

OTHER SYSTEMS NEWSLETTER

OSN 47 NOVEMBER 2012

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EDITORIAL Changes are afoot. PDF files will be well known to most readers and I've been thinking that it would be a good idea to send out OSN articles directly to subscribers in this format. Doing so would eliminate postal charges and anyone using this method would simply pay an annual subscription of £5 to cover my incidental expenses. Articles would be sent as soon as they are ready rather than every 6 months or so & could be printed off by the recipient, single- or double-sided, or simply stored as files. Another advantage is that this method would allow more pages of information such as Set Contents, Illustrated Parts, etc without the constraints of 32 page Issues.

To allow recipients to keep track of the 'new pages' they will simply have page numbers following on from the last page of this Issue, plus the month & year it was sent out.

Please let me know if you would like to change to this method, and I hope as many as possible will do so as it will simplify matters at this end. I expect most readers will have the PDF software already but if not it can be downloaded free & if required I can give details. It will be at least 2 months before anything is sent out under this system & that will allow me to answers queries & find solutions to any problems.

Anyone who cannot adopt this change can of course continue to subscribe as at present and I will send out batches of pages when I have approximately 32 on hand.

Shorter NOTES, with thanks to all contributors.

1. **METALL-BAUKASTEN [5] - Correction.** On p1389 of OSN 46 some words were omitted at the end of the second paragraph in some copies. They followed 'a short Screwed Rod' and are as follows: 'a square Nut, & 2 lengths of cheeseheaded Bolt.'

METALL-BAUKASTEN [5]: S4 [47/1420]

2. **A Large BILDICO Outfit.** Paul Goodman has found one of the very hard-to-find BILDICO sets, see 46/1413, full of parts and perhaps complete. Its box is in the same style as the No.4 in OSN 46, black outside & green inside, but larger, the same width but 6cm more in breadth, with 3 extra compartments across the bottom of the box for Strips & Clips.



So, most likely a No.5, the largest set in the range (the 'sets 0-6 in the BILDICO para in 46/1415 should have read 'sets 0-5'). The Set has the same quantity of Wheels as the No.4 except 8 instead of 6 Loose Pulleys, and has the same green Cord. The lid label above, the same size as the No.4's, is as would be expected but the manual is like the 'earlier' of the two EREKTIT ones described in OSN 46 (with the 46/Fig.E front cover) but with the word EREKTIT replaced by BILDICO throughout.

This set's manual lends support to BILDICO having been introduced alongside or soon after EREKTIT. The BILDICO manual shown in MCS appears to be as Paul's but with the last page replaced with the price list of parts without its EREKTIT name being changed – probably hastily during WW1.

EREKTIT: S5 [47/1420]

3. 'New' Dutch System: NAME
NAME probably means Special, and below, Marktplaats photos of a set showing the lid (with the name on it



enlarged here top right), the box's base, and a tray of parts. These notes are based on this set, and a few 'mystery' parts to hand which can now be clearly identified as NAME. They were given to me some 30 years ago by Bert Love who had been sent them by a Dutch enthusiast, Dr. Boerdijk, in the hope that they could be identified. Keep a thing long enough





The 4 parts to hand are a 9h Strip, an 11h Strip, a 1*3*1h DAS, & a 5*8h Flanged Plate. All but the 11h Strip can be seen in the Set. Holes are 3.4mm Ø at 13.5mm pitch (but 13.4mm in the Flanged Plate). All the holes are round, as are all that can be seen in the Set. The Strips are 13mm wide but the DAS, 121/2mm.

In total the 23 different parts that can be identified are: 2, 3 (probably), 5, 7, 9, 11h Strips; 3, 5, 7, 11h A/Gs; an A/B & a D/B; 1*3*1 & 1*5*1h DAS; a $5*\underline{8}h$ Flanged Plate & a Flanged (probably) Sector Plate; a 3*5h Perf. Plate; a 5*1h long Girder Bracket; a Wheel Disc; a Road Wheel; a Screwed Rod about 40mm long; a cheeseheaded? Bolt (holding some of the parts down), & a small Hexagonal Nut (on the Screwed Rods).

