4BA, with a steel, 6.1mm Ø RH Set Screw, 3/8" u/h, & painted red. On the No.3 card the Collars are tapped 5/32" BSW, with plain steel 6.8mm Ø RH Set Screws, again 3/8" u/h. The Set Screw from the 1" Pulley on this card is missing and the tapping hasn't been identified, the pitch looks similar to 4BA but the 3.0mm bore is too large. • The **Spanner** is 87mm long with the holes parallel to the base edge; the wire **Screwdriver** is 6" o/a and is like the one in 21/615.

OSN 32/947

ONADO: S2

'New' System - PONTA PONTA is a bridge construction system and Jacques Pitrat kindly send photos & details of his set, a Nr.1. Right the box lid, with the manual cover below it. Below again the open box, & 2 somewhat rearranged pages from the manual. The model page is about 3/4-scale; the other shows the parts (but omitting all but one length of the Strips & Girders) & the set contents. The maker's name does not appear anywhere and there is no indication of date, but most likely PONTA was made in Germany soon after WW2. There is nothing to suggest that there were other sets in the system.

The **BOX** is 32*30 1/2*2cm and the words at the bottom of the lid (and the manual cover) are PATENT ANGEMELDET (patent pending).

The **PARTS** are blackened steel, & of good quality. The hole diameter is 4.0mm and the pitch, 10.0mm. The Strips, Girders & Plates are 1.0 mm thick. The main parts in the Set were: 4,5,8,9h Strips; 8,9h Wide U-Girders; 5,7,8,9h Narrow U-Girders; and Plates F2 & F3.

The Narrow Girders can be bolted inside the Wide type and this allows longer U-girders to



be easily made, as in the model's top members; or square girders are possible, as in the uprights.

The Plates are 12*5cm, and are flanged on their shorter sides. As can be seen the flanges are trimmed on the F2 & F3 parts to give a neat joint at the top & bottom of the end ramps. In fact 2 holes remain in the F2 flange, and all 4, as shown, for F3. The 4 in the F3 explains why there are no F1's in the Set, F3's are used instead. No doubt it was originally intended to use F1, and the set contents & building instructions in the manual reflected this until changes were written in by hand. Perhaps not many copies of the manual were printed!

The Bolts have a countersunk head (not round as shown in the manual), and there are three lengths for the threaded part: 6mm, 13mm, & 22mm. The diameter of the thread is 3.8 mm. The hexagonal Nuts are 8mm A/F and 2.5 mm thick. No Tools are described in the manual, and none were found in the Set.

The **MANUAL** is in German, printed black on white, and is made from 2 sheets stapled together, giving 8 pages 20.7*14.3cm. Apart from the page of illustrated parts & set contents, it contains 3 models, the 2 on the cover and the one

beinhaltet:	
Stück	Fahrbahnteile
2	F 2
10	F 3
10	U-Träger . Ub 9
4	Ub 8
4	Ub 7
4	Us 9
4	Us 8
4	Us 7
10	Us 5
12	Lochschienen L 9
8	L 8
4	L 5
14	L 4
34	Schrauben Nr. 1
38	" " " 2
8	" " " 3
66	Muttern " 4

Der Brückenbaukasten Nr. 1
Die Formen dieser Teile sind aus den nebenstehenden Abbildungen zu ersehen.

Brücke mit Fachwerksträger
Fig. 10 bis 12

Erforderliche Teile: Fahrbahn nach Seite 3
Außerdem:

4 Stück Ub 8	2 Stück Ub 9	18 Stück Schrauben Nr. 2
4 " Us 8	2 " Us 9	4 " " " " 3
4 " Ub 7	8 " L 9	(bereits bei Fahrbahn, Seite 2, angegeben)
4 " Us 7	4 " Schrauben Nr. 1	26 Stück Muttern Nr. 4

Auf die nach Seite 3 hergestellte Fahrbahn werden zusätzlich die oben angegebenen Teile nach fig. 10 angebaut. Die Anbringung der aus U-Trägern Ub 7 und Us 7 gebildeten Eckpfeilern ist aus Fig. 11 ersichtlich, wobei zu beachten ist, daß bei dieser Figur nur die zur Erläuterung dieses Pfeileranbauvorganges notwendigen Teile gezeichnet sind. Die aus U-Trägern Ub 9 und Us 9 gebildeten Mittelpfeiler zu beiden Seiten der Brücke, müssen bereits, wie aus Fig. 12 zu ersehen, bei dem Zusammenbau der Fahrbahn (siehe Seite 3) mit Schrauben Nr. 2 bzw. Mutter Nr 4, so an den kastenförmigen Trägern der Fahrbahn befestigt werden, daß die Köpfe der Schrauben im Innern der U-Träger Ub 9 zu liegen kommen.

shown here. They differ only in their sides and there is a separate detailed description of the construction of the common decking. The last page is blank.

This is a very simple system but the use made of 2 widths of U-Girder is unusual and the models are a reasonable size – about 24" long and 5" wide. It would not be easy though to build Bridges that are very different from the three in the manual.

COZZONE: SETS 300 & 500 This post-WW2 American system was mentioned in 12/313 but only now have parts come to light, in the shape of two sets, a No. 300 and a No.500, the latter hitherto thought the only size actually produced. Neither is quite complete but both have the (same) manual. They belong to Kendrick Bisset and what follows is based on the material he kindly sent.

THE PARTS The manual has a price list of parts and full-size illustrations of all of them except the Motor. They are shown opposite at 3/4-scale except that only one each of the Swivel Rod, Stud, & Plate illustrations is included.

The **Swivel Rod** is aluminium bar, 4.78mm (3/16") Ø, with each end turned down to form a spigot. Each spigot is fitted with a union, retained by the end of the spigot being peened over. The union is in effect a hexagon bolt (6.4mm A/F) with a 10-32 (about 3/16"o.d.) thread, bored out to slide over the spigot. It is shinier than the rod, and is probably nicked brass. The spigot's peening is such as to allow the union to rotate, but with minimal longitudinal play. Thus a Rod is just free to turn when a union is tightened into a Coupling and is not quite 'solid' with it.

The **Studs** too are solid aluminium, the same diameter as the Swivel Rod, and with one end threaded.

The **Hexagon Coupling** is tapped through from all faces, and the inside seems to have been machined out to some extent, with no sharp edges where the tapped holes intersect. (As

Kendrick wrote, this must have been an interesting tool!) The finish is like the Swivel Rod union. The **Square Coupling** has not been seen.

The **2" Wheel** is made of hard rubber, and reminds one of those in GIRDER BILT and other cheap post-war aluminium sets. Its centre however has a spindle embedded in it, which looks as if it is a short length from one end of a Swivel Rod, but with straight knurling along it. The union is on the Wheel's inner face of course, with about 1/8" of the rod showing between the union and the wheel. On the outside the end of the rod is peened over to hold a steel hub cap in place.

The **1" Wheel**, called a Steering Wheel, has not been seen but looks as if it may be a push fit on a Stud or a Swivel Rod union. (Most of the wheeled 300/500 set manual models call for 'Wheels W1' but the Wheels on the models look to be the 2" size, as found in the sets, so W1 may have been an earlier designation of the 2" version.)

The **Plates** are of 0.26 mm thick tin, painted either red, near white, or a pale cream on one side. The back is a yellow coating, with overspray of the paint in some instances. To use them the manual says 'hook the two-fingered end around the first rod, and snap the single finger around the other rod'.

The **Track Holders**, T1, are said in the manual to snap onto the Rods and then toy train track can be laid on them.

The **Spanner, Constructorule, & Motor** have not been seen. The Motor looks like the early version of the one in THE CONSTRUCTIONEER (see 9/206).

Certain other parts, not in the price list or the illustrated parts, are needed for some of the Motor-driven, non-outfit fairground models in the manual. They are a **Pulley P1**, a **3-**

Part No. R9, Swivel Rod.....	18¢ each
Part No. R8, Swivel Rod.....	17¢ each
Part No. R7½, Swivel Rod.....	17¢ each
Part No. R7, Swivel Rod.....	16¢ each
Part No. R6, Swivel Rod.....	16¢ each
Part No. R5½, Swivel Rod.....	15¢ each
Part No. R5, Swivel Rod.....	15¢ each
Part No. R4, Swivel Rod.....	14¢ each
Part No. R3, Swivel Rod.....	14¢ each
Part No. R2½, Swivel Rod.....	13¢ each
Part No. R2, Swivel Rod.....	13¢ each
Part No. R1½, Swivel Rod.....	12¢ each
Part No. R1, Swivel Rod.....	12¢ each

Part No. S1¾, Stud 1¾-inches.....	3¢ each
Part No. S1½, Stud 1½-inches.....	3¢ each
Part No. S1¼, Stud 1¼-inches.....	3¢ each
Part No. S1, Stud 1-inch.....	3¢ each

Part No. X1, Hexagon Coupling (8 holes).....	12¢ each
Part No. Q1, Square Coupling (6 holes).....	12¢ each

Part No. P2, Plate 2-inches.....	4¢ each
Part No. P3, Plate 3-inches.....	5¢ each
Part No. P4, Plate 4-inches.....	6¢ each

Part No. T1, Track Holder.....	6¢ each
Part No. WR1, Wrench.....	15¢ each
Part No. RU1, Cozzone Constructorule*.....	15¢ each

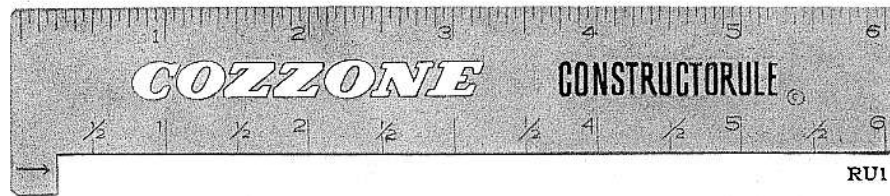
Part No. WH2, Wheel 2-inch diameter.....	15¢ each
Part No. WH1, Steering Wheel 1-inch diameter	5¢ each

Part No. M1, Cozzone Cyclone* Electric Motor	\$3.95 each
--	-------------

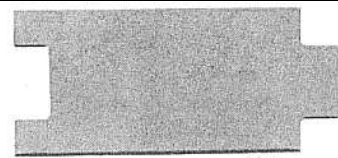
*Registered



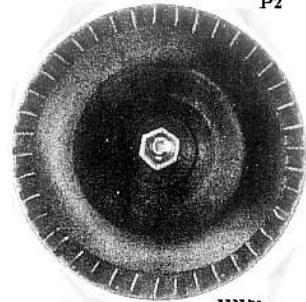
WR1



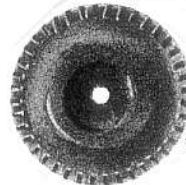
RU1



P2



WH2



WH1



X1



Q1



T1

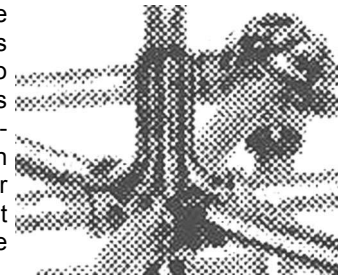


S1¾



R2

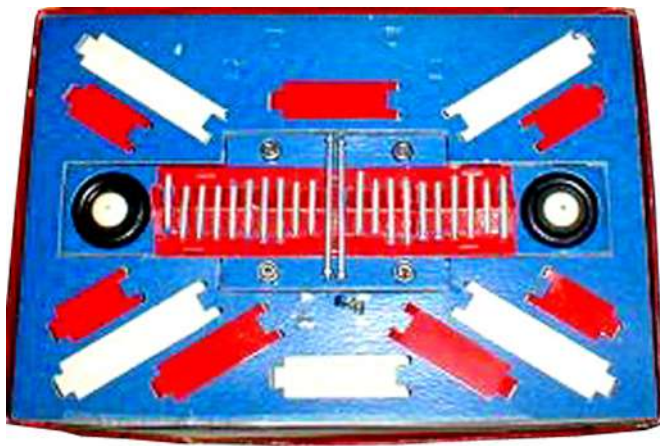
step Pulley U1, a Rubber Belt RB1, a Special Bearing B1, & a long Center Rod, CR1. The Pulley is used in a Ferris Wheel and looks to be 1" or so in diameter. All the other parts are used in the Aeroplane-Whirl shown later, and right, an enlarged view of its upper Special Bearing – it looks at least 1" long with a base tapped to accept 6 Rods.



THE SETS The 300 box is 11*16*1"; the 500, 12½*18½*1". The aprons are red, and both lids are similar, with the 300 shown below right. The parts clip/push into cards made up from 3 sections for the 300 and 4 for the 500. The open 300 box is shown atop the next column with the Rods & Studs as found, and not all of the correct length. The Rule & the Spanner would have been at the top. The 500 is just like the (poor) OSN 12 illustration – it can be seen a bit more clearly on the OSN web site or the MCS extra page.

No official inventories are available for the sets but the





likely contents are given below for the 300 & 500, based on the parts found, & those needed for the models in the manual. There are the not unusual anomalies and the numbers in curly brackets are the total of the parts found in the two sets.

Contents R2: 2,2 {0}. R3: 2,6 {6}. R4: 2,2 {3}. R6: 0,2 {0}. S1: 8,8 {0}. S1¼: 4,4 {17}. S1½: 4,4 {10}. X1: 4,4 {4}. Q1: 0,4 {0}. P2: 4,6 {10}. P3: 4,6 {10}. P4: 4,6 {10}. T1: 0,4 {4}. WR1: 1,1 {0}. RU1: 1,1 {0}. WH1: 0,0 {0}. WH2: 2,4 {2}.

As can be seen from the Price List, many of the Rods, and one of the Studs were not included in the sets.

THE MANUAL It has 12 unnumbered pages, 278*207mm, plus covers. The front is shown below; the oval bottom left has



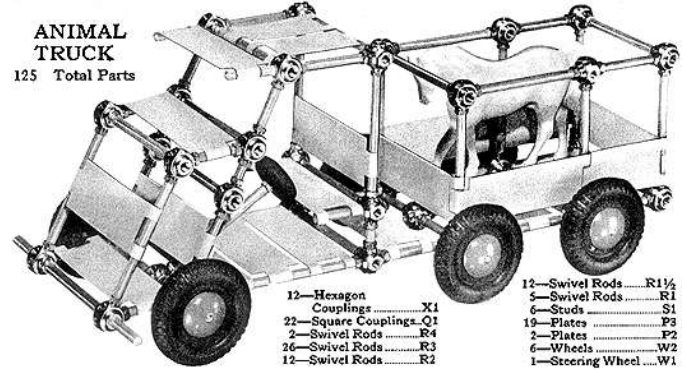
'ANOTHER COZZONE PRECISION PRODUCT' in it, and the blue one on the right: 'Sold exclusively BY CARROM Industries, Inc. LUDINGTON - MICHIGAN'. The other pages are printed black on white, with white on red panels. The non-model pages are: Instructions on C2; illustrated parts on p1; & list of parts with prices on C4. Also on C4 the full address: COZZONE CORPORATION / 18 Nuttman St., Newark 1, N.J.

No set numbers are mentioned anywhere but the 19 smallest models are numbered 301 (HOUSE BENCH on p2) to 319 (COUNTRY CHAIR on p4), and the 14 next slightly larger ones 501 (BED on p5) to 514 (BOARDWALK CHAIR on p6). After that 12 somewhat more ambitious models, which need extra parts - they are not numbered, but are named (COACH on p7 to MERRY-GO-ROUND on C3). A parts list is included for all the models.

Both the 300 and the 500 are quite small sets and the models are modest though reasonably realistic. They are mostly simple Seats & Tables, with a few Carts, 2/4-wheeled for the 300/500. Highlights are a Bench Saw for the 300, and a Bicycle for the 500, though it has 4 Wheels, no pedals, and the saddle is a Coupling. The non-outfit models are generally better and include a Girder Bridge about 30" long, 3 Motor-driven fairground models, the OSN 12 Jeep, and an Animal Truck. The latter is shown below, and also one of the two

Roundabouts (both about 50% full-size). Noticeably absent from the manual are Cranes or any crank-operated motion, and it would be difficult to model mechanical features. Vehicle steering might be possible but would be rather clumsy.

ANIMAL TRUCK
125 Total Parts

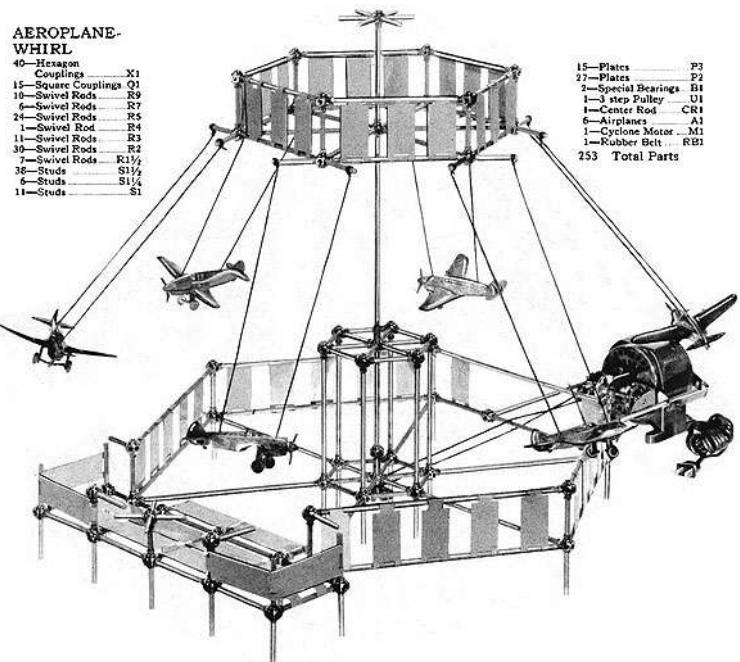


HISTORY There is little to add to the OSN 12 account. It is not surprising that COZZONE did not sell very well, the sets were only large enough to allow quite small, fairly uninteresting model to be made, and if the \$12.99 mentioned in OSN 12 was correct, they were by no means cheap. As a comparison an ERECTOR No.6A, a decent set with a mains Motor, cost \$10 in the 1948 Sears catalogue, and \$12.95 in 1952, both post paid. And the best models in the COZZONE manual need many additional parts over those in the No.500 outfit - the Bridge for example requires 62 more Couplings, and the total cost of all the extra parts for it would have been over \$26.

COZZONE would have been costly to produce because of the machining and accurate assembly needed for some of the parts. The 'Another COZZONE Precision Product' on the box was no doubt a proud claim and a good slogan but one that would have been more appropriate to a 'professional' system such as FAC or AUTOMAT. Both of those used frameworks made of Rods or Tubes, but they were sold to customers who could afford to pay for a precision product. Even then such structures were not very versatile for general model building.

In fairness, the use of the unions to attach the Rods made model building easier than with other comparable (and equally unsuccessful) systems such as SPEDICON (17/470) and TECHNICAL TRAINER (23/658 & earlier), and the Couplings were certainly neater than in the latter.

It is claimed in the manual that the provision of the unions, called swivel nuts, on the Swivel Rods was a patented feature but Kendrick has searched the US Patent & Trademark Offices for Cozzone & found nothing relevant.



Snippet – 'New' System: METAL WORKSHOP

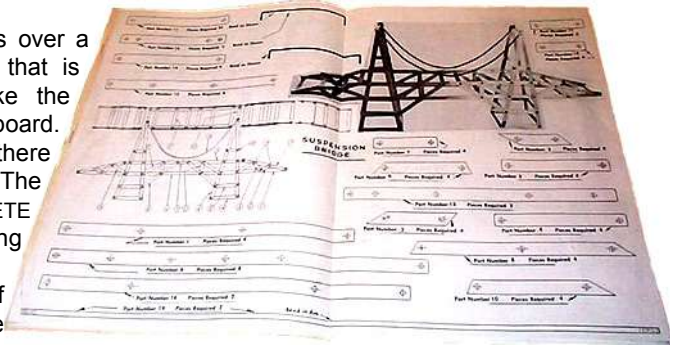
Judging from the numbers seen on Ebay, 'DIY' sets don't seem to have been very popular in America, but they did exist, witness the LITTLE GIANT MODEL MAKER (21/603), & BILD-R-JIG (29/853) with its wooden Strips.