NAME: S1 [47/1420]

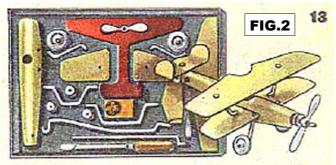
Flammer of the Fahrzeug-Baukasten were given in 41/1234 and now Urs has found the illustration below of the Set in a N.Y., though the '1976' is blurry.

FIG.1

Veu: F.C.W.-«Bob» der neue schweizerische Fahrzeugbaukasten. Die Bestandteile aus Leichtmetall lassen sich zum Bau von Kleinfahrzeugen, wie Trottinette, Velo, Tandem, Anhan-ger und Auto etc., zusammensetzen. Mit Anleitung Fr. 24.50.

1944/45 Franz Carl Weber catalogue. It is described there as being a new Swiss set, and it cost Fr.24.50. Its set number isn't given but the OSN 41 set was No.905. The standard Swiss BOB sets were introduced in 1943.

Also in the catalogue the previously unrecorded Flugzeug+ baukasten below, again said to be newly introduced. In fact 4



«Bob» der Flugzeugbaukasten zum Bau von Metaliflugzeugen, Nr. 902, Doppeldecker und kleiner Eindecker, Fr. 19.50. Nr. 903, Doppeldecker und zwei Eindecker, Fr. 28.50. Nr. 901, großer Eindecker, Fr. 9.75. Nr. 900, kleiner Eindecker, Fr. 4.75.

sets 900-903 are listed for: a Small Monoplane; a Large Monoplane; a Biplane & a Small Monoplane; &, at Fr.28.50, a Biplane & 2 Monoplanes. Perhaps the illustration is of the No.902 & if so it seems that with the 2 wire Undercarriage Legs, & the 2 long Formed Rods under said Legs, both models could be made at the same time. That assumes that the basis of the Small Monoplane is the brown wing cum fuselage cum tail part top centre. The long Formed Rods would run the length of the fuselage with the Prop at the right end and the curly part of the longer one as a tail skid of the Biplane. More information on these sets very welcome. And was there ever a Set No.904?

BOB [3]: S2 [41/1421]

5. Snippet. TECHNICAL TRAINER. It was said in 19/529 that from May 27, 1946 the maker was Farmingdale Aircraftsmen Mfg. Corp. & that distribution was by Herman M. Kruse & Associates, St. Louis. An 11/46 Popular Mechanics ad on Ebay recently had a photo which looked like a Set A and was offered at \$8.95. The ad was from Dynamic Electronics, New York,

4. Snippets. The Swiss BOB Theme Sets. Details from Urs Inc., 37W. 57th Street, N.Y. | 2 Park Avenue, N.Y. | Broadway at 65th ST. The mail order address was 1976 Broadway, N.Y.,

TECHNICAL TRAINER: S3

6. Snippet. 'New' System, BURSCHI. Below the Ebay photo of the set which it was said was made in the DDR by a company called Burschi in the period 1945-50. Under the name on the lid is 'der bunte (the colourful) METALLBAUKASTEN'.

The parts have a MÄRKLIN look to them, though with only



Flanged Disc Pulley (if indeed that part has a pulley groove). The Flanged Sector Plate is probably 8h long, as would be expected, and the long Strips & A/Gs probably 25h. Nothing really can be seen of the Brackets but some of the parts in the bottom right compartment are a puzzle. One looks to be a 1*6*1h DAS, and another a 1*7h SAS, but neither are clear enough to be sure. There is a double-ended Spanner in the bottom centre bay.

Of the 4 models that can be seen I spotted 3 in a late 1930s MÄRKLIN manual. The one on the lid is the Set 2 Dieselmotor mit Schnellbohrmaschine, and the first 2 of the 3 on the tattered manual page are both No.1 models: Lastaufzug (Goods Lift) & Hauptsignal (Railway Signal).

BURSCHI: S1 [47/1421]

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Snippets. 'New' System AUTO-MONTEUR Two single-model sets from this German system, date unknown but possibly post-WW2, have been seen on Ebay, a Nr.50 and a Nr.51. The maker too is unknown but the logo is on the box lids, see Fig.3. The method of joining the parts is unusual – by tabs pushed through slots and then bent over. Shown here, the open box of the Nr.51, some parts from the Nr.50 (Fig.2), the Nr.51 lid, and the Nr.50 model with part of its lid.

The Parts & Model The parts are the same in both sets except for the Wheels & the colour of the Load Carrier. The main parts are a flanged plate for the Chassis, the Cab (it is seen assembled in both sets but is made from 2 parts), the Bonnet, the Load Carrier, the U-shaped Plate which supports it, & the Wheels. Smaller parts (see Fig.2) are 2 Axles which have one end flattened, 2 rubber Axle Stops, & a Screwdriver. Not seen in either set, a tool describes as a small Key which is used to bend over the tabs.





Assembly of the model is Bonnet & Cab attached to FIG.2 straightforward with the Chassis, and the U-Plate to the bottom of the Load Carrier. This Plate is mounted on the back Axle, thus allowing the Load Carrier to tip. The finished model is 23cm long and the Wheel scales at 4cm Ø.

The Instructions for the Nr.50 are on one side of a single sheet, with a drawing of the model identical to the one on the box lid on the upper half, and text underneath. The Nr.51's, folded in two, and with the bottom 2 lines hidden, can be seen in Fig.1. The text is the same as the Nr.50's but with its layout

Two slightly rearranged. No doubt its top half has a drawing of the model similar to the Nr.50's.

The Sets The two boxes are the same apart from their colour, the Nr.50 is blue, and having a different label. As an indication of size their length is about the same as that of the finished model, 23cm. Apart from not having the 'Made in Germany' on it, the Nr.50's label has the same wording & picture as Fig.3 but arranged diagonally, as in Fig.4.



There is no indication of which style of set came first but to me the Nr.50's box looks of better quality and its label more modern. But if it replaced the Nr.51 why was it called a Nr.50? And was there ever an earlier Nr.50? Perhaps originally the numbering started at Nr.51 in order to have the '50' available for a later, cheaper set. With only different Wheels, the saving in the factory cost of the Nr.50, compared with the Nr.51 wasn't perhaps large, but the retail price may have been set appreciably lower than that would imply, to increase the size of the market. And perhaps the Nr.51's price could have been increased a little to compensate, particularly if its box & label were made smarter to match the Nr.50. Note the many 'perhaps' above.



AUTO-MONTEUR: S1

OSN 47/1422

The ANDERS Liliput Set More information thanks to Jürgen Kahlfelt & Urs Flammer. Jürgen sent a much clearer photo of the lid of the Set shown in 38/1134, and gave the size of the box: 126*105*16mm. The Strips in the model on the lid have a shallow 'U' section, as in Urs' box right, and, as can now be seen, in the one in OSN 38. Also the buffers are cheeseheaded Bolts held by square Nuts. The length of the Flanged Plate is about the width of the box, and is thus rather smaller



than the 'guesstimate' in OSN 38.

Urs' set has the same lid as Jürgen's; the parts can be seen left. Notice the Axles with pips to locate them between the model's sides, and the Crank Handle with a hooked end. Though not spotted at the time both parts can also be seen in the Nr.113 set illustrated in OSN 38. The hooked end is presumably to engage in some part of the model's structure to prevent the load running down. The Set's N&B are in a small fawn packet with Liliput Nr.1 printed on it.

ANDERS: S4 OSN 47/1422

Another MLADOST Set Details of an unused set from this Bulgarian system, with parts to build a Loco & Goods Van, appeared in 25/720. Now David Hobson has kindly supplied photos of & notes on his recent find, a similar, unused set, but this time for a Loco & Passenger Coach, the latter right, from the model leaflet. The Loco was shown in OSN 25 (the OSN website photo is clearer, see p3 of the OSN 25 photos),

and can just be seen on someone's hand in Fig.3.