Now a third called METAL WORKSHOP, made by Ray Lewis Associates Inc., Buffalo, NY in 1937. The Tool looks as if it is comparable to JUNEERO (8/176, 9/216), and is said to be capable of 'shearing, forming, and punching'. The ad also told of '40 pieces of round/flat stock, wheels, and nuts & bolts'. All of them neatly housed in or on the wooden baseboard.



The lid, left, fits over a plain cardboard box that is deep enough to take the Tool mounted on its board.

Notice the 'NO. 2' on it, so there may have been other sets. The slogan reads 'A COMPLETE WORKSHOP FOR BOYS Young & Old'.



Small drawings of various models can be seen on the lid, and on the manual cover, left. They include a Big Wheel, a Gantry (Crane?), a Railway Bridge with Signals, and the Bridge shown on the pages of the manual opened above.

They include a Big Wheel, a Gantry (Crane?), a Railway Bridge with Signals, and the Bridge shown on the pages of the manual opened above.



OSN 32/951

METAL WORKSHOP: S1

Snippet – Another MECHANIC Set

This set was being sold from Germany. The top of the box, right, is very similar in style to the outfit shown in 31/939. Again it has a 4-figure number in the bottom right corner, but in this case it looks to start with '19'. The underside of the box, below right, shows the parts in the set (240 in all), and most of them could be 'Chinese' pattern. The main new parts are the Wheel for the Motorcycles, and the Disc below it of about 3/4" Ø - it is used, for example, with the black part, as a rear view mirror. The red circle below the Flat Trunnion could be a Pulley but I can't place the larger red part to its left.

The models look a reasonable selection and as far as I can recall they have not featured in any Chinese sets before.

I wondered about the connection between this set and the one in OSN 31. For the latter, it didn't occur to me at the time that it might have 'Chinese' parts, partly because if it was the same as the METAAL CONSTRUCTIE SET (MSE henceforth), its hole pitch would be 12.3mm, not the usual Chinese 12.5mm. But assuming it is the same as MSE, many of the OSN 31 MECHANIC/MSE basic parts (see 31/938) could well be the same as those in this set, with a hole pitch of 12.3mm and parts with 'too much' metal outside the holes. Two other sets described elsewhere in this Issue, STEEL BUILDER & STIHL, have parts like that too.

It seems therefore that for the future it will be useful to distinguish between the basic, 12.3mm pitch parts in all these new sets, I'll call them 'new Chinese', and 'old Chinese' parts with 12.5mm pitch, as in the earlier Chinese sets, WISDOM, MECHANIC [1], MECHANIX, etc.

There is one anomaly though: Of the two sets I've been able to examine, the MSE hole pitch was 12.3mm; the STIHL pitch, 12.2mm. Remaking the measurements as accurately as possible I now have averages of 12.26mm for MSE & 12.23mm for STIHL; a small but real difference which could no doubt arise from different tooling, subcontractors, etc, etc. For the moment though I shall lump them all together as 'new Chinese'.



OSN 32/951

MECHANIC [2]: S1

'New' System: TECHNO Charles Perez found the set to be described in Canada, and passed it on to Don Redmond who kindly sent details. As can be seen from the photos the parts generally resemble TRIX and are quite unlike the 'Chinese' TECHNO noted in 24/712. One other TECHNO has been reported, an Israeli system, but it's possible that it is the VAŠEK-type TEKNO described in 29/866 – there is always the chance of alternative renderings of Hebrew names.

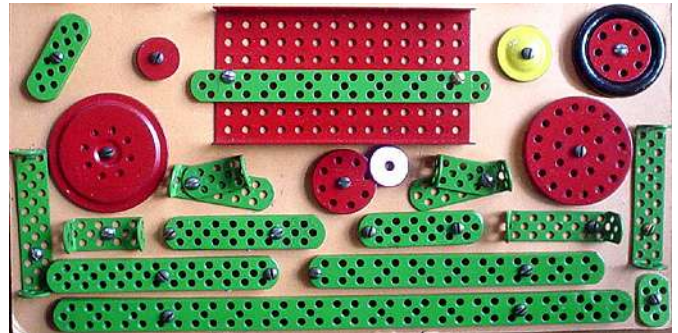


The words in the circle bottom right on the box lid above are 'Made in Canada by Toy-Co' and so the system will be assumed Canadian but the words could of course only apply to the box itself, with the parts made elsewhere. However there is no real reason to doubt that they are of North American origin with the 6-32 thread used and a hole pitch, measured at 7.85mm, very near to 5/16" (7.94mm).

Nothing is known of Toy-Co, and there is no indication of whether TECHNO dates from before or after WW2.

The SET is in a red paper covered cardboard box 310*215*45mm. There is no indication of a Set No. but there is a round space top left on the lid which might have been for one. (Note the reference to 'Sets' at the bottom of the lid label.) It seems that the parts were in 2 layers, sewn to the 2 orange cards found in the box. Also there, 2 pieces of green Roof Card, each probably about 21*22cm originally. From the quantities of some of the parts found (given in the next paragraph) it is possible that they came from more than one set.

The PARTS The different parts are listed below with some comments, and the number found in curly brackets. Most of the main ones are shown in the photo below, bolted to a card. **Paint** has been heavily but rather carelessly applied. **Holes**



are probably about 3.4mm Ø under the paint and the Bolts are a snug fit.

- '33', '25', '17', 13, 9, 7, 5, 3h **Strips** {4, 2, 6, 6, 6, 11, 5, 9}. Inverted commas denote where every other hole in the centre row has been omitted - to give extra stiffness perhaps. **DAS**: 65, 50, 35, 20mm long {3, 2, 4, 1}. **SAS**: 45, 30mm long {3, 2}. **A/B** {9}.
- **54mm Pulley Disc** with just one ring of 8 holes and a raised flat rim {4}. **50mm 8/16h Disc** {4}. **43mm black Road Wheel Disc**, shown top right with an 8h Disc over it. It has 8 matching holes & the edge is formed into half a 'Tyre', so that two butted back-to-back make a wide tread wheel. {10}. **30mm, 8h Disc**, shown below the Flanged Plate, & on top of the Road Wheel, top right {14}. **25mm Formed Disc**, painted yellow, the only yellow part and a 'foreigner' perhaps {4}. The silver Pulley under the Flanged Plate is most likely 'foreign too'. **19mm Disc** {{7}}.
- The **Flanged Plate**, 14*7h just slips into the TRIX part, has square corners, is of much heavier stock, has no end grooves, and the flange holes are noticeably above the midline. {3}.
- **Screwed Rods**, 25, 50, 85mm long. Various **N&B** were found, all in a box with a hinged lid: black Bolts with 5.4mm Ø fillister heads & 8mm u/h {75}; bright Bolts with 6.3mm Ø round heads, 6, 18, 25, 32mm u/h {100}; hex, chamfered face Nuts with various finishes, 7.9mm A/F. Also in the box, red painted **Washers** {20}.
- A **Hook** and a TRIX-type **Motor** can be seen in the Crane on the box lid.

TECHNO [3]: S1

OSN 32/952

Snippet – The SEYMOUR AIRPLANE FACTORY A



note in 26/774 mentioned this system as a possible Seymour promotional item but from the poster left (about 16*21") it seems more likely that Seymour marketed promotional sets for Metalcraft. Right an enlarged view of the Set, 'cut out' from the poster; it could be a METALCRAFT No.951, but in the red panel it says 'parts for the construction of various airplanes', against the 25 models claimed for the

951. Also there looks to be a #32 Pilots Cabin (see 24/688) bottom right in the box, a part not in the 951. Possibly the Seymour set was simplified by having only 1 Wing and consequently fewer Struts, and this limited the number of possible models. Such a mix of parts also meant that it



couldn't be compared directly with any of the regular METALCRAFT sets. I don't know how much the 951 cost but this Seymour could be obtained for 8 of Voigt's Crescent flour coupons plus \$1.69.

The Ebay seller of this item suggested the the poster would probably have hung in a grocery or general store and mentioned that the small print included a reference to the (Metalcraft) patent 1674637, and also Seymour's address: Central National Bank Building, St Louis, Mo.

SEYMOUR AIRPLANE FACTORY: S1

OSN 32/952

Snippet – New System: JUNIOR 5 sets with this name were offered on German Ebay in July last year, the only time they have been seen. A picture of both the front & back of the packaging was provided for each and the name is top left on the front of all of them, with an Item No. above it – 4904- followed by 3 figures, some of which are unclear. Bottom right on all the fronts is 'TOYMAN' in small white letters.

2 sets with 68 & 108 parts (#005 & 006), for 20 models each, are blister packs, 36*26*2½cm, and the larger one is shown below. The models are illustrated on the back. The



other outfits are boxed, and have 156, 164, 333 parts for 20, 16, & 14 models. Their Item Nos. may be ???, 002, & 001 (the ??? might end in '4'). All the box fronts are similar in style to the largest one at the top of the next column, and again the models are on the back. The '156' box is in portrait format and measures 36*27*4½cm; the others are landscape, both 41*28*6½cm. From the models for them, the different sets seem to be progressive.

The following parts can be seen in the '108' & the various models for the different sets. 5 & 11h Strips. M90a Curved Strip. 5h DAS. Red Trunnion and/or Flat Trunnion (probably). 2h Ø Pulleys with Tyre – red, & bright with boss. Bush Wheel.



Flanged Plates: 5*11h, 3&5h, 5*5h probably; and a Flanged Sector Plate, probably 7h long. Blue Flexible Plates: 3*5h, 3*11h, 5*5h, &, probably, 5*9h. Axles about 4 & 7h long. A long Crank Handle. A Spanner like M34c but with no centre piercing. A green-handled Screwdriver.

The models for all the sets are fairly 'traditional', rather than the 'Buggy' type found in many new systems. 9 of the 15 on the back of the '333' box (only 14 are claimed) are shown right, and 3 more of them are those on the front of the box above.

Origin Despite the sets being sold from Germany all the text that can be read on them is in English. From the parts above it may be that they are 'Chinese', and a few of the models look like WISDOM, especially those for the smaller sets. If 'Chinese', it is not clear if the parts are to the 'WISDOM' standard with holes at 12.5mm pitch, or the 12.2mm of STIHL & STEEL BUILDER (described elsewhere in this Issue). In either case most of the models look to me better than most of the earlier 'Chinese'.



OSN 32/953

JUNIOR [2]: S1

More MECOTECH Two of these Chinese sets were noted in 11/284. The No.1 had a few metal WISDOM-type parts, an electric Motor, & some plastic 'space' pieces, to make Jet/Rocket type Vehicles. The other was a more expensive MM 2001 but with no details.

Now I've Ebay photos of 4 other outfits. 3 are very similar to standard WISDOM sets: the No.2 below, 13" long, another No.2, & a No.3 in similar packaging. The 4th had no box and was part of a lot which also con-



left, all that could be seen of the manual. The red, triangle WISDOM logo is on it, & top right, an MM number which might be 2001.

Parts not seen before are the Road Wheel with boss & what may be imitation spokes; and the lighter blue (built-up?) chassis with the 'Architraves' bolted on. The manual cover Motorcycle also looks to have other 'new' parts in it. Among the loose parts in the lot (not shown here) are a red cylindrical Motor with yellow plastic mounting plate, & a blue Controller like the OSN 11 one but with a different switch. Also a crosshead Screwdriver with a flat green plastic handle, & 'MADE IN CHINA' moulded into it.



All the sets were found in Canada except one No.2 from Australia - it was marked 'Made in China for George Tauber Imports'.

tained some MECCANO. Right, the main parts, &

OSN 32/953

MECOTECH: S1

Les JOUETS AUTO-CYCLE In 25/747 Philip Woodcock asked about this unusual 1920s French system, and particularly its sets. Unfortunately not much detail is available about actual sets and this general account is based mainly on manuals, some made-up models, and a small selection of parts. Thanks are due to David Hobson, Jacques Pitrat, and Philip for supplying the information.

For ease of reference I'll give names to the 3 manuals to be described: Philip's 'Cycle', & 'Aero', and Jacques' 'No.2'. Judging from their contents the earliest is the *Cycle* and its models are mostly Cycles of all sorts. Next the *Aero* – it has the Motorcycle & Sidecar plus various Aeroplane models. Finally the *No.2* - it was with a No.2 set & is thought later than the *Aero* because a leaflet with it lists more sets than a similar one with the *Aero*, and adds Automobile to the list of models.

HISTORY The application date of the French patent (519761) was 1919; against 1920 for the UK (156061) & U.S. (1428496) versions. They were all in the name of Jean Léon Roquefort-Villeneuve, 77 Rue du Faubourg St. Jacques, Paris.

No other firm dates are available but 'known 1920 to the beginning of the 1930s' has been mentioned.

The original idea (from the U.S. patent to hand) was to make realistic models of various types of bicycle, or a motorcycle, with their frames made of rods, bolted together through their flattened ends, and with special parts to complete the picture. A special body part was also envisaged which could be used as a trailer or as a sidecar for the motorcycle. These ideas were broadly carried into production and extended to include other models, notably Aeroplanes and later a Car, with an ever increasing number of special parts. 3 C/W Motors were provided to power the main models, and 4 models, all thus powered, could be bought as ready-made items.

The name on the literature is AUTO-CYCLE or JOUETS AUTO-CYCLE, but it isn't clear if either was the company's name. Other toys were sold under these names and it's possible the brand dates from before the patent.

One other point of interest. Some of the parts in the manual models are shown marked AUTO-CYCLE PARIS, and Philip spotted that one Wheel in the *Cycle* manual has MECANAUTO PARIS instead, in the same format.

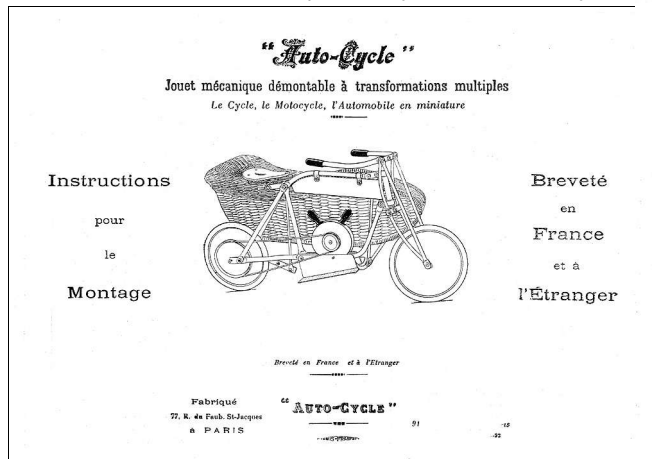
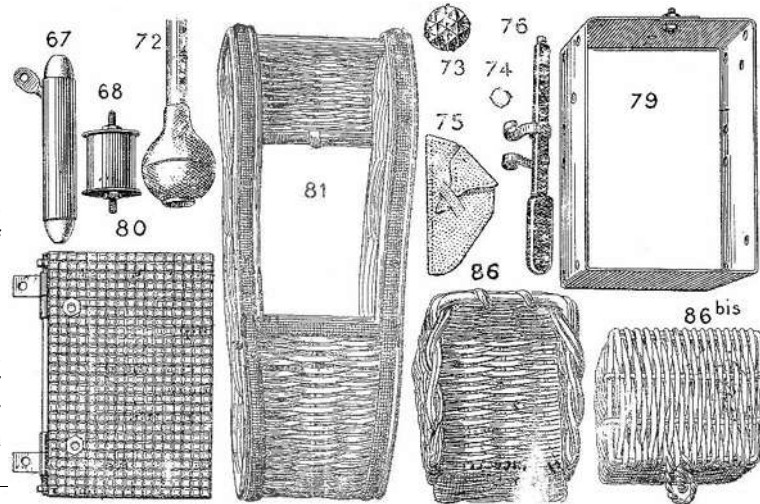
The CYCLE Manual It consists of 8 loose, folded sheets giving 32 (unnumbered) pages about 27*18cm. It is judged the earliest on several counts. The cover, below, looks older, and while the range of parts does not include the Auto or Aero parts, it does include a number of accessory parts not in the other manuals. Also the parts are described at the beginning as well as being illustrated, and the parts in the models are not identified in any way - in the other manuals the parts are illustrated but not described, and in the models they are identified by their PNs. One oddity about the cover is that the words under the name at the top – Jouet mécanique démontable à transformations multiples | Le Cycle, le Motocycle,

'Automobile en miniature – include the Auto, which 'ought' to have come later, after the Aero models. However the reference may not be to the later Auto: in my file is a photocopy of an AUTO-CYCLE leaflet which also mentions 'Le Cycle, le Motocycle, l'Automobile en miniature', and it includes the very indistinct image left, clearly an Auto but also clearly not the later one.

Another anomaly on the cover is the Motorcycle – its crankcase is much larger than in other illustrations, and larger than the 18mm Ø of Philip's part. Also the tank is the flat panel (2-dimensional) type rather than the cylindrical one, #67, shown in the Illustrated Parts. The flat type, #37, is the only Tank listed in the other manuals.

Bottom left on the manual cover is 'Fabriqué 77, R. du Faub. St-Jacques à Paris', and bottom right is what is left of another address (it looks as though a label has been stuck over it and then torn off). It may have been 'Agent Commercial ?? Letessier, 91(?) Boulevard Sébastopol, Tel. Louvre 36 92, Paris'. That address is on the Leaflet mentioned above which also has on it, under "AUTO-CYCLE": 'Bureaux: 77, Rue du Faubourg St. Jacques Paris' and 'Usine [factory] 39, Rue Dareau, Paris XIV^e'. Finally on addresses, 'Imprimerie [printer] spéciale de l'AUTOCYCLE, 289, rue Saint-Jacques – Paris' is on the Manuals's back cover.

The next 6 pages have the Illustrated Parts with descriptions. The illustrations are as in MCS/NZ. There are 90 parts in all including 6 lengths of Screwed Rod, 22 Formed Rods, and 3 Pulleys with Tyres for them. Also 2 C/W Motors & their individual parts, most common to both. Then there are the special parts including Baskets for Bicycles (#86, 86bis), and Bodies for the Trailer (81) & Sidecar (82), all in wickerwork; also accessories like a Horn (72), Head & Tails Lights (73,74), a Pump (76), & a leather Tool Bag (75) to hang behind the (aluminium) Saddle. It's impossible to describe all the 90 parts here so I'll put the 6 pages on the OSN web site. However some of the parts which do not appear in the later MCS/FB Illustrated Parts, are shown below. #67 is the cylindrical Tank

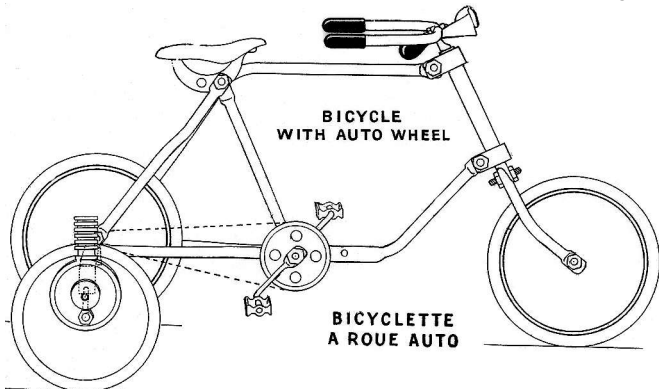


already mentioned and #68 is said to be a Tank for a (Motor) Scooter (which isn't in the Manual). #79 is the Triporteur (Delivery Tricycle) Body, later made up from separate parts. 2 parts are listed but not illustrated: #83, a Sidecar Body instead of the wicker one, and #84, the Load Platform of the Triporteur. Both are described as being 'richement décorée'.

There are 4 blank columns alongside the list of parts, headed I, II, III, IV, and under an overall heading MODELES. This last word seems to mean sets, but not sets with increasing numbers of parts (as will be the case in the other manuals), because in the Building Instructions on the page following the Parts List it says 'Les dessins de ce Manuel sont de même grandeur que les jouets Modèle I', and 'Les jouets modèles II, III, IV, ne diffèrent que par leur taille, se construisent sans aucune difficulté en suivant les données du

Manuel' (The drawings in this manual are the same size as the Set I models. The Set II, III, IV models, differing only in their size, can be build without any difficulty by following the contents of the manual.) So were there 4 sizes of parts? It sounds unlikely and all the parts seen have been the same size as the manual models. Perhaps I've misunderstood the French, or perhaps the different sized parts were never produced.

The next 16 pages have line drawings of 18 models, all named in English & French. They go from HAND BARROW / CIVIÈRE to MAN'S BICYCLE / BICYCLETTE D'HOMME. The other models are mainly every sort of Bicycle imaginable, including Tandems & Trikes. Among the rest are a Sled, a Plough, & a Wheelbarrow. Despite the Motorcycle & Sidecar on the cover, the only model which uses the 'Motor' is the one below (38% f-s). The wheels are a little over 6cm o.d. The Triporteur isn't shown either. Perhaps there were originally



other sheets in the manual. The Crane in MCS/NZ looks as if it might be of this period, and its parts include a Winding Drum (possibly the Scooter Tank) and a rectangular Tip Bucket.

The next 5 pages have detailed instructions on how to assemble the 2 Motors. Then 2 blank pages and on the back cover a photo of 10 models, with various Cycles, Trikes, 2 Triporteurs, a Motorcycle, and another fitted with a Sidecar.

The AERO Manual It isn't clear from the photocopies of this manual whether it was made up of loose sheets, but 4 of the copies seem to be the front & back of 2 leaflets, the same size as the manual pages, and similar to ones found with the No.2 manual. The first is headed Les JOUETS "AUTO-CYCLE", and lists 3 ready-made models, all C/W powered: Moto avec Side-Car (Motorcycle & Sidecar - just 'Side-car' henceforth, a usual French name for a combination and the name mostly used in the No.2 manual), Triporteur, and Avion (Aeroplane). Two versions of the Side-car & Avion were offered: Aluminium or Sicalite. Sicalite was (is?) a plastic and Philip's Avion has thin red plastic Wings & Tailplane (the Fin is missing), presumably of the said sicalite. Possibly it's the material the AÉRO MACREZ Wings & Fuselage Sides were made of (see 30/884).

Next the sets: I, for 12 models; II, 24 models including the Side-car; III, 30 models including the Side-car & Avion; IV, 36 models including the Side-car, Avion & Triporteur. Sets III & IV were available in aluminium or sicalite.

Then there were linking sets: Set A, which with the Side-car (the made-up model that would be) allowed all the Set II models to be made; B, with the Avion or the 'Boîte Aviation' (the only reference to this) allowed all the Set III models including the Side-car; and C, with the Side-car or Set II, allowed all the Set III models including the Avion (but with the sicalite Side-car an aluminium Body #63 was also needed - this metal Body was used in the Side-car & the Avion).

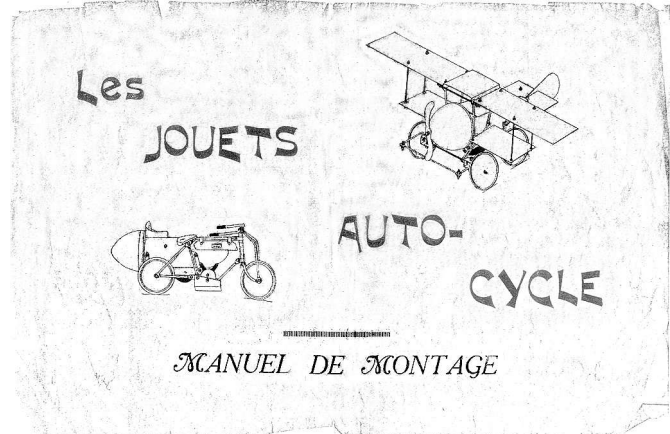
Next, the Tools necessary are listed: 2 Spanners, a Tubular Spanner, & good quality Pliers. The Spanners are in the Illustrated Parts but not the Pliers.

Finally on the front side, an ad for a new product: 3-wheel Auto-Cycle roller skates.

Overleaf is a list of the 36 models which can be made from the sets, with the names in French, English, Italian & Spanish. Most of the 12 models for Set I are in the *Cycle* manual but only a few of the extra 12 for Set II. A few *Cycle* models are not mentioned including the Sled & Rickshaw.

The other leaflet has detailed building instructions for 2 models. On the front side is the Side-car (both aluminium & sicalite sidecars are described), and on the reverse, the main Aero model.

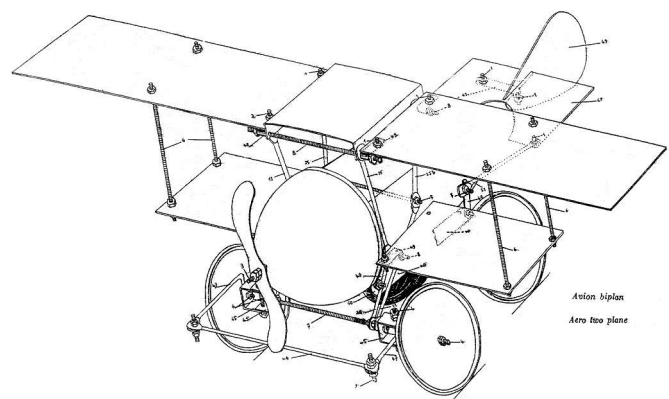
Now for the manual itself. The page size is about the same as before, and the cover, below, is like the one in MCS except for the typeface, and very slight differences in the drawing of



the 'Side-car'.

As mentioned already some of the *Cycle* parts are not included in the Illustrated Parts but the additions include all the Aero parts, with aluminium (#64-69) & sicalite (81-85) versions of the Flying Surfaces & Propeller; different parts to make up the Triporteur body, again in both materials (70-72 metal; 86-88 plastic); and sicalite parts to make the sidecar body (89-92). Most of the early PNs in the *Cycle* manual remain the same but many of the later ones have been changed. Many of the parts can be seen in the models shown here but I'll put the whole range including the Auto parts on the web page.

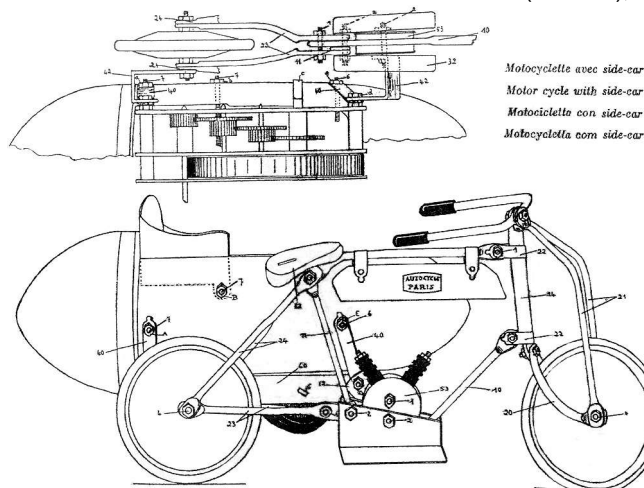
The model illustrations are line drawings as before but with the PN added for some of the parts. The main Aero model is



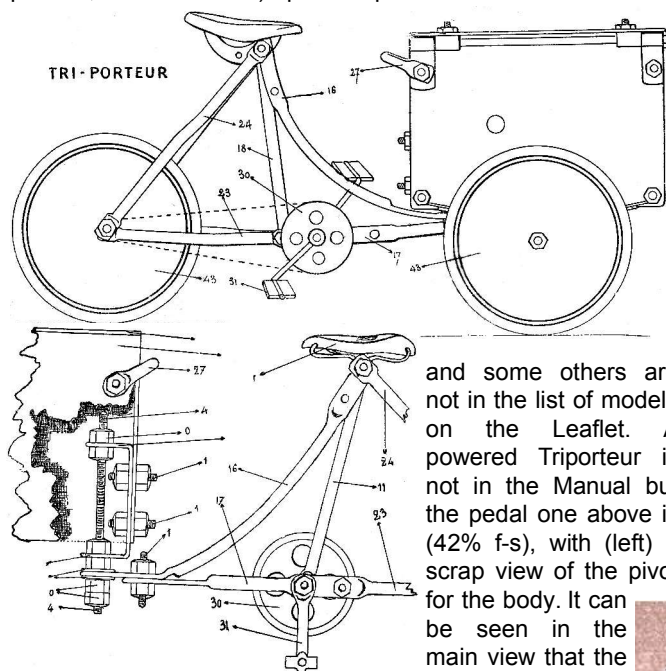
shown above, 1/3 f-s - the Motor is inside the fuselage, and the spring can be seen sticking out of the bottom. The drive is to the rear Wheel on the port side - there is no matching Wheel to starboard. Very odd. Another unusual feature is the steering linkage for the front wheels which is not connected to any control. Other simpler models are also shown including a Glider, and an Aviette, which a Google search tells me is 'A heavier-than-air flying machine in which the motive power is furnished solely by the aviator' - a photo of a 1913 machine shows a simple monoplane with the pilot pedalling to drive the landing wheels & the propeller. The A-C version is a biplane, and it doesn't have a propeller, or a tailplane, but the Pedals of a cycle-like body do drive the rear wheel. It looks more like today's hang-glider. A Russian site shows another Aviette, in

this case a cartoon of a 'Small airplane with motor-cycle engine', and A-C has one of those too, a Moto Aviette – it's really the Aviette above but with the mock V-twin Engine instead of the Pedals. The final model type is a Seaplane with the cigar-shaped Floats (#64bis), about 75mm long.

The other main model is the Side-car below (48% f-s); the



sidecar body is the Avion fuselage back to front, and as can be seen, the Motor inside it drives the motorcycle's rear wheel. Many of the other models in the *Cycle* manual are included, and a few small, new ones, a Cycle Rack for instance, with triangular frames made of Links (my name for the rods with pierced, flattened ends) spaced apart on Screwed Rods. This



and some others are not in the list of models on the Leaflet. A powered Triporteur is not in the Manual but the pedal one above is (42% f-s), with (left) a scrap view of the pivot for the body. It can be seen in the main view that the front wheels are

sprung using the Leaf Springs, #36.

The No.2 Manual Like the *Cycle* manual, this is made up of 8 loose sheets (32 pages), and there were 2 leaflets with it, equivalent to those with the *Aero* manual.

The one listing the sets & models shows many changes. The Automobile, in aluminium only, is added to the ready-made models, some changes are made to the description of Sets II-IV, and 4 new sets are listed.

The changes to the description of Sets II-IV are: '(1 mécanisme)' has been added at the end of the lines describing Sets II & III (a Motor that is); Set IV is said to be in a wooden box, with 2 Motors, and the Triporteur can be made at the same time as either of the other 2 models. Some or all of these changes could of course just be additional information.

The new sets are as follows, all packed in wooden boxes. No.II Spéciale, with 2 Motors and parts to make 25 models

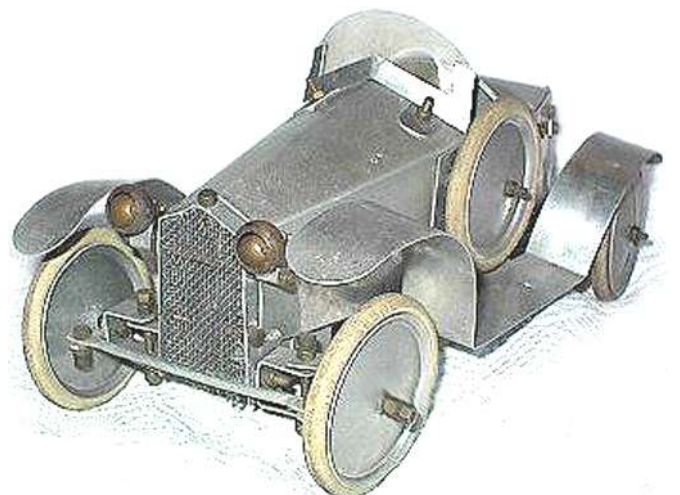
including the Side-car & Automobile together. No.III Luxe, 30 models, including the Side-car & Avion together, but only 1 Motor. No.V, 36 models, 3 Motors, and the Side-car, Avion & Triporteur could all be made at once. No.VI, 3 Motors, 37 models, and the Automobile, Triporteur, and either the Side-car or Avion could be made at the same time.

Linking Set A is no longer listed; sets B & C are as before except that the 'Boîte Aviation' isn't mentioned.

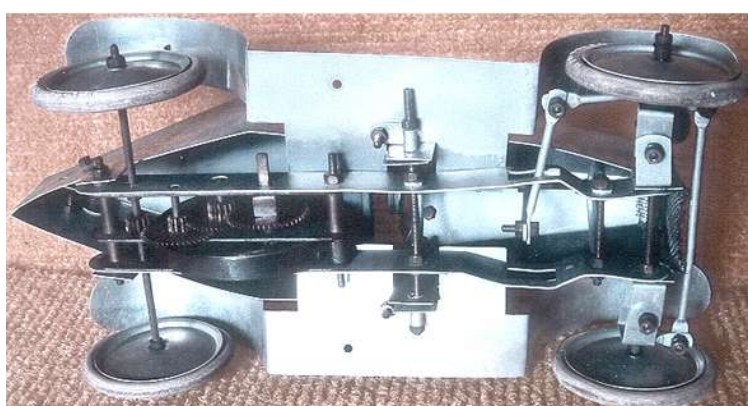
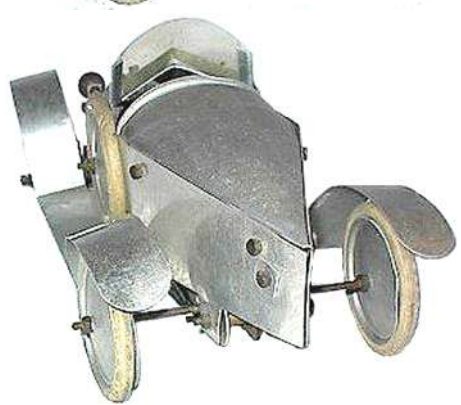
After the bit about the Tools as before, a new toy is advertised, a speedboat, 'Le Racer'.

Overleaf is the list of models, the previous 36 plus '37. Automobile'.

The manual cover is identical to the one in MCS (similar to the *Aero* one) and the 2 pages of Illustrated Parts are identical to the MCS/FB pages. That's to say they are like the corresponding *Aero* pages but with the 17 Auto parts added. They are #74-79 & 93-101, and most can be seen in the model below, probably complete except for the Toolbox #101.



It is 11" long and it has been suggested that it might be based on a Citroën 5 HP [1921-25 I believe]. The near horizontal steering column carries a 25mm Pulley at one end as the steering wheel, and a drop arm at the other which connects to the



steering arm via a link – as in the photo above (© Philip Woodcock).

The Manual has 30 models, 29 of which are listed in the Leaflet, plus the Bicycle Stand. Those seen, including the main ones, the C/W-driven Side-car & Avion, are as in the *Aero* manual. Neither the Automobile nor the powered

Triporteur is included.

The PARTS Below a few points of interest from the limited number of parts seen. Where 2 PNs are given they are from the *Cycle/No.2* manuals (as in MCS/NZ; /FB). Except where stated the parts are made of aluminium.

- The **thread** is 3x.6mm, the prewar French standard no doubt. The **Nut** is machined brass, 5.0mm A/F & 3.1mm deep. The **Screwed Rods** too are brass. No **Bolts** are mentioned in the literature but a few, hexagon-headed, were found in Jacques' set.
- **Holes** are 3.1mm Ø, with a few 3.2mm.
- Most **Links** are 3.0mm Ø; a few 4mm, and the cycle **Steering Rod**, #8/14, is 6mm.
- The **sheet metal parts** are usually .55mm thick but some are .85mm.
- **Pulleys:** The smallest #33 is machined brass. The others are 25, 41, & 54mm o.d., 4-4½mm wide at the rim, and are made from 2 discs held at the centre by a brass eyelet bush, 3-3½mm bore. The discs of the 41 & 54mm are spaced 8-8½mm apart at the centre; the 25mm discs are tight together, and their 4 face holes are 5.9mm Ø.
- 4 different **Tyres** have been seen, all for the 54mm Pulley. 3 are 4mm Ø rubber rings, one black, one white, & one grey with a slight tread of raised lines across the outside face. The fourth, on the Auto, is a 6mm white ring with AUTO-CYCLE moulded onto one side.
- The drive **Chain** #34 is braced steel with 7 links/cm.
- The hemispherical nose of the aluminium **Body**, #/63, is a separate part which pushes on.
- A few the **parts** seen are **stamped** AUTO-CYCLE PARIS.
- The **Handlebar Grips** & the cylinders of the V-Twin Engine are black rubber
- No examples of the parts which have been described as wickerwork have been seen as yet. Could they really have been made of woven strands, and if so of what?

The SETS Only 2 sets have been seen. The lid of one, an Ebay item, is shown at the top of the next column and a '2' can be seen in the bottom right corner. The parts include two Motors and twice the number of various other parts that might be expected in a No.2, the Sidecar Body amongst them. So perhaps the contents may have come from more than one outfit. The presence of the Motors points to the set being from the *No.2* manual time or later. Among the parts were 41 and 54mm Pulleys, both fitted with thin cream Rubber Rings. A pair

of tapered Wings of about the right size for the Avion can also be seen, but they have no holes for interplane struts and no other reference to such parts is known.

Jacques set is also a No.2 with a lid that looks like the one above. The box is 35*24*8cm, red inside with a lengthways partition, and there may have been a false bottom in the smaller compartment. A good many of the parts are missing but those remaining include a Motor and other parts which match 'half' of the Ebay outfit.



Postscript Since these notes were written more has come to hand about the patents, thanks to Jeannot Buteux & David Hobson. The British & French patents are very similar to the American one described earlier, but all three contain an interesting point in relation to the size of the parts that I missed before. To quote, 'According to the dimensions given to the members of the construction, toys can be made varying in size from a few centimeters to sizes sufficient to allow a child to ride on them.'

There was also an earlier French patent from the same M. Roquefort-Villeneuve, with an application date of October, 1919 (against December, 1919 for the later one). It envisages a constructional set called MÉCANAUTO (a name it will be recalled, noticed on a part in one of *Cycle* manual models) which would allow a wide range of models to be made including Cycles, Motorcycles, Automobiles of all types, Boats, & 'L'aéronautique en entier'. It is said that the parts would be bolted or screwed together but otherwise no details of them are given. No drawings were provided either but Jeannot wrote that the applicant took along a number of MÉCANAUTO models to support his application.

One other item has come to light, a very blurry ad from a company called Fontaine, Rigot & Cie of the same 77 R. du Faub. St-Jacques address as the patentee, and as on the *Cycle* manual. It shows an open-top box, probably wooden, with a drop down side. This side has lots of parts heaped on it and inside the box is a made-up Aeroplane. Above & below the box, but not necessarily connected to it, are the Sidecar & Automobile models.

OSN 32/957

AUTO-CYCLE: S4

Snippet: Spanish TRIX An Ebay item shows a No.4 set (see 20/570), apparently unused, and said to be from the early 1960s. The box is dark red and the label on the lid (below), and the manual cover, are as in OSN 20. The inside of the box

is green and the parts are on 4 layers of light yellow cards. As expected the contents comprise 4 each of the No.1 & 1A Units, with the main parts for 2x No.1 on each of two cards &



2x 1A on the other two. One 2x No.1A card is shown below –



there are no packets (for the N&B presumably) on the other cards, or room for them, and the centre of the other 1A card is arranged differently to use the whole space neatly. All the Strips are red, quite light in the photo; the DAS, D/B, Hook, & Spanner are dark blue; and the Wheel Disc, & A/B are dark green. As can be seen the Spanner has the normal perforations.

OSN 32/957

TRIX [5]: S1

Snippets – New Systems: MECHANIK, METAL MECHANIC, MECHANIH, & RIG OUT ONESELF

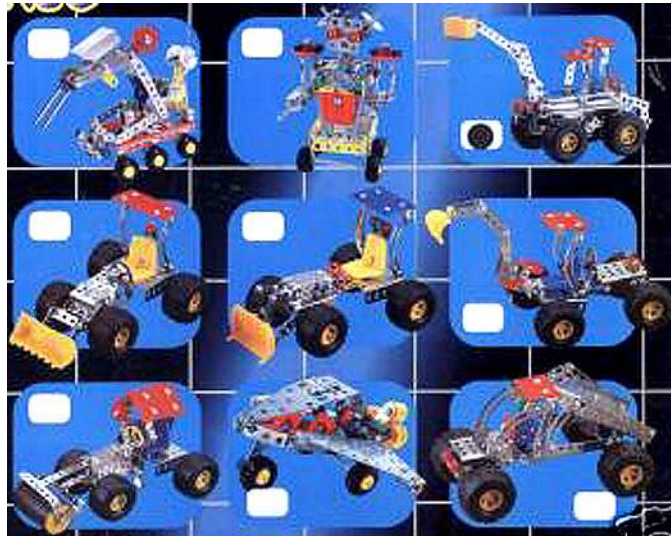
Last autumn produced a fine crop of smallish sets, mostly being sold from the UK & Germany. Their parts look like CONSTRUCTION/POLYLONG plus a number of new plastic pieces, but the models are different. The sets have one, or in one case two, of names above, and many of the models appear in more than one of them, or in METALLICA (see 31/933). 'Made in China' can be seen on some of the boxes but there's no indication of the maker in the photos available.



First, left, **MECHANIK**, which actually dates back to late 2003. From the only words that can be read on the lid, METALLO E PLASTICA, it seems to be Italian. The small model at the bottom looks like METALLICA.

METAL MECHANIC

Below part of the bottom of one box showing the models from one



range of 9 single-model sets. - I'll number them 1-9 clockwise from top left. Nos.5, & 7-9 are the main & the small models on the MECHANIK lid, and Nos.3 & 8 are the METALLICA pair. The only box tops seen are generally similar to the lid with the Armoured Car (henceforth Lid A) below, but has model 5 as the main picture. Perhaps all the lids were the same & the model that could be



made from a set was indicated on the base by the black circle in one of the small white panels by the models.

The other series of 4 sets is mostly about military models. The contents of the Lid A outfit can be seen in



one photo – a block of white foam with 10 recesses housing 2 lots of parts, 6 Wheels, & 2(?) red-handled Screwdrivers. One of 2 models could be made from this set, though which two isn't clear from the lid. Again this could perhaps be gleaned from the underside of the box. Another Ebay item showed 4 pairs of models, including the example left. They are apparently from the

bottom of one, or perhaps four, sets. The pairs of models are (with my names) the Lorry & the Tank already shown; the Lid A Tank, & a 4-Wheel Vehicle; a tracked Rocket Launcher with 6 plastic Rockets, & the Lid A Armoured Car; another 4-Wheel Vehicle, & a 10-(small) Wheeled Missile Vehicle - a rudimentary lorry with a fat plastic missile, some 10cm long, on the back. The lids for these sets aren't shown but it's possible that Lid A is used for all of them. However some of the lids from the MECHANIH / RIG OUT ONESELF sets described next have single models from this military range on them, and all 8 are on the one illustrated below.

MECHANIH/RIG OUT ONESELF 4 lids named thus have been seen, and the one below, which dates from mid-2003 shows all 8 of the MODEL MECHANIC 'military' series models. The others are in the same style but with some differences: they have



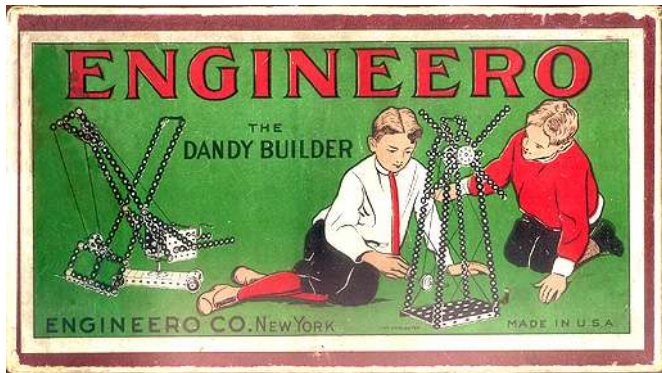
only one model, an Item No. in the bottom right corner, & the number of parts top right. One, No.58586 with 186 parts (also from 2003), shows the Tank from the middle of the right column above. The others have Item Nos. that also start with 585 but the last 2 digits are unclear. Their models are the Rocket Launcher (215 parts) & the Armoured Car (167 parts).

RIG OUT ONESELF Again 4 lids, but with just this name (& 'Intelligent TOYS' in a small panel) on them. One is shown below and is said to have 171 parts; another, No.58186 with 121 parts, is in the same style but with a Forklift Truck model, & 'FORKLIFT' down the left side. The main changes in layout for the other two are an 8 language panel on the left instead of the model name, just 'MOBILE MACHINERY SHOP CATERA / UP TO THE MINUTE Design' along the bottom, and the model name after the system name at the top. For No.58386, 123 parts, the name is WIT MODEL BUCKET SHOVEL TRUCK, & the model is the METALLICA Shovel Loader. And for No.58388, 153 parts, it is WIT MODEL BULLDOZER, and the model looks almost identical except that it has a Blade instead of a Shovel Bucket at the front.



MORE on ENGINEERO That's the early type with the diamond holes, see 18/520, and this is mainly about two more similar sets from what I'll call Phase 1, and another outfit, probably later, with some different parts, and a different manual. That will be Phase 2.

PHASE 1 First a **No.25** set, nearly complete except for the model leaflet, that David Hobson kindly lent me. Its dark red box measures $6\frac{1}{4} \times 11\frac{1}{4} \times 7\frac{7}{8}$ " and the lid is shown below. The



small print at the bottom is PAT. APPLIED FOR. There is no indication of the Set No. on the outside of the box but a label inside the lid is headed 'CONTENTS OF OUTFIT No 25' (and they are as in MCS). The Keystone Mfg. Co. logo (left) also appears on it (and it was on the the IFC of the OSN 18 manual



as well).

The **parts** are as would be expected from OSN 18 except the **N&B**. They are nicked steel as before but with an 8-32 thread. The Bolt is nearly identical, with a 7.4mm Ø head, but the Nut is much larger, 9.5mm A/F & 3.5mm thick. Some of the models in the OSN 18 manual show a larger Nut, but it is hexagonal.

The other point worth noting is that the **Wheel Disc** is 24.2mm Ø, very thin (.4mm), and its holes (4.3mm Ø) are at 8.2mm radius (.32"). Using 3 of the holes the part can act as a corner bracket to allow 2 Strips to be bolted at right angles, though with the part's dimensions it is only just possible to do so. None of the manual models take advantage of this useful property.

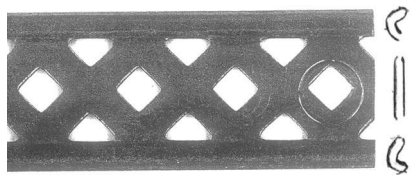
Another recent find is a lid of the same size with most of the parts from a **No.25** set (but no N&B). In this case the lid is black and the label is as David's except that the name, and the red/pink parts of the boys, are white. The only difference in the parts is that the Wheel Discs are tin instead of brass plated, and at .5mm, are slightly thicker.

PHASE 2 Kendrick Bisset kindly sent details of a **set** he has recently acquired, certainly incomplete, and without the bottom of the box, but with a manual. The **lid** is black, $12\frac{1}{2} \times 7\frac{1}{4} \times 3\frac{3}{4}$ ", with a label identical to David's above. There is no indication of size but from the manual models it is probably a No.50. Also the lid is very near the size of a Phase 1 No.50. The only indications of the maker is the 'ENGINEERO New York' on the label and the Keystone logo on a small packet labelled 'Clips and Anglebrackets' [sic]. The addresses of Engineero & Keystone, which were in the OSN 18 manual, are not in the present one and in fact Keystone isn't mentioned in it at all.

The **expected parts** in the Set are various Strips, a 5*11h Flanged Plate, & some nicked Wheel Discs (they match all the others seen in size, with a diameter of $\frac{15}{16}$ " and holes at aa $\frac{5}{16}$ " radius - the OSN 18 ones were probably wrongly described).

The **unexpected parts** are 4x 11h Braced Girders about 20mm wide (which henceforth I'll just call Girders), and 2x $1\frac{3}{8}$ " Ø Loose Pulleys. The Girder looks nickel plated and a short length is shown right, full-size, with a sketch of its cross-

section – it is really a standard Strip with vee section channels added at each side (very like an ERECTOR Girder in this respect). The Pulley (right) is larger than any seen before, and was the only type found in the Set. It is 2 tinplate discs held with a centre eyelet. Two other new parts can be seen in the manual with the Set, a 25h version of the Braced Girder, and a 12-spoke Pulley of perhaps $2\frac{3}{4}$ " Ø. The latter looks very like the ERECTOR part, P19, which was made from two, staggered 6-spoke discs.



The Intro in the **Manual** speaks of 5 **sets** from 10c to \$2 in price and in the model section they are referred to as Nos. 25, 50, 100, & 200 (no No.10 models are shown). Also mentioned are 5 accessory sets 'from 25a to 100a' to convert a 25c to a 50c set, etc - though that seems to imply 3 sets rather than 5.

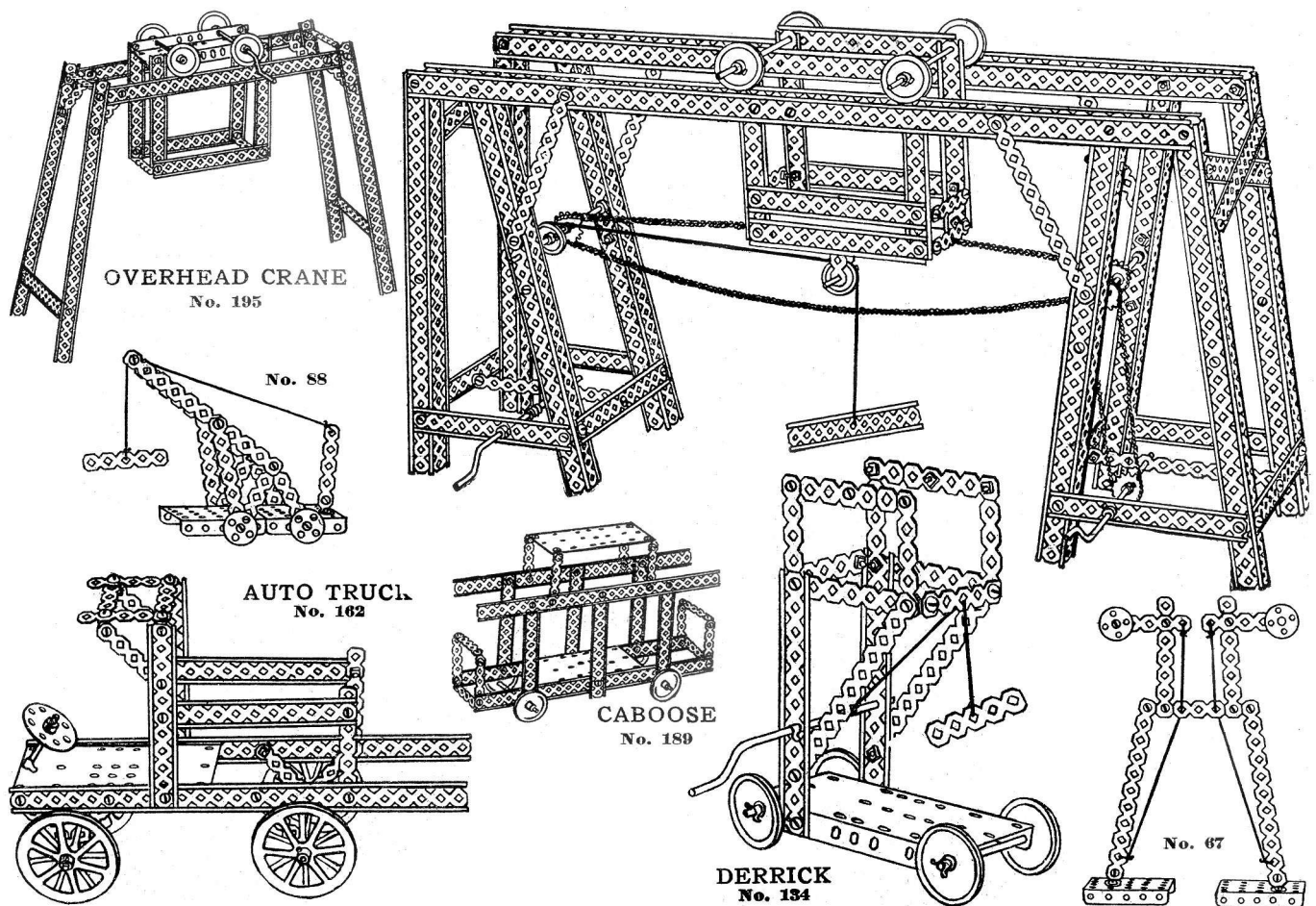
The Manual has 16 pages, 255*171mm, plus covers, and the front is identical to the cover in OSN 18 except that it is printed in blue on pale blue paper and the 'Engineero Co. New York' does not appear in the rectangle at the bottom. There is an Intro on C2, similar to before but with an omission that will be discussed later, and then 200 models on pp1-16. Set 25 has 100 unnamed models starting with the (unnumbered) Alphabet & Numbers 1-9,0 on p1, then from No.37 Sledge? on p2 to No.100 Low Table on p5 (my names). For Set 50: No.101 ICE SKATE on p5, to No.136 SINGLE R. R. SIGNAL on p9. For Set 100: No.137 ENDLESS ROPE WAGON on p10 to No.173 DOG CART on p14. For Set 200: No.174 WHIRLIGIG on p14 to No.200 HORSE TOWER WAGON on p16. C3 has the Illustrated Parts, as in the OSN 18 manual & MCS, and not updated to show the new parts; C4 shows an unnamed non-outfit Gantry Crane.

As in the OSN 18 manual there is a line drawing for each model, but no longer any Parts Lists. There are many more models than before, and with fewer pages, the drawings are very much smaller, particularly for some of the No.25 & No.200 models. The examples at the top of the facing page are full-size, and are fairly typical although they have also been chosen to show the different parts. Also shown is the Gantry Crane on the back cover, again full-size.

There are no **inventories** in the manual but the models probably give a fair idea of the major items in the different sets. Apart from the Strips those for the **No.25** (see models #67,88) are 2x 5*4h Flanged Plates & 4 Wheel Discs. The main ones in the **No.50** (#134) are a 5*11h Flanged Plate, 4x 11h Girders, & 4x $1\frac{3}{8}$ " Pulleys. The Flanged Plate is shown with the same, new pattern of holes in all the No.50 & later models but the one in Kendrick's set has a full complement of diamond holes. 4 each of 11 & 25h Girders are used in a number of the **No.100** models (#162) but one needs 6x 11h and another 6x 25h. Other parts are 4 Spoked Pulleys, a 5*11h Flanged Plate, & a Bush Wheel. The **No.200** models (#188,194) need the same parts as those for Set 100 with in addition a Flat Plate that looks like the Flanged Plate without the flanges.

Presumably the sets are progressive but oddly none of the models for sets above No.25 use the 5*4 Flanged Plate, or the Wheel Discs from that outfit. As already noted the new parts aren't shown in the Illustrated parts in the Manual and some of the parts there aren't used in any of the models, notably the A/G, Flanged Sector Plate, Sprocket & Chain, and the Hook. Also perhaps the 1" Bossed Pulley and Strips longer than 11h. The Sprocket, Chain, & Pulley though can be seen in the Gantry Crane.

HISTORY There is no positive proof that Phase 2 came after Phase 1 but it seems almost certain in view of the new parts



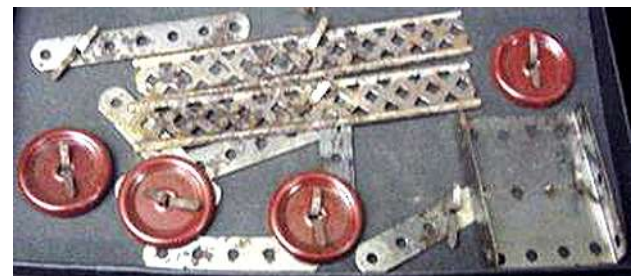
and the manual. On the latter the main things are that the Illustrated Parts page has not been updated, and that there is no longer a postal address for Engineero.

Also on the manual, the Keystone logo and name & address no longer appear and this may point to the parts being made by a new manufacturer, or to a change in the ownership of ENGINEERO. It is true that the logo is still on the parts envelope but this of course could just be old stock being used up.

Some aspects of the manual point to hurried preparation, for example an offer of help by correspondence over problems with models is still given at the end of the Intro but now there is no address underneath ('369 Broadway, New York City' before), nor, as noted above, is one given elsewhere.

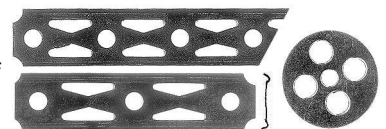
The main puzzle in all this is the design of the Girders, so near to the ERECTOR patented pattern. Gilbert's patents also covered the 'square girder' and while there is no mention of Girders being used in this way in the Manual, and no square girders can be seen in the outfit models, they are used for the corners of the towers in the non-outfit Gantry Crane. With such provocation one wonders why Gilbert didn't threaten/take action. Perhaps he did and that is why so few examples of Phase 2 parts are known. Or perhaps Gilbert had bought the company and Phase 2 was an experiment in using new parts prior to his redesign of ERECTOR in 1924 (as in the case of STEEL ENGINEERING).

OTHER ENGINEERO PARTS An Ebay snip shows a box, said to be about 6*9*1", with a lid label like the green/white one mentioned earlier except that the background colour is orange or red instead of green – a colour not seen before I think. The parts in the open box are shown at the top of the next column and as can be seen only the Girders are recognisable as ENGINEERO. All the other parts have round holes - the 5*4h Flanged Plate is the same size as the ENGINEERO part but with 2 missing rows of crosswise holes, and the red parts look like Wheels rather than Pulleys. I saw



this lot before I knew of Kendrick's set and I wondered if it was an early outfit, and whether the diamond holes in the Braced Strips led to their adoption for the later parts. Then my theory continued, Gilbert objected to the Girder and it was replaced by the A/G. Sadly the manual with Kendrick's set has the A/G in the illustrated parts & the Girder in the models - it would have to be the other way around for my imaginings to be correct. Just shows how one can concoct a plausible tale and be completely wrong.

And some MYSTERY PARTS These were with Kendrick's ENGINEERO parts and are shown below, 1/2-full-size, with the top 7h Strip cut back to 4 holes. The parts are nickel plated and the edges of the Strips are once again grooved. A strange thing is that the 2 Strips have different hole pitches – 1.00" for the 3h Strip, and .76" for the longer one. The holes are 4.7mm Ø. The Disc is 1" Ø, a little larger than the ENGINEERO one, and its outer holes are about 1/4" Ø.



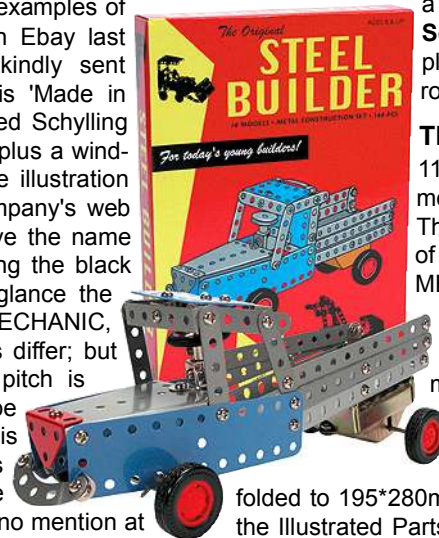
There is no reason to think that these parts are anything to do with ENGINEERO, and to underline this both Strips have since been seen is a large Ebay lot of AMERICAN MODEL BUILDER parts, together with several DAS with a base like the 3h Strip.

Another 'new' system to look forward to.

New System: STEEL BUILDER Two examples of an outfit with this name were offered on Ebay last autumn and Orion DreamDancer has kindly sent some details of one of them. The set is 'Made in China' for an American toy company called Schylling of Rowley, Massachusetts, and 168 parts plus a wind-up Motor are claimed for 16 models. The illustration right was taken in February from the company's web site (www.schylling.com). The words above the name are 'The Original' (cheek!) and those along the black flash 'For today's young builders'. At a glance the parts look typically 'Chinese' (WISDOM, MECHANIX, MECHANIX, etc) except that their colours differ; but there is another difference, the hole pitch is 12.2mm and not the 12.5 that would be expected. The 'Chinese' heritage though is evident from the Instruction Leaflet. It is headed MECHANIX and is in the same style as the one described in 17/471, with no mention at all of STEEL BUILDER. On the front is 'ITEM NO.195', and though the MECHANIX Set 195 has not yet been seen, the present outfit is very similar to the WISDOM No.5, also an Item 195 (see 10/238), and the corresponding MECHANIX outfit, 006, see 24/710.

The PARTS First the colour: the Strips are a dark metallic grey, the Flanged Plates silver, the Trunnions red, & the Plastic Flexible Plates a purplish-blue. On the hole pitch, the 12.2mm value arises because the parts have the same main overall dimensions as the WISDOM pieces but the metal outside the outer holes is greater. This is also the case for the parts in the STIHL set described below and the remarks there about the Strips may also apply to these parts.

The **Road Wheel** is new with a different red hub and different, treaded tyre – it is still fitted to the thin Axles though. Apart from that the other parts are similar to the MECHANIX ones described in OSN 24 except as follows. The **C/W Motor** is the original 'Chinese' pattern with a 64mm long body against 80mm for the MECHANIX one, and open ends with the spring coming out at one end. The Coupling, actually a **Threaded Coupling**, is a puzzle. It is 18mm long, and is meant to connect the 2.6mm Ø vertical output shaft of the Motor to a normal 4mm Axle in certain models such as the Helicopter right. In MECHANIX it had a 4mm smooth bore single-tapped at each end, and so could be used, albeit with a lot of wobble. But here one end has a single-tapped 4mm bore while the other is threaded M4, with no cross tapping. So although this end will fit over the Motor shaft there is no way of securing it. The **Loose Pulley** is the 18mm Ø type, as in the 003 set, but

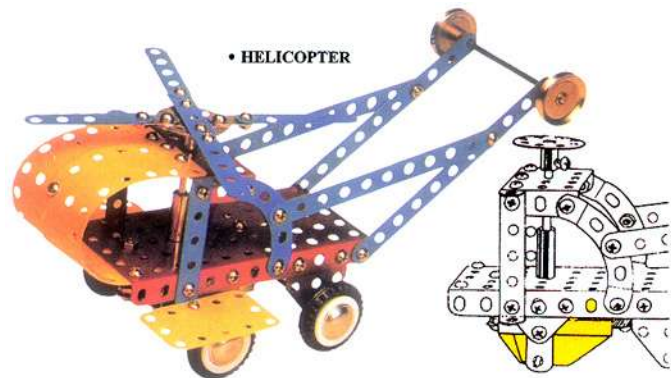


a translucent red-orange, and the (puny) **Screwdriver** reverts to a flat blade & green plastic handle (90mm long o/a but there is room in the packaging for a 120mm one).

The SET The end-opening box is 16½" 11⅛" 2¼" and the parts are in a clear plastic moulded tray with a matching 'clamshell' lid. The contents found are as given on the front of the Instruction Leaflet and are as the MECHANIX 006 outfit except that 2 extra 5h Strips & A/Bs are included.

The MODEL LEAFLET As already mentioned this is the MECHANIX type and all the photos show MECHANIX rather than STEEL BUILDER colours. Its 6 portrait sides consist of a single sheet folded to 195*280mm with a loose sheet inside. The front has the Illustrated Parts and a large photo of a Tower Crane, one of the Leaflet models. The other pages are devoted to the 16, mostly indifferent models, though some would look better in the Schylling colour scheme. The Helicopter below is a fair example. A goodish photo is provided for each model, together with a parts list and a line drawing showing how the Motor is fitted. The models go from ELEVATOR (a Fork Lift Truck) to Vertical Crane – a strange Mobile Crane in which the Motor drives the travel & slewing motions at the same time and there is a suspended Hook but no means of raising or lowering it.

4 of the models are identical to all that are in part of a WISDOM No.5 manual which Werner Sticht kindly sent, with the same, or very nearly the same illustrations. Only one, somewhat modified, was carried forward to the 6 (little better) models for MECHANIX.



OSN 32/961

STEEL BUILDER [2]: S1

New System: STIHL This is another one outfit system and a rather strange one. A good many of the parts are clearly 'Chinese' – they include Strips in the later Chinese blue but with the hole pitch & ends like those of STEEL BUILDER above; the smaller size of push-on Road Wheels and the necessary 2.6mm Axles for them; and a Threaded Coupling identical to the STEEL BUILDER part. Non-Chinese parts included some small Perforated Plates, a 3h A/G, & the corresponding Flat Girder. With 301 parts the Set is a decent size, but it is rather limited in scope because it lacks any rigid Plates larger the 3*5h, and



though there is a reasonably good selection of Strips (up to 11h) & Brackets, there are not enough of them to compensate.

The name on the box & manual is Andreas Stihl AG & Co., D-71336 Waiblingen, a large German firm who make chain saws and much other mechanical equipment. So it's not surprising to find what appears to be a Chain Saw model on the box lid (left), but it was surprising to find that it has no moving parts, and no representation of the chain at all. And the other manual

OSN 32/961

STIHL: S1

models are not very exciting either. So why was the set produced? Hardly to swell the company's profits or open up a new market, so perhaps, I thought, as a promotional give away. But the intro in the manual is clearly aimed at youngsters, so was it intended for employees' children at Xmas? Not very likely either you might say.

There is no indication of when STIHL was made but I have noticed unused sets on German Ebay between September 2002 & March 2004. I bought mine, in 2002, from a general dealer who seemed to sell mainly T-shirts.

The PARTS A list of the 45 different parts follows with comments as necessary for those which are not typical 'Chinese', and with the **quantities** in the Set in curly brackets. Asterisked parts are illustrated. **Holes** are generally 4.4mm, with a few 4.3, at 12.2mm pitch. Except where stated, slotted holes are 6mm. The general **colour scheme** is blue Strip parts & A/Gs; orange rigid Plates & Trunnions; white Flexible Plastic Plates; nickel Brackets, Wheels, Axles, N&B, etc. **Quality** - all the parts are accurately made with an excellent finish.

- **3,5,7,11h Strips**, the 3h is nickel. {6,6,10,4}. Typically there is 4¾ mm of metal outside the end holes (cf WISDOM at 3¼mm) and this means that 2 Strips end to end must overlap slightly if they are to be bolted to another part. However the width of the Strips has been reduced to about 12.1mm so bolting them down side by side isn't a problem.
- **Curved Strip** {2}.
- **Slotted Strip*** (like M215a but 80mm o/a with 16mm slots, and perhaps a flattened version of the WISDOM part) {4}.
- **DAS** {2}.
- **Arrowhead*** made from a 5h Strip and used only to represent a switch on the far side of the Chain Saw body {1}.
- **3h A/G** {4}.

- **3*3 & 3*5h Perforated Plates** with all the end holes slotted {3,3}.
- **3h Flat Girder** {5}.
- **Trunnion & Flat Trunnion** {2,2}.
- **3*1h Triangular Plate***, the upright part of a Trunnion {1}.



Flexible Plastic Plates:

- **3*5h, 3*7h, 3*7h clear, 3*11h**, all with a centre hole except the 3*5h, and the 3*11h has STIHL printed on both sides {1,2,1,2}.
- **3*5h Triangular** {4}.

Brackets: • **Flat, Angle, Obtuse Angle*** (the A/B with its lugs curved back), **2*1h Angle*** (with the top & the foot hole slotted), & **Reversed Angle Brackets** {4,14,4,6,4}.

- **28mm Pulley** {2}.
- **Wheel Disc** {2}.
- **28mm Road Wheel**

- **4}. 18mm Loose Pulley*** {3, red plastic}. Push-on **35mm Hand Wheel***, with a 5½mm Ø spigot, so it can't be used as a crank pin {1 red plastic}.
- **25,50,70mm Axles, & 60mm Thin Axle** {2,2,2,2}.

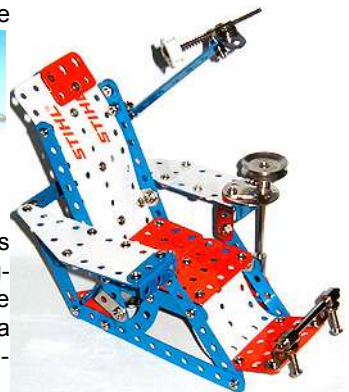
- **Threaded Coupling***, as in STEEL BUILDER, 9mm o.d {1}.
- **Collar**, 9mm Ø, 10mm long, s/t {2}.
- **Axle Stop***, red plastic, 11½mm Ø & 4mm wide {7}.
- **Hook** {1}.
- **Spring***, black, 19½mm long, & 3.5mm i.d. (it is called up for 2 models but its use can't be seen; possibly it acts as a spacer on the Thin Axles - a Bolt can just be screwed into it but is then very difficult to unscrew) {4}.
- **Spring Clip**, the black plastic type with small wings {14}.
- **Hank of the usual thin white Cord** {1}.

- **N&B Crosshead Bolts**, 6,9½,20mm u/h {65,7,4}; **Nut** {76}.
- A **MECHANIX pattern Spanner**, & a crosshead **Screwdriver**, 130mm long with an orange plastic, fluted handle.

The SET The box has a flap lid and measures 35½*25¼*4cm. Thumbnails of all the manual models are shown, 5 on the lid and 3 on each side of the bottom. The parts are in plastic bags which sit in 9 small card trays, and these in turn sit in cutouts in the box's false card bottom. The Stihl name & address is on the underside, followed by '0464 881 000'.

The MANUAL It has 16 unnumbered portrait pages 147*210mm, and the cover is like the box lid except that only 3 of the small photos are shown along the bottom. p2 has a short introduction in German, English, French, & Spanish, and pp14-15 has the Illustrated Parts with quantities. The back cover is plain apart from the company details. One model is shown on each of the other pages, so 11 in all, from the Chain Saw on p3 to a Crane on p13. There is one photo of each model with a photo of the parts needed for it underneath.

The models are simple and none use more than a fraction of the parts available. They include 2 Cranes, a 3-Wheel Scooter, a fair Racing Car, apart from its small Wheels, various Aircraft, mostly rather strange, and some Vehicles which to be kind might be described as futuristic. One of the Aircraft is shown below (the



Hand Wheel on the nose is purely ornamental), and alongside the Dentist's Chair I made from the Set, inspired by a WISDOM model & the WW1-time MECCANO version.

STIHL: S2

OSN 32/962

Snippet: New system - METAL KITS

4 sets bearing this name have been sold from time to time on Ebay, from the UK, since November, 2003. Each set makes one model but all four are shown on the lid right, and they are identical to those of the Polylong COMBINED TOYS Outfits Nos. 501, 502, 505, 506, see 30/887. The words in the bottom panel read 'ITEM NO.D55377 FOREIGN MADE'.

The parts from one of the sets were shown in one Ebay offer and are as would be expected, though the colours of some of the plastic items may be different from those on the box lid. The Screwdriver had a green plastic



handle.

One other type of box lid has been seen, similar in style and background but with no 'windows', and only 2 models shown, the Helicopter & F1 Racing Car. Also it has a logo in the top right corner, a yellow 'A' in a blue circle, with ACKERMAN GROUP in a surrounding orange ring. This logo was also on the METALLICA box described in 31/933. Ackerman is a London company who sell a range of products including a variety of cheap toys, some their own and some from other manufacturers.

METAL KITS: S1

OSN 32/962

'New' System: COMBIPLANO Some of the 1930s Aero outfits were sold again for a while after the war, BRAL and MÉCAVION come to mind, but as far as I know, and with one notable exception, the only innovations were in France. They were a MÉCAVION set to make 3 propeller-driven multi-engined monoplanes; AVIADYP sets with aluminium parts that mostly clipped together to make a limited number of single-engined propeller & jet aircraft; and a CONSTRUCTIONS R.M. outfit for a 4-engined Airliner & other machines. From Ebay photos the R.M. set seems to have flat aluminium parts, including the side view silhouettes of fuselages & engine nacelles. Some of the parts slide together & some are bolted.

The one exception was the Argentinian COMBIPLANO, said to be from the 1960s, though possibly a bit earlier. It had a range of 46 parts and a manual showing 21 more or less realistic models of actual aircraft. They include both propeller & jet aircraft, the former ranging from a 1930s single-engine Boeing F4B-3 Biplane to the 6-engine Convair B-36, and for the jets, from the North American F-86A to the Boeing XB-47. Others include the Avro Lincoln, the Vought Corsair F4-U2, and the De Havilland DH 108 Swallow. So, a wide variety, some more successful than others but all in all a brave try.

This account is based on a near complete set which also included a few extra parts.

The SET The box is 32½*43½*5cm and the lid is shown below. The picture is signed J.Panichelli. The base has 11 compartments for the parts with trays or red cards in some, perhaps in all originally. Sitting on top is a full size red card with the flat parts held on it by split brass paper clips. The N&B may have been in two plain pale orange envelopes found in the Set.



envelopes found in the Set.

The PARTS On the facing page the illustrated parts page from the manual with the quantities in the set (from a list inside the lid) added in brackets near each part (except that the N&B details are given later).

Most parts are steel painted silver, .5 to .6mm thick for the sheet metal parts and a little thicker, up to .9mm for the Struts & Brackets. The black parts are moulded rubber, and #17 & 18 are clear, pale orange plastic (#18 is a nose part and #19 is similar but metal). To give an idea of size the Half Wing #4 is 19¼cm long with a chord of 7¼cm, and the span of the B-36 (the extensions #5 & 6 are used) is 71cm. Its fuselage would be about 43cm long. The holes are 4.2mm with no particular pattern to the spacing, and the thread is 5/32" BSW.

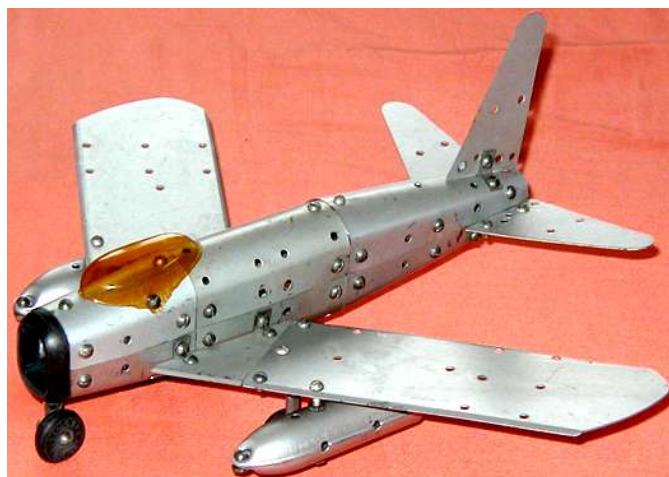
Parts #1-3 are used for both the top & bottom of the fuselage; they butt one to another & the inside joints are made using the **2*2h Plate #20** – one of its holes has a threaded up-stand. The nose may be the **Intake #16** or the **Nose #19**. The plastic **#18** looks as if it ought to be interchangeable with #19 but it is appreciably smaller and doesn't seem to fit anywhere. The outer 3mm of the leading & trailing edges of the **Wings #4** are angled down at about 30°. **Parts #7** are used to give the wings sweepback. **#8** is used for both the fin & horizontal tailplane; **#9** is an alternative fin. As can be seen the **Half-nacelle #10** has a half-hole on each side, and **#11** has two such, not shown. These parts are also used to make floats, & as the booms of a Fairchild Packet. The **Wheel #14** has the company name C.O.M.P.A. ARGENTINA S.R.L. on each side. The **Brackets #21-25** are 10mm wide with 6mm slotted holes. The **Struts #26-34** are 8mm wide. The **N&B** are dull plated steel, with 7mm Ø RH **Bolts** & hex **Nuts** 8mm A/F. The quantities that follow are those in the Set Contents (and using the

PNs & u/h lengths given there). **Bolts:** 1 packet, ¼" u/h, #35 (160 found); 4x 5/8", #36; 10x 1¼", #37; 6x 5/16", #38; 6x 1½", #39; 1x 3", #40. **Nuts:** 1 packet #41 (147 found); 9x Acorn #42.

The MANUAL It is in Spanish, and has 24 pages 240*179mm, plus covers – the first 3 pages have no numbers, the rest are 1-21. The front is shown below, the model is from the manual, a Martin XB-51. C2 has an Introduction, & the back covers are blank except for the names of the company and the printer on C4. The first page is the Illustrated Parts, the next two have building instructions (with halftone illustrations, and not the clearer line drawings shown much reduced on C1), then 21 models, one to a page, with a halftone for each, plus some brief constructional notes, a list of parts (except the Nuts & ¼" Bolts), and a few details of the original. The first model is the NORTH AMERICAN F-86-A, and the last, the CONVAIR B-36.



The MODELS The F-86 I made is shown below. The parts

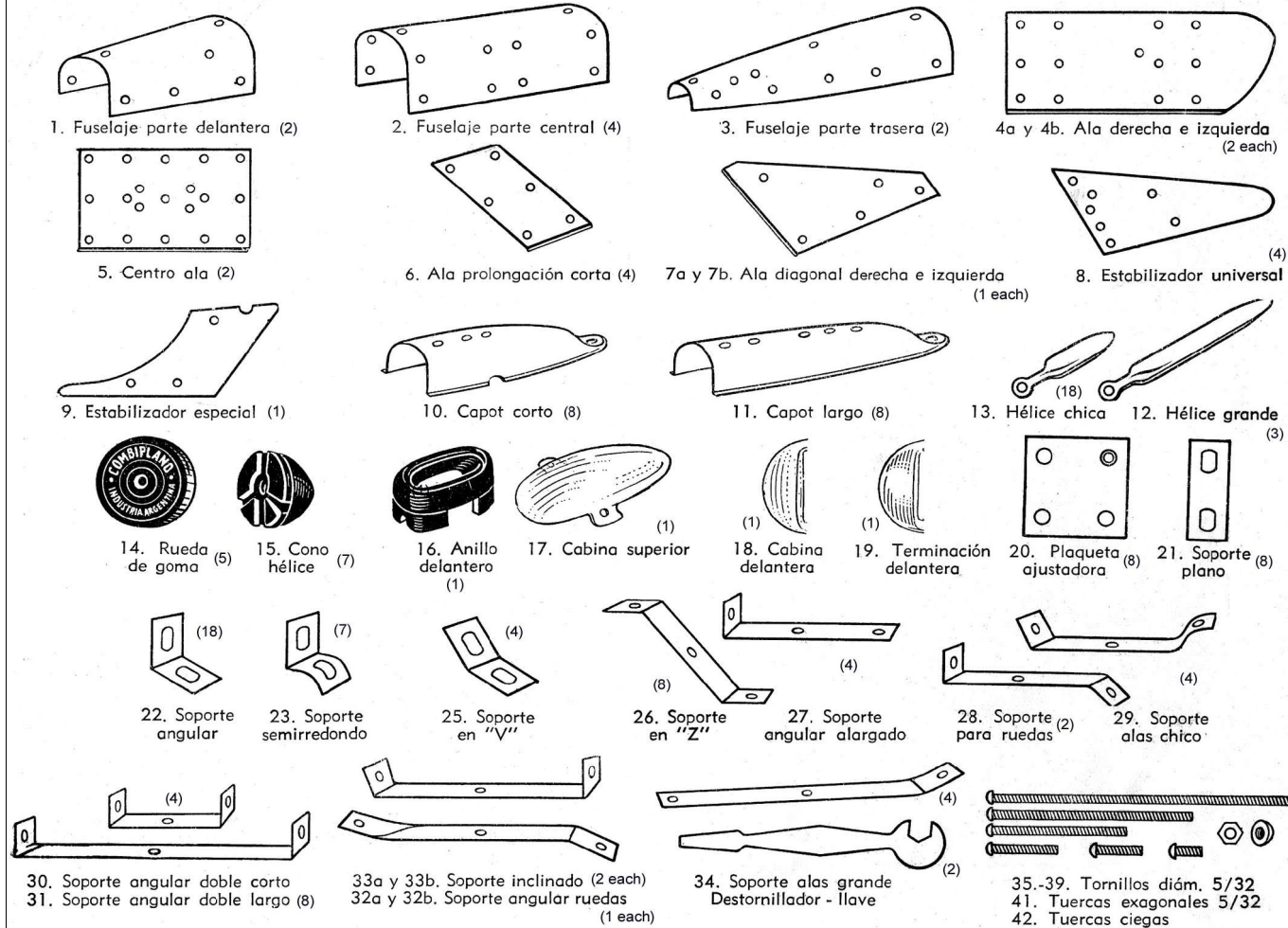


are generally well made and finished, and with a little care they fit together quite well. All the models have the same fully-enclosed fuselage except that the nose & tail end fittings can be varied, and an extra section inserted into the centre, as in the B-36 right. The bubble canopy works well for the 'modern' machines but extra parts are really needed to give a normal cabin front for aircraft like the DC3, or the open cockpits in the 1930s Biplanes – the Boeing opposite looks as if it might have one but it's a trick of the light & a Rear Fuselage sitting slightly proud. The Wings can be attached on either side and this allows a tip shape which is about right for straight & swept wings. The Nacelles work very well but as in the Macchi opposite (a world speed record holder from 1932) they don't look quite so nice as floats. Other worthwhile additions would be a tapered wing, a different shaped fin, and a radial engine.

HISTORY There is no name or number on the box but the manual has EQUIPO BASICO on the cover. That set is also featured on a leaflet with the Set, plus an add-on outfit, called COMBIPLANITO, to allow new models to be made. I wonder if it contained any new parts. Another leaflet to hand (courtesy David Hobson) lists 2 sets, Equipo No.1 to make 15 models, and Equipo No.2, for 21, with a photo that looks just like the present set. The maker, as on the Manual, is COMPA Argentina S.R.L., Artigas 359, Villa Ballester.

The only indication of date is the '1960s' quoted by the

COMPONENTES DEL CONJUNTO "COMBIPLANO"



Ebay vendor. All the aircraft in the manual had probably flown by 1950 - the most recent one I could trace was the only Argentinian machine included, the Kurt Tank designed Pulqui II, as in the thumbnail below, which first flew in 1950.

A sticker on the lid apron has 'Patent A. No.131.101' on it.

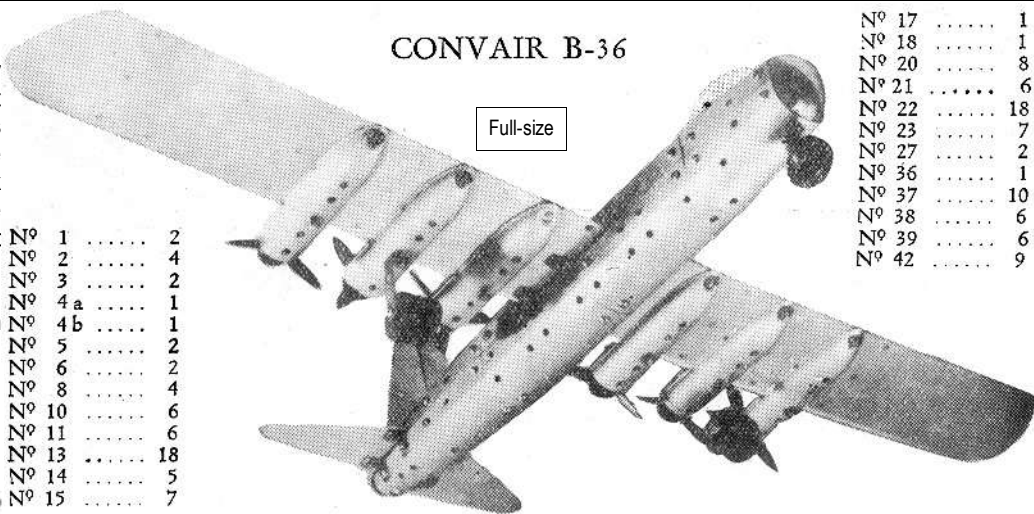


Nº 2	2	Nº 12	2	Nº 20	6
Nº 3	2	Nº 14	2	Nº 22	5
Nº 4a	2	Nº 15	2	Nº 23	7
Nº 4b	2	Nº 21	5	Nº 28	2
Nº 5	1	Nº 16	1	Nº 29	4
				Nº 30	1
				Nº 31	8

Nº 1	2
Nº 2	4
Nº 3	2
Nº 4a	1
Nº 4b	1
Nº 5	2
Nº 6	2
Nº 8	4
Nº 10	6
Nº 11	6
Nº 13	18
Nº 14	5
Nº 15	7

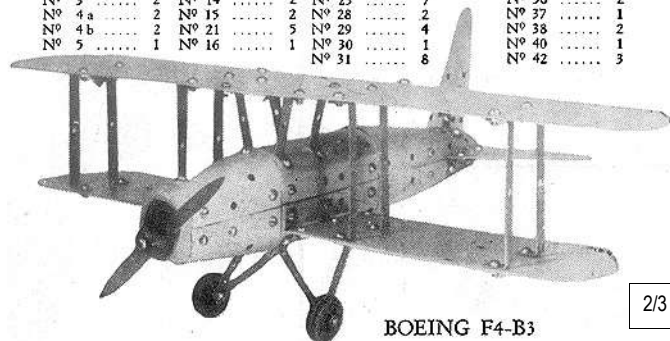
Nº 32a	1
Nº 32b	1
Nº 36	2
Nº 37	1
Nº 38	2
Nº 40	1
Nº 42	3

CONVAIR B-36



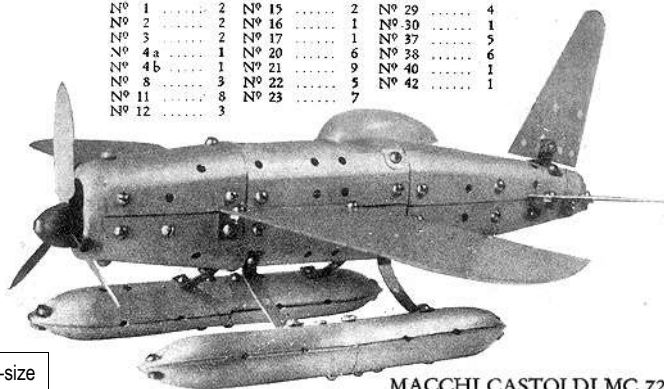
Nº 17	1
Nº 18	1
Nº 20	8
Nº 21	6
Nº 22	18
Nº 23	7
Nº 27	2
Nº 36	1
Nº 37	10
Nº 38	6
Nº 39	6
Nº 42	9

Nº 1	2	Nº 15	2	Nº 29	4
Nº 2	2	Nº 16	1	Nº 30	1
Nº 3	2	Nº 17	1	Nº 37	5
Nº 4a	1	Nº 20	6	Nº 38	6
Nº 4b	1	Nº 21	9	Nº 40	1
Nº 8	3	Nº 22	5	Nº 42	1
Nº 11	8	Nº 23	7		
Nº 12	3				



BOEING F4-B3

2/3 full-size



MACCHI CASTOLDI MC 72

More on METALLO TRIGON

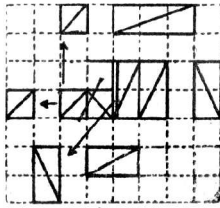
This piece follows on from the notes in 5/93 & 15/416; it has been prompted by David Hobson kindly lending me his No.3 set, and also digging out some early UK ads for the system.

The PARTS Except where stated the notes below are about the No.3 parts.

- **Triangles** #1-6. They, and all the other parts in the Set, have a bright galvanised finish, and with a few minor exceptions are accurately made. In 2 other small lots (one kindly sent by Graham Jost) the Triangles & other parts are nickel plated.

- #10a is a 2*5h **Flat Bracket**, the part used to make the 5h long A/Gs #11 & 12.

- **Axles & Crank Handles** are brass steel, 2.80-2.85mm Ø, with sheared ends. #13 is 92mm long and #14, 132mm. The Crank Handles are 120 & 148mm o/a with 27mm handles offset about 15mm.



- No **#17a** or **#17b** were found in the Set; in the manual 17a is shown as a 17b with one end of an Axle held in it.

- The **Hinge** #18 has square corners and is 35*9mm closed. Each leaf has 2 hinge loops, & the holes are at 12.5mm pitch.

- **Tools.** Below the **Screwdriver** #21, 66mm long. The **Flat Spanner** # 19 was missing. The **Box Spanner** #21, bottom left, is formed from one piece of steel and is 59mm long. The tubular type can be seen in photos of other sets.



- **Wheels.** The diameters of #22 & 23 **Pulleys** are given in the manual as 30 & 38mm. As found the o.d. of the 6-spoke #22 is 32mm & it is 4¾mm wide. The 4-spoke #23 is 39mm Ø & 8¼mm wide. Both have straight spokes. The **Flanged Wheel** #24 has 10 spokes and is 34½mm o.d. It is 8½mm wide and the tread tapers down to 28mm Ø. All 3 Wheels are gold lacquered zinc die castings, with a bore of 2.9mm. Red painted Wheels have been seen in the photos of 2 Ebay sets.

- The **Collar** #26 is brass, 8mm Ø, 2.9mm bore, & 4mm long. The **Driving Dog** #25b is a Collar with a 4mm long, 1.2mm Ø steel pin. These parts are single-tapped like the #17b in OSN 5 but the thread is different. 2 types of **Set Screw** were found, both about 2.35mm (.093") Ø & 40 tpi (or perhaps .65mm pitch). One is brass, 4mm u/h, with a 3.2mm Ø tapered CH, and the other brass steel, 5mm u/h, with a 3.8mm RH.

- **NBW.** The **Bolts**, #27 & 28, have a flattened RH, 5.8-6.1mm Ø, and are 7½ & 22½mm u/h (though one is 20mm & another 24½mm). The pressed **Nut**, #29 is hexagonal, 6.2-6.4 A/F, & 2mm thick. The thread is M3 & all are brass steel. The **Washer**, #30, is galvanised steel, 10mm Ø, 1mm thick, and slightly dished.

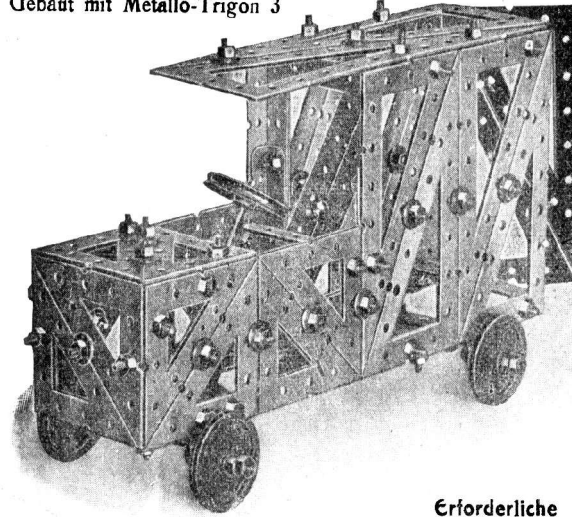
In one lot of nickel parts the NBW are as follows. The Bolt, 7mm u/h, has a hex head, 6.0mm A/F & 2.1mm deep. The hex Nut is also 6.0mm A/F but is 3.0 mm thick. Both are machined and look like plain steel though possibly nickeled originally. The Washer is nickeled and is 10mm Ø by 1.3mm thick.

- **#31** remains a mystery and is not listed in the manual's Set Contents.

- The **bore** given for the OSN 5 parts was in the boss of a #17b and is appreciably greater than in the No.3 parts. Probably the 17b had been bored out to suit the Axles with the

Modell Nr. 75 Lastautomobil

Gebaut mit Metallo-Trigon 3



Erforderliche Zeile

12 Dreiecke	D 1	4 Räder	R 30
12 "	D 2	1 Rad	R 38
2 "	D 3	1 Greifring	G
6 Streben	S1/2	1 Stelling	St
6 "	S 1	5 lange Schrauben	und 14 Muttern
10 Winkel	Wr	20 Klemmschrauben	
1 Welle	Vk	38 Schrauben und	Muttern
1 Scharnier	T		

Erforderliche Zeile

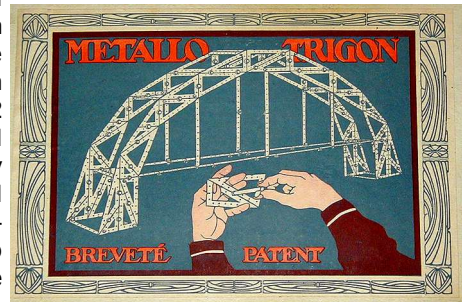
OSN 5 parts, and said Axles are almost certainly not genuine.

The SETS Before describing the No.3 a little more about the **No.0** in OSN 5. Its box is red, 27½*18*2cm and the label covering the lid is identical to that shown in 5/92, blue with the model in white, & red lettering. The same label is glued to the inside of the lid. The parts are strung to a red card with red/white stranded cord. One corner is cut away for a 6¾*4¼cm red box to house the small parts - it is glued in place and its lid has a fabric hinge. There is nothing to indicate the Set No.

The **No.3** box is also red, 22½*37½*5½cm, & on the apron of the lid is a white label with 'METALLO-TRIGON No.3' on it. The lid label, 20*30cm, is like the No.0 but surrounded by a swirly

border. The same label, below, is on the white inside of the lid. There are 2 layers of parts with the bottom of the box divided

up by 13 white card trays. Resting on these is a white board about 1cm thick, made from 2 white cards joined & spaced apart by card strips around the edges & forming a honeycomb inside. Holes in the top card seem to indicate that parts were strung or clipped to it but apparently before the composite structure was put together. A similar box (labelled a No.2) but with red trays, is shown as Tafel 27 in *Eisenzeit*. In both there would be room for another layer of parts and a No.3 shown in a Leaflet with David's set does have 2 cards.



Other Sets The box of the set in *Baukästen*, p156, has an imitation wood grain finish (the top of the lid can't be seen). An Ebay set is in what looks like a wooden box with a sliding lid, and the background colour of its label is black rather than blue. Inside the bottom has wood partitioning to form oblongs and blocks to create spaces for each of the different Triangles. It looks well made but may of course not be original.

MANUALS Details of the manual for Sets 0 & 00 were given in OSN 5. The one with the No.3, summarised below, is for Sets 1-3, and has a different type of cover, right, with two slogans which might mean 'The iron way of life' & 'The most play value for the thinking lad'. Like the 00-0 it has no PR or any indication of date, but unlike it the text is all in German and Set 000 is not included in a list of the sets available (though it is listed in the Leaflet mentioned above). Also a different



presentation of the models is used: instead of just a line drawing for each there is, with one exception, a (rather blurry) photo, a diagram showing the layout of the Triangles in the model, a list of the parts required, and some explanatory notes. In the Set Contents the parts have letter designations as well as a PNs, and the former are used in the Parts Required. As an example the Triangles (Dreiecken in German) are D1 to D6.

SUMMARY OF MANUAL •Name: METALLO TRIGON •No details of Maker, Dates, or Ref Nos: •Page size: 243*155mm. •No. of pages: 40+covers. •Language: German. •Printing: line drg of 1 model; photos of the rest. •Page Nos. of Illustrated Parts/Set Contents & highest PN: C3,30. •Sets covered: 1,2,3. •No. of models for each set: 16,16,16. •Name, Model No., Page No. of first & last model of each set: 1: Leiter,1,5; Hallenkonstruktion, 16,12. 2: Muldenkipper,31,13; Pavillon mit Türe,46,25. 3: Doppelkran,71,26; Brücke,86,40. •Other notes: •C2,4 are blank. •The model illustrated by a line drg is Nr.5, Lastwagen, on p7.

The models include a good selection of Bridges, Structures, Swings, & Cranes, most of which are credible looking. Most of the Vehicles though are rather clumsy looking, witness the No.3 Van on the previous page, full size. As in many of the models the Pulleys, used as wheels in this case, do not seem to have spokes, whereas most do in the line drawings in the 00-0 manual. But no set seen has any solid Pulleys.

One Leaflet with the No.3 has already been mentioned and it also shows 8 models from the 000 outfit, from Leiter to Durchgang, all of which are included as 00 models in the 00-0 manual. Another Sheet with the Set is headed 'Zum Schulgebrauch!' (For School Use!), It has the geometric properties of the 6 Triangles on one side, and a mass of maths formulae on the reverse. Among them are multiplication tables from 11x11 to 19x19, trig functions such as $\text{ctg}(\alpha\pm\beta)$, & the binomial expansion of $(1+x)^n$ – ah, carefree days of youth!

METALLO TRIGON: S2

OSN 30/966

HANDY CRAFT - Still More The piece in 31/935 included mention of the **Airplane Set** and subsequently Kendrick Bisset kindly sent details of a Set he has, and its manual.

The **box** measures $12\frac{1}{4} \times 11\frac{3}{4} \times 5\frac{1}{2}$ " & 150 models are claimed on the lid. The parts broadly correspond to those given on a label, loose now but apparently pasted inside the box at one time. The heading on it is 'HANDY CRAFT Built-up Toys and Sets', and over a list of the parts 'THIS NO. 3 SET OR NO. 3B TOY CONTAINS:' It may be supposed that the No.3 was a straight constructional set, and No.3B, with the same parts, had some of them made into a model. It would be the featured Airplane in this case and the box would be just the right size for it.

The 252 **parts** listed on the label are, with the H C names in brackets, where different: 3 Flanged (Base) Plates; 6,12,7,5x 15,11,7,5h Strips (Plates); 10 DAS (7h Plates Bent); 12 A/Bs (2h Plates Bent); 10 Flat Brackets (2h Plates Straight); 6 Triangular Plates; 4 Pulley (Grooved) Wheels; 4 (Single) Wheels; 2 Wheel Discs (Plain Circles); 1 Bush Wheel (Circle with Hub); 4,1x $3\frac{1}{2}, 1\frac{1}{2}$ " Axles; 2 Crank Handles (Cranks); 64 Screws; 64 Nuts; 22 Axle Stops (Spring Washers); 1 Hook; 1 Screw Driver – Wrench; 1 Wire Screw Driver.

The **manual** with the Set is the 3rd H C one known and to avoid confusion I'll call:

- the one with the Auto Truck outfit, described in 18/506, the '**1/2**', because all the models can be made from 'Set Nos. 1 and 2' (PR: W.A.A.-7-26-15M) – no doubt that means Set No.1 or No.2;
- this Airplane one, the '**1/2,3**', because as well as the models in the '1/2' it has models for Set 3 (PR: W.A.A.-7-26-5M);
- the one in 31/935, '**1,2,3/4**', because it has models for Set 1, Set 2, & 'Set No.3 & 4' (PR: E.R.H.Co. 4-27-7500).

The '1/2,3' has 24 pages plus covers, sized as the other manuals, and with the usual front cover. The model pages for the 1/2 models are as in the '1/2'; the remaining 12 pages have 24 models for Set 3, from Automobile to Railroad Lift Bridge. The

HISTORY If I've understood *Bk* correctly the system was patented in Germany (No.258829) by Frau Dr. Frieda Lehner of Kelsterbach am Main (near Frankfurt), in April 1913, from an application dated June 1912. A U.S. patent 1103781 was granted to Alfred Lehner of the same town in July 1914, from an application filed in March 1913. The dates in *Bk* for the various firms involved with M-T differ slightly from those given in 15/416, but the end points are the same. Also mentioned in *Bk* is a 'Kriegsbaukasten (war set), as well as the 000-3 range, but I'm not sure if this was devoted to warlike models, or just a wartime expedient in terms of packaging etc. A German trade ad in Nov. 1913 (*Bk*, p155) lists agents in Amsterdam, Hamburg, London, Paris (Maerklin Frères & Cie, 410 Rue St. Honoré), New York, & Vienna.

The London agent was William Seelig & Co. and they first advertised M-T in the April 1913 *Toy & Fancy Goods Trader*. No details were given but sets could be inspected at 19 Fore Street, London, E.C. The next mention was in an article in the Oct. 1913 number when Seelig & Co. were given as the agent, and the parts were said to be 'plated' – could that mean nickel? Boxes No.1, 2, & 3 were available, at 6, 12, & 20/-, plus linking sets 1a & 2a at 6 & 8/-. The article included line drawings of 2 sets, probably a No.1 & a No.2. In both the parts are in 2 rows of 3 compartments each at one side of the box, and on a card filling the rest of it. The lid labels are as the No.0 in OSN 5, but the No.2 does not cover the whole lid. An article in the July 1914 issue mentions sets at 2, 4, 6, 12, & 20/-, with supplementary sets at 2, 4, 6, 12/-. So that would no doubt not include the 000. Samples could be seen at the sole agent for the UK & the Colonies: Lewis Wild, 12-14 Barbican, London, E.C. - no longer Seelig. No ads from after WW1 are known.

inside covers are blank and C4 just has the PR & Printed in U.S.A.

The '1,2,3/4' has all the '1/2' models but they are now for Set 1. The 11 models for Set 2 include 8 of the No.3 models from the '1/2,3', and the 3/4 models are the remaining 16 from the '1/2,3'.

Questions arising (assuming that the 2 manuals with '26' in their PR came before the '1,2,3/4' with '27').

- The models in the '1/2' manual are all for either set, so what was the difference between the 2 sets? The possibilities are the same as those for the 3 & 4 discussed in 31/935.
- Second, why were the No.2 models separated in the '1,2,3/4' manual? Perhaps customers felt cheated if having bought a No.2 there were no specific models for it.
- A few of the No.2 models in the '1,2,3/4' manual need more parts than those in the No.1 models. In particular the 3 new models that are not ex-No.3 ones need 2 Flanged Plates, so did the contents of the No.2 change with the advent of the '1,2,3/4' manual?
- What were the contents of the 3 smaller named sets? Each claims over 50 other models on the box lid, and there are 50 models in the '1/2' manual, so perhaps the sets contained at least the contents of the No.1.
- None of the manuals has more than 77 models, so where are the rest of the 150 claimed for the Airplane set?
- Was the Airplane model included ready made in the Airplane set? And did the other named sets include a built-up model? The Windmill & Auto Truck boxes would be large enough for their featured models, but the Sail Scooter box scales at $12\frac{1}{2} \times 3\frac{1}{2}$ " in plan and is probably no more than 2" deep - so it would only take the model if its mast & rigging were removed.
- Bearing in mind the built-up Airplane shown with the No.4 set in the '1,2,3/4' manual, was a built-up model included in any of the other numbered sets?
- Did Sets 1-4 actually exist? They are mentioned in the manuals but the 6 outfits known to me all are named sets. Early days though because H C sets are uncommon.

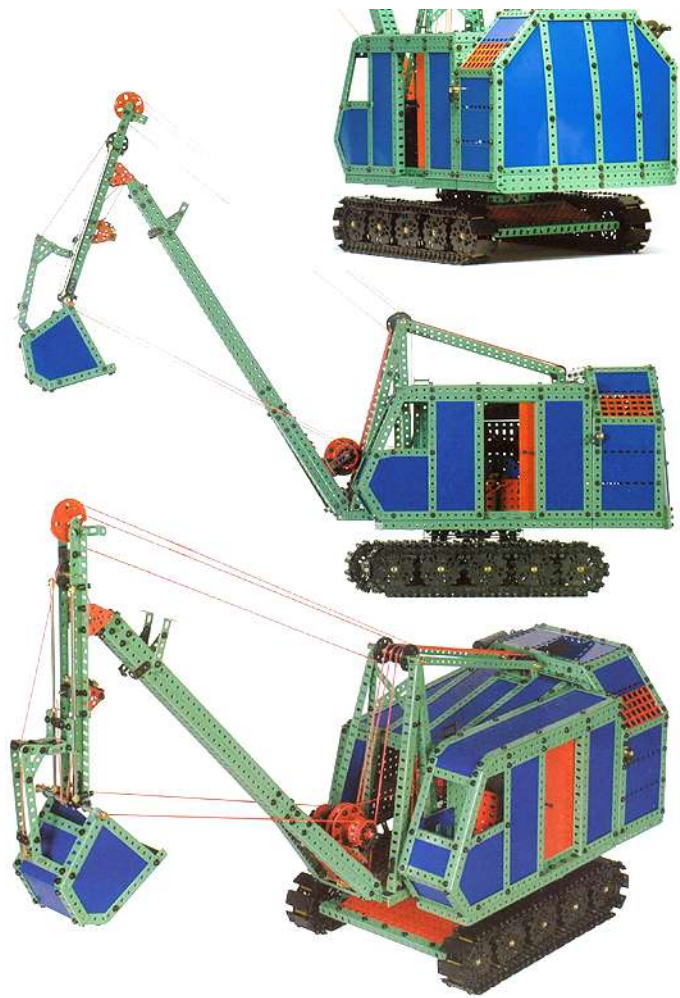
HANDY CRAFT: S2

OSN 32/966

MÄRKLIN Excavator Set Paul Goodman has kindly sent some details of the MÄRKLIN METALL Seilbagger mit Tieföffel (Cable Bucket Excavator) Set, see 31/909, & pages from the manual showing the set contents & photos of the finished model. Some of the latter are shown opposite; the other side of the cab can be seen in 30/877, and the 11*17h red Perforated Plate carries 7 crank handles to operate the model's movements. The Set, #10900, is packed in a wooden case, 72*50*10½cm, with a lift off lid, and weighs some 30kg. The parts, about 4850 in all, are in 2 layers with 3 inserts in each – these are Metallus-style fibre blocks machined out to take the parts, and they must be handled with care as they will easily split under the weight of the parts.

The parts include around 130 Strips, 150 A/Gs, and 1100 N&B; but only 4 Pinions & 3 Gear Wheels. The Strips range in length from 3-15h in steps of one hole, and 17-25h in 2 hole increments; likewise the A/Gs but plus 3, 27, & 35h. The Bolts are in 11 sizes from 5-45mm long. A number of the parts are Metallus creations and a fair few seem to have been specially made for this model. The latter include an 8t Ratchet Wheel & Pawl for it, 7 Flexible Plates for the cab, & a 165mm Ø Perforated Plate with a centre boss and an outer ring of holes very close to the edge, presumably for the slew bearing. Also brass Distance Sleeves in 12 lengths from 3-35mm long with an o.d. of 6 or 7mm, but some of them may be standard METALLUS. In passing according to their web site the METALLUS range now extends to 850 parts.

The manual has 56 A4 portrait pages in full colour with the illustrated set contents on pp54-56. The instructions are in 6 main stages, starting with the tracks and ending with the rear section of the main cab (quickly detachable to allow access to the 'works'). With the manual a loose A4 sheet with half a page of corrections in German, English, French & Dutch. And also in the Set, a copy of the 1989, 12 page History of the Märklin Metall System – it is in German and an account of it was given in 4/50 & 5/98. The 6-figure PNs used for the parts are not those of similar METALLUS parts, nor do they seem to



match the 6-figure numbers used by Märklin from the late 1990s.

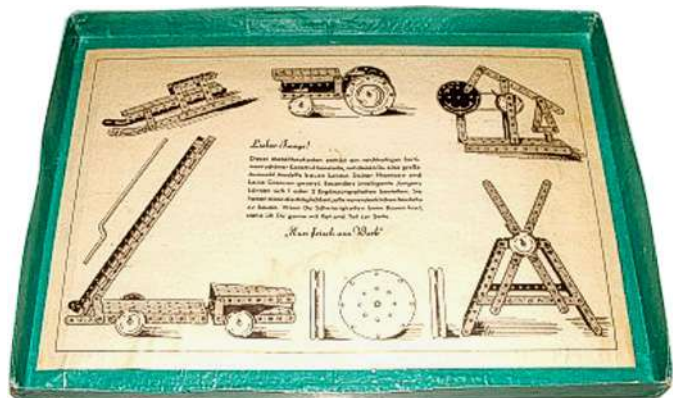
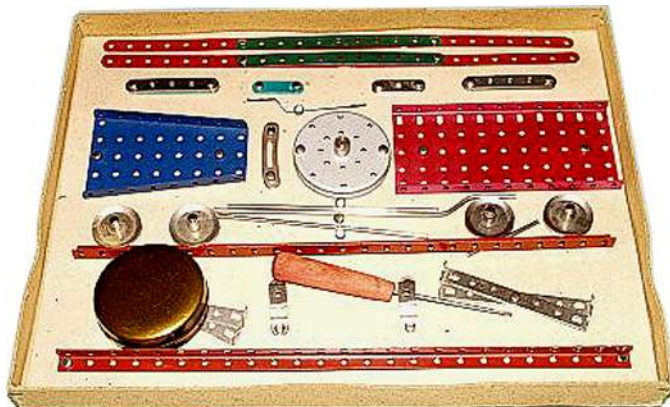
OSN 32/967

MÄRKLIN: S3

Snippet – 'New' System: KNÖLL Little can be added to the Ebay pictures of this (presumably) German set. There is nothing to indicate the size of the parts but generally they have a MÄRKLIN look to them. There seems to be only a single Flanged Disc Pulley in the box but two would be needed for the Tractor on the inside of the lid, and some of the other models there need more Strips than look to be present. So was there another layer of parts originally? The box doesn't really look deep enough for one.



One or two points about the parts. The turquoise Strip in the 3rd row down looks 3h long but has no centre hole. The Curved Slotted Strip doesn't look long enough to be the usual 5h length. The A/G has no slotted holes; the type of hole in the flanges of the Plates can't be seen clearly. The smaller Pulleys are a little larger than the usual 2h Ø. The 2 parts near the Screwdriver are Double Bent Strips.



OSN 32/967

KNÖLL: S1

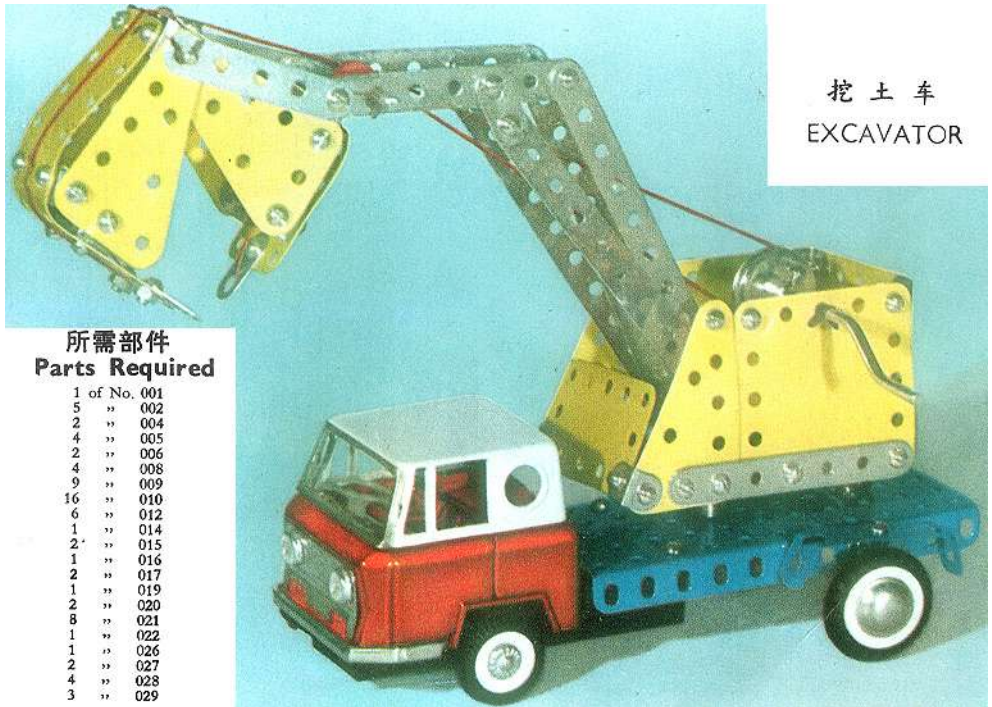
A No.6 WISDOM Outfit This is the Lorry outfit with a realistic Cab & a Friction Motor. David Hobson kindly lent me his still strung example, complete except for some N&B missing from a split plastic bag. The notes below amplify those in 10/238-9.

The box measures 38½*28¼*4½cm and the lid is in the usual WISDOM style with, in this case, the aprons and 4cm wide borders around the transparent centre in light red. The yellow and black wording is: MM 196 CONSTRUCTION MODEL WISDOM/ MADE IN CHINA, plus the equivalents in French and Chinese. Most parts are strung with white cord to a white moulded plastic tray, with the small parts and N&B in small clear plastic bags, and the Top & Bottom Cab parts a push-fit in their compartments. The contents are as given in the MCS Extra Sheet with, where relevant, the number of parts after the '/'. The Manual actually lists 2x ½" Pulleys 'with Boss' but that should read 'without Boss'. [In passing, the No.0 contents in MCS should show 4x 1⅛" Rubber-tyred Wheels instead of 4x 1½", see 10/239.]

The Parts The windscreen & circular lights of the Cab Top are glazed, and the Bottom has rudimentary seats & a translucent steering wheel (LHD) on an imitation yellow facia. The nickel grille at the front has plastic headlamps with plastic inserts lower down (turn indicators?) – they are yellow & green respectively but are shown clear & red in the Manual. The Cab parts & the Chassis are assembled by pushing tabs into slots, and the result is perfectly rigid without needing to bend any of the tabs. The assembled Cab is smaller than I'd expected, about 7*7cm in plan and 6cm high, giving only a little over half the volume of the MECCANO version. The smaller size only allows the 1⅛" Wheel to be used and both the Cab & the Wheel look too small in many of the models. Perhaps the Cab was originally used as part of a non-constructional toy. The 1⅛" Wheel is just like that in the No.0 except that the hub cap has an impressed pattern around its circumference – it can just be seen in the model top right. This Wheel is supposed to push onto the output shaft of the friction motor but this would be very difficult because its bore is unchanged from the standard meant to push onto 2.6mm Ø Axle, and the 3.0mm Ø motor shaft is appreciably bigger. The Mudguard, called a Slotted Bent Strip in MCS, can be seen over the rear Wheel in the model, it's like an M215 but flat in the centre with quite sharp bends near the beginning of the slotted holes.

As can be seen the Cab Top is white, the Bottom metallic red, and the Chassis has a black crackle finish. The standard parts comprise nickel Strips, Brackets, Pulleys, etc, as usual, with the other metal parts light blue (not the shade in the manual model), and the Plastic Flexible Plates yellow. The Cord is white, and the ½" Pulley red plastic.

The Manual has 28 unnumbered pages, 175*112mm, plus covers, all plain except the front, shown right. The name WISDOM is used in the Intro on page 4. The text is in English & Chinese except for MODELE DE CONSTRUCTION on p1. p2 is blank, the intro is on pp3-4, the set contents on pp5-7, & the illustrated parts in colour on p8. Then 20 models, one to a page, with one colour photo and a list of parts for each. The first one is CRANE (as on the MCS Extra Sheet) and the last Watering Vehicle. The Titter Truck in OSN 10 is among the



挖土车
EXCAVATOR

所需部件
Parts Required

1	of No.	001
5	''	002
2	''	004
4	''	005
2	''	006
4	''	008
9	''	009
16	''	010
6	''	012
1	''	014
2	''	015
1	''	016
2	''	017
1	''	019
2	''	020
8	''	021
1	''	022
1	''	026
2	''	027
4	''	028
3	''	029

other models and they are a fair selection, apart from the size of the Cab already mentioned. The Excavator above, full-size, is a fair example.

Other Sets Two sets seen on Ebay have similar boxes but with darkish red lids, and the blue parts in them are more the colour in the Manual. In one case a different manual cover, right, is shown; in the other the manual is open with a model on each page, identical to ones in David's manual, but on different pages.



Two forms of the Cab Top are known. In the present set it is a metal pressing with the glazing held by tabs in a narrow nickel frame, and this frame has a tab on each side which push into a slot in each front Cab pillar. It is most likely that all the pieces were assembled in the factory. The other type can be seen in photos kindly sent by Don Redmond. The Cab Top is a white plastic moulding, and the Screen is a separate part, a shaped clear panel with 2 lugs on the top edge & one on the bottom. The bottom lug is pushed into a slot in the Cab Bottom and then the Screen is held by the top lugs engaging slots in the roof of the Cab Top, as it is put in place. These 3 slots are not in David's parts. One other detail, Don's headlamps & turn indicators are clear & red as in the Manual models.



More on BEAVER & KONSTRUKTA Some brief notes on parts thought to be KONSTRUKTA were given in 6/129 and an ad from 1952 was noted in 19/554. The main new items to hand are the still strung KONSTRUKTA No.1 set mentioned in OSN 6; a BEAVER No.1 like the one in OSN 6, again still strung, courtesy David Hobson; and a largely complete BEAVER No.2, kindly lent by Malcolm Hanson.

HISTORY As mentioned in 6/129, BEAVER seems to be related to KONSTRUKTA. A Parts List for KONSTRUKTA, not known before, is included in the manual for the No.1 Outfit (the page in question is on the OSNL web site) and it contains 36 parts, 10 of which have an 'A' suffix. There are 2 Illustrated Parts Lists in MCS for BEAVER. One has 34 parts, all, with a few minor differences, from the KONSTRUKTA range, and numbered 1-34; the other has 29 parts, 1-29, with 4 new parts and among those dropped are the Gears.

There is nothing positive to say which system came first but from the above it seems most likely that BEAVER followed KONSTRUKTA with initially most of the latter's parts (I'll call it Phase 1), and then the range was simplified & revised (Phase 2). Other indications of this order are the colour cover of the BEAVER manual which doesn't really look pre-1952, and the BEAVER A/B which, unlike its KONSTRUKTA counterpart, has a slotted hole. No Phase 1 set is known but the No.4 BEAVER models in MCS would need parts not in Phase 2.

All that is known of the KONSTRUKTA set structure is the No.1 set and, from the OSN 6 manual, a No.4. The only references to a BEAVER Phase 1 set are the No.4 models in MCS. As they need parts not in Phase 2, the No.4 was probably quite similar to the KONSTRUKTA No.4. The present Nos.1 & 2 BEAVER sets have the same '29 part' manual and are thus considered Phase 2. A No.4 outfit is mentioned in said manual but the models in it are for Sets 1-3 only, and inventories are given for Sets 0-3. A No.3 set, probably from Phase 2, has been reported.

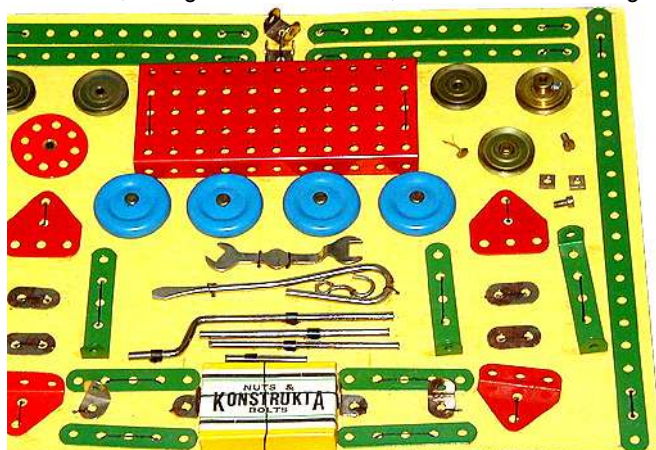
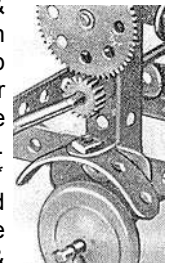
THE PARTS The PNs of the 36 parts in KONSTRUKTA are 1,2,4-27, plus 10 with suffix 'A'. #3 is not used but should logically have been a 3h Strip. As already mentioned, there are 34 parts in Phase 1 BEAVER and they have counterparts in KONSTRUKTA, but are now numbered 1-34, and in a different order. Not included are the Wheel Disc & the Hank of Cord. Some of the BEAVER parts show changes - the A/B, and the Flat Bracket which replaces the 2h Strip, both have a slotted hole; the shape of the wire Screwdriver is changed; & a Spandriver replaces the Spanner. The 29 BEAVER Phase 2 parts have PNs 1-29 with many changes to the Phase 1 numbering. The new parts are a Flanged Sector Plate, a 5*5h Perforated Plate, a Collar, and a Pulley with Tyre. Those dropped are the 5h Formed Strip, the Flat & Double Brackets, the 1" Loose & 3" Pulleys, the Gear & Pinion, the Coupling, and the Screwdriver.

All the parts are listed below, KONSTRUKTA first and then the new/changed BEAVER ones. The details have come from the Sets already mentioned, the OSN 6 'KONSTRUKTA' lot, & a mixed lot, thought to be BEAVER, that included 2 Flanged

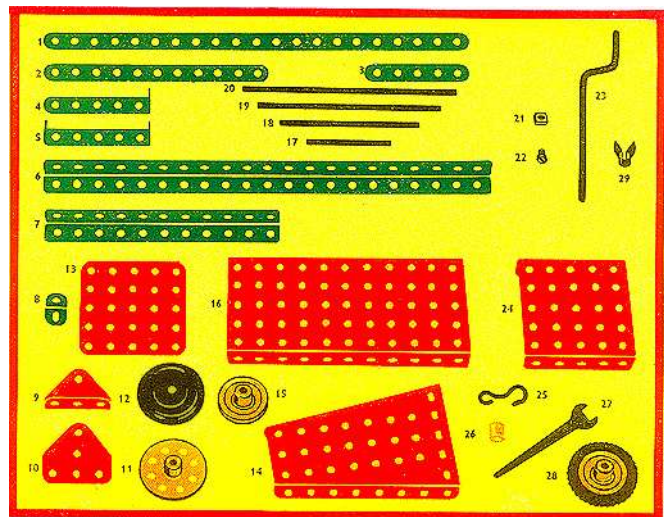
Sector Plates. Many of the parts can be seen in the photo of the KONSTRUKTA box in the last column, the BEAVER Phase 2 Illustrated Parts below, & the models shown.

The KONSTRUKTA Parts

- **Holes.** 12.7mm pitch, 4.1mm Ø, with a few up to 4.2mm.
- **Bosses.** Brass, 4.1mm bore, 3/8" Ø except the 3" Pulley, s/t 5/32" BSW, with a narrow, shallow ring of peening.
- **Quality.** The parts are well made and nicely finished but one side of the bore in the boss of the Road Wheels is too small to admit the Axles.
- **Colours.** Compared with MECCANO colours the green parts match the 1950s shade; the red are slightly darker than the '60s colour. The Axles, Crank Handle, Hook, Tools, Brackets, & 2h Strip are nicked.
- **Strip parts.** 2.5, 11, 21h Strips; DAS; SAS; & a green 5h Formed Strip which can be seen in the snip from the Tower Wagon right (from the OSN 6 manual). The ends of the 2h are fully radiused; the others at .28" r, not quite.
- **A/Gs.** 11 & 21h. Green, 13 1/2 * 13 1/2mm, with all round holes and rounded corners.
- **Brackets.** the A/B is made from the 2h Strip; the D/B is 14 1/4mm wide o/a.
- **Flat & Angle Trunnions.** At 1mm the metal is thinner than in other similar 5h ones sometimes found.
- **Flanged Plates.** The 5*5 & 5*11h both have small corner radii. One of several 5*5h in the OSN 6 lot is a distinctly darker red.
- **Pulleys.** 1". The same 28mm discs are used for the **Fast & Loose** versions - they are distinctive with the centre (about 13.5mm Ø) raised slightly. The vee is about 4mm wide and the Loose one has a 5/16" Ø boss, 1 1/2mm deep with a bevelled edge. The 3", painted gloss black, is shown right. The slots are 17mm long, & the boss is 1/2" Ø.
- **Bush Wheel.** The disc is steel, 1 1/2" Ø, painted red.
- **Balloon Road Wheel.** Blue, 38mm Ø & 9mm wide.
- **Gear & Pinion.** Adding to the description in OSN 6, both are brass & run well together at 2h centres.
- **Coupling 1".** The two examples seen in the OSN 6 parts are only 19mm long. Both are 3/8" Ø brass but one is nickel plated. Both have two s/t holes at 3/8" centres but the tapping holes in the nickel one go right through.
- **Axles.** 1 1/2, 2 1/2, 3 1/2, 4 1/2" long, 4.07mm Ø with sheared ends, slightly bevelled.
- **Crank Handle.** 5.0" long o/a with a 3.6" shank & a .9" handle offset .7"; it is 4.03mm Ø with square sheared ends.
- **N&B.** plain steel, 5/32" BSW (but 3 BA also listed), with a square Nut, 8.1mm A/F & 2 1/2mm thick, & CH Bolt, 6.0mm Ø & 6 1/2mm u/h.
- **Spring Clip.** Just like MECCANO.
- **Wire Hook.** 2.4mm wire, 29 1/2mm long o/a.
- **Screwdriver.** 4mm wire, 116mm long o/a.
- **Spanner.** 76mm long o/a with no centre piercing.
- **Not seen:** the 8h Wheel Disc, & Hank of Cord.
- **Motor.** In the OSN 6 manual it is at 'A' in the Dynamo model shown later, and is called the "Konstrukta" 12 volt electric motor.



OSN 32/969



BEAVER: S1; KONSTRUKTA: S1

the back of the manual, but slightly rearranged. • **Holes.** B2. 4.3mm with a few down to 4.2mm. • **Bosses.** B2. Bores 4.2-4.3mm. The Bush Wheel boss is $\frac{5}{16}$ " \varnothing , d/t, & only about $\frac{5}{16}$ " long. • **Colours.** B2. the red is the same but the green is very slightly darker. • **Brackets.** B2 (& B1 probably). The **A/B** has one 7mm slotted hole, & is probably made from the (unseen) **Flat Bracket.** • **Flanged Sector Plate.** It has straight ends, fully radiused corners, and $\frac{6}{4}$ mm slotted holes in the flanges. • **5*5h Perforated Plate.** Red with fully radiused corners. • **Pulleys.** B2. the centre is less raised and about $12\frac{1}{2}$ mm \varnothing . • **Pulley with Tyre.** Not seen but probably the standard 1" Pulley. • **Bush Wheel.** B2. As before but the disc is brassed steel, and the boss $\frac{5}{16}$ " \varnothing , as already described. • **Balloon Road Wheel.** B2. gloss black. **Collar.** $\frac{5}{16}$ " \varnothing & $\frac{5}{16}$ " long, d/t. • **Axles.** B2. Square sheared ends: $2\frac{1}{2}$, $4\frac{1}{2}$ " long, 4.02mm \varnothing , in Set 1; $2\frac{1}{2}$, $3\frac{1}{2}$, $4\frac{1}{4}$, $5\frac{1}{4}$ ", 4.09mm \varnothing in Set 2. • **Crank Handle.** B2. 4.06mm \varnothing . • **Wire Hook.** B2. 1.6mm wire, $28\frac{1}{2}$ mm long in Set 1; 1.8mm wire in Set 2. •



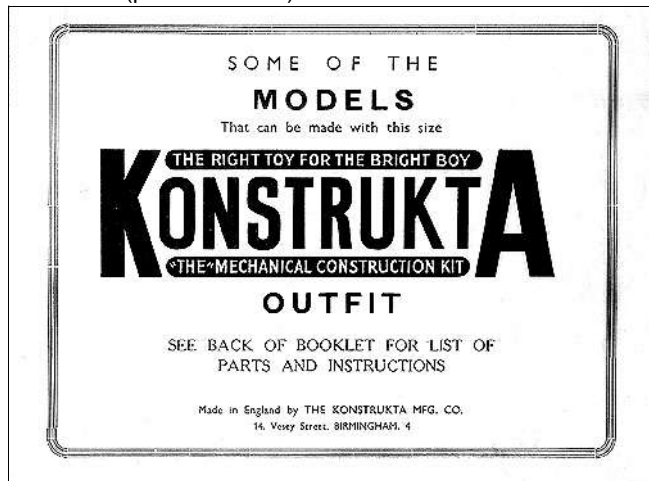
• **Screwdriver.** B1. Its manual illustration is shown to the right. • **Spandriver.** B2. 74mm long with a 4.2mm wide tip. • **N&B.** B2: brassed steel, $\frac{5}{32}$ " BSW (but possibly 4 BA in Set 2), with a square Nut, 7.9mm A/F & 2mm thick, and RH Bolt, 7.1mm \varnothing & $6\frac{1}{2}$ mm u/h.

The KONSTRUKTA No.1 SET The box is dark red, $11*14\frac{1}{4}*3\frac{3}{4}$ ", with a label, right, $9*6\frac{3}{8}$ ". The parts on their card have already been shown (there is symmetry left & right apart from the Bush Wheel & Loose Pulley). Except for the N&B in the little box, & the bossed parts which push into holes in the card, the parts are attached by either black Cord (to be kept & used in the models), split paper clips, or, for the Axles, the Spring Clips from the Set.



The **contents** of the set are: 2,4,4,4 of 21,11,5,2h Strips; 2 SAS; 2 DAS; a 5*11h Flanged Plate; 4 A/Bs; 2 D/Bs; 2 Trunnions, 2 Flat Trunnions; 4x 1" Pulleys; a 1" Loose Pulley; a Bush Wheel; 4 Road Wheels, 1,2 of $1\frac{1}{2}$, $3\frac{1}{2}$ " Axles; a Crank Handle; a Hook; 5 Spring Clips; 18 N&B; a Screwdriver; & a Spanner.

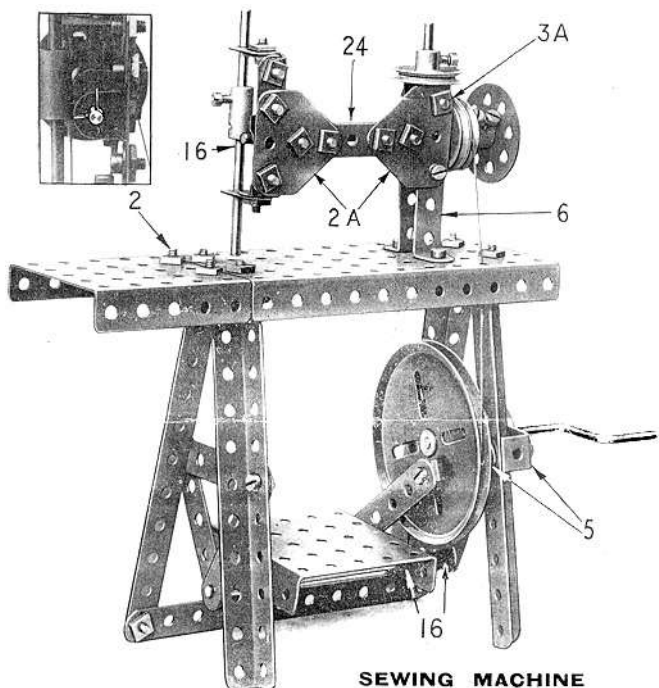
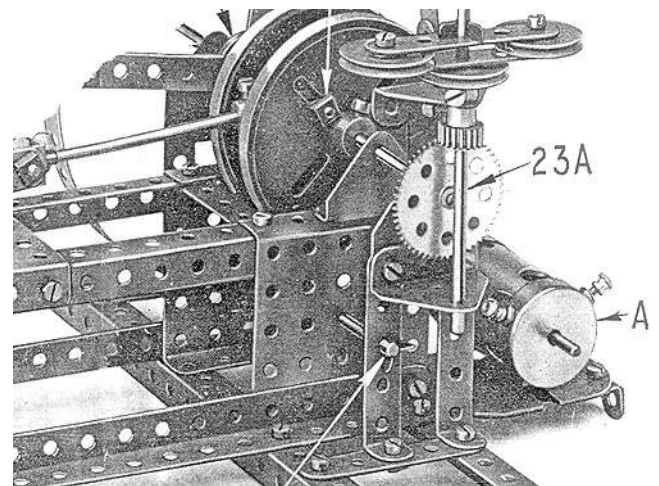
The **manual** is a single sheet folded to give 4 landscape sides $270*202$ mm, all printed in B&W. The address on the front below (p1 in MCS/NZ) is THE KONSTRUKTA MFG. CO. 14,



Vesey Street, BIRMINGHAM, 4. On the back (MCS p3) are 8 numbered paragraphs of elementary instructions, and a list of the 36 parts in the system, 24 of which are in the No.1. Inside

are 5 models from SMALL POWER PRESS to EXCAVATOR, with a photo and parts list for each. One of the pages is shown in MCS and includes the best model, the SMALL POWER PRESS. On the other page is a reasonable CRANE WITH (Cord around a Pulley) BRAKE. No Set No. is given anywhere but all the N&B in the Outfit are used in several of the models so presumably they were intended for the No.1. Strangely though the Road Wheels are not used at all, even for a Tip Truck (Lorry) - 1" Pulleys are used instead, so perhaps the Road Wheel was not in the system when the models were built.

The OSN 6 KONSTRUKTA MANUAL The size of the 8 photocopied, unnumbered pages to hand is $268*192$ mm landscape, and there is a model on each, with a Parts List & brief constructional notes. In alphabetical order they are: LIFTING BRIDGE, OVERHEAD GANTRY CRANE (the No.4 BEAVER model in MCS), PEDESTAL DRILLING MACHINE, SEWING MACHINE, STEAM TRACTION ENGINE (the other No.4 BEAVER model in MCS), SWIVELLING GANTRY CRANE, and TOWER WAGON. Also DYNAMO (the first part of the name has been torn away but it's a steam engine driving a 'dynamo' (the electric motor driving the model). Part of this model is shown below 85% f/s, with underneath, at 60% f/s, the Sewing Machine (the Inset isn't very clear but shows the Coupling being flipped up by a Spring Clip on the horizontal shaft). All the models are simple but I think quite attractive. Most need 30 to 40 N&B, but two require 59. ---->>



SEWING MACHINE

PHASE 2 BEAVER SETS As already mentioned the Phase 2 manual contains inventories for Sets 0-3 and photos of the sets (p6 in MCS/FB). All are in packed in the same style with each main part individually attached to a card, or 2 cards for the 2-layer Nos.2 & 3.

The main parts in the Sets are as follows. **No.0:** a 5*5h Flgd Plate; 8 Strip parts; & 2 Road Whls. **No.1:** 2x 5*5h Perf Plates, 8 Strip parts, 2 A/Gs, a 1" Pulley, & 4 Road Whls. **No.2:** 2x 5*5h Perf Plates, 2x 5*5h Flgd Plates, 22 Strip parts, 6 A/Gs, a Bush Whl, 4x 1" Pulleys, & 4 Road Whls. **No.3:** 6x 5*5h Perf Plates, a 5*11h & 2x 5*5h Flgd Plates, 1 Flgd Sector Plate, 24 Strip parts, 6 A/Gs, a Bush Whl, 4x 1" Pulleys, & 4 Pulleys with Tyres. Sets 2 & 3 have 2 each of the 21h Strip & A/G. The 4 sets have 20, 30, 72, 84 N&B. The contents are progressive except that the No.0 has a 5*5h Flanged Plate and 2x SAS, parts which next appears in the No.2; the No.1 has 4x 5h Strips whereas the others have only 2; and the 4x Road Wheels in the No.2 are replaced by Pulleys with Tyres in the No.3. The odd thing is the paucity of 5h Strips in the larger sets – the No.3 has 12x 11h but still only the 2x 5h.

The Phase 2 BEAVER No.1 SET The **box** is a medium red and measures 8¼*13¼*7⅞". The lid, printed in colour, is just like the manual cover shown below except that the white



border is red and there is a red 'SET N° 1' label stuck over the Instruction Book panel. The main parts are tied, individually as with the KONSTRUKTA No.1, to a light yellow card with dark red cord, and the Spring Clips and N&B are in a 3½*1¼" red/white SUNDRY PARTS box glued to the card. The **contents** correspond to the inventory in MCS except that there are a few extra N&B.

The **manual** has 16 pages including covers, 217*143mm, and the cover is shown in the last column. The 18 models included are for Sets 1-3 but on C2 (p2) it is said that 'This Booklet has been prepared to illustrate the many and various models which can be constructed from the No.4 Beaver Set'. p2 also has the address, The Rutland Plastics Ltd., Oakham, Rutland, Telephone: Oakham 178, and p3 is all about the Beaver Club with a slip to tear off to join (and thereby tear in half one of the models on the back of the page). Also 'The Beaver Creed': 'To do some things better than they have ever been done before, to model for the love of it, to originate, to look ahead to the future, to be an example, and to learn to master circumstances'. Advice was offered to Club members and notification of model competitions to be held occasionally.

There are 6 models for each Set with a good photo and a parts list for each. For No.1: TRAILER on p4 to AEROPLANE on p6; No.2: BREAKDOWN LORRY on p7 to WINDMILL on p9; and No.3: TOWER BRIDGE WITH SHIP on p10 to DRILLING MACHINE on p14. None of the small models resemble any from the KONSTRUKTA No.1 manual, and really none for any of the sets are very wonderful – similar in some ways but arguably not as good as VOGUE, though one or two of the small ones are quite similar. The remaining pages remind one of VOGUE too, with photos of the sets and the contents of Sets 0-3 on C3, and the parts in colour on a vivid yellow ground, as shown already, on C4. But who copied who?

The Phase 2 BEAVER No.2 SET The box is like the No.1 but larger, it scales at about 9*29", & has the same size 'label' printed centrally on the red lid. The one remaining parts card is light yellow as in the No.1 & apart from a few missing items the contents are as would be expected. As already mentioned the manual with it is identical to the one in the No.1.

OSN 32/971

BEAVER: S3; KONSTRUKTA: S3

Snippet – New System: ENTECH Not Eitech this time, ENTECH. A number of little 'one model' sets with this name have been sold on Ebay for a £1 or two each since late last year, mainly from the UK.

4 typical lids are shown here – along their tops is 'ENTECH mini's' [sic] followed by a category, either 'automobiles', 'bikes', 'trucks', or 'flying machine'. Under ENTECH is Engineering Technology, and under the category is the model name, both in tiny letters. At bottom right is an Item No.

The sets seen so far are listed below, asterisked if illustrated, with the name/probable Item No./number of parts.

Flying Machine: Airplane*, 1370 71; Helicopter, 1371, 60; Bi-Plane, 1372, 72.

Automobiles: Car*, 1373, 65; Racer Car, 1374, 65; Sand Buggy, 1375, 67.

Trucks: Flat Bed*, 1376, 64; Small Pick-Up, 1377, 43.

Bikes: Thunder, 1379, 82; Classic*, 1380, 82.

So it looks as though there may be several more sets in the series.

Most of the main parts can be seen on the lids shown here, and with both normal and Narrow Strips in some models, the parts look like MECCANO, or one of its close copies. 'Meccano compatibility' was claimed in one Ebay ad. The other models in each category have the same colour scheme as those shown here.



OSN 32/971

ENTECH: S1

This is the last page of OSN 32.