The Set's maker in Bratsigovo, is the same as before, and the date rubber-stamped on a yellow

label stuck onto the box's wrapper is 30 vi 1989. **The PARTS** All the different parts in the Set are shown right (except the 3*3h Trapezoidal Plate, see OSN 25) with the metal parts to the right of the black Plates. All the parts were in the OSN 25 set except the 5h Strip & the 3*5h Flexible Plate, and, apart from some of the colours, match them except that the Motor has a tinplate case, plastic gears, and a built-in axle to accept the push-on plastic (Pulley) Wheels. The hex Huts & panheaded Bolts are steel: the M4 have a brassy look, except the perhaps cad-

miumed 8mm Bolt; the M3 nickelled. The M4 parts

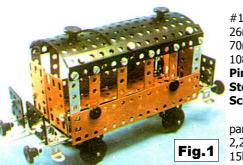
are 7mm A/F & head diameter: the M3, 5.5mm. **The SETS** David's is packed in a plain brown cardboard box, 11*7*3", with the wrapper as described in OSN 25 around it (except that it has the yellow label on it). The wrapper shows the models from Sets 1-4: the Loco with either a Refrigerated Van, Tank Wagon, Goods Van, or Coach respectively, but the only indication of which set it is is the name, but not the Set No., on the yellow label. The parts are packed into 7 recesses in each of 2 white plastic trays.

A leaflet with the set lists the range available: Sets 1-4 as on the wrapper, No.5 is the Loco, and Nos.6-9 are 1-4 without the Loco.

The Loco & the 4 items of rolling stock are shown, as in OSN 25, on the front of this leaflet, but also a Railway Station & Level Crossing Barriers. On the back is a photo of a large display or exhibition piece. It has a Loco & 2 wagons running on black track, probably A/Gs; a Station; a Railway Footbridge; and some Garden Furniture, all seemingly made from parts in the system. 2 of the Helicopters and a Windmill from the ELEKTROMEKHANICHEN sets described in 36/1099 can also be seen, along with some other toys, presumably more of the firm's products.

The Loco Set The parts in it are: Strips: 1,2,4 #1001,1002, 1006, 2,3,10h. A/Gs: 2 #1028, 20h; 2 #1168, 10h, 120°. L-**Girder** 2 #1163, 15*2*1h. **A/Bs**: 4,4,2,4,1 #1034,1035,1119, 1160,1178, 1*1,2,4,6,6h. **D/B**: 2 #1038, 2*1*2h. **DAS**: 5 #1120, 1*3*1h. Rev. A/B: 6 #1036. Flat Trunnion: 6 #1013. Perf. **Plates**: 2,1,1,3,1,1 #1017,1012,1164,1161,1016,1021, 2*10, 3*3,3*7,3*10,5*7,7*10h. **Trapezoidal Plate**: 1 #1014, 3*3h. Flex. Plate: 1 #1177, 7*10h. Gear Wheel: 1 #1151. Pulleys: 1,6 #1115,1049, 23,38mm Ø. **Axles**: 1,2 #1057,1159, 20,81mm. Hook: 1 #1103. Bolts: 48,8 #1083,1084, 6,8mm. Nut: 56 #1089. **Bolt**: 6 #1079, M3*6mm. **Nut**: 6 #1088, M3. **Headed** Pin: 2 #1116. Buffer: 6 #1165. Axle Stop: 7 #1045. Funnel: 1 #1167. Headlamp: 3 #1166. Nut Carrier: 1 #1043. Spanner: 1 #1044. Screwdriver: 1 #1090. Geared Motor: 1 #1162. Switch: 1 #1112. Connection Wire (possibly, it was missing from the Set): 1 #1117.

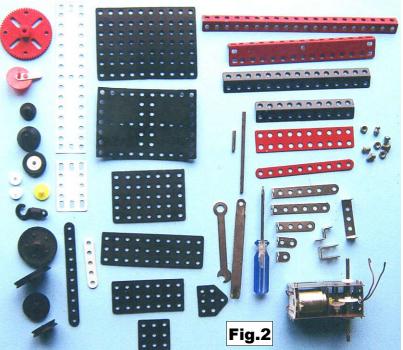
The Coach Set Its parts are: **Strip**: 8 #1003, 5h. **A/Gs**: 2 each #1027, 15h, & #1169, 15h, 120°. **A/Bs**: 8,5,4 #1035,1119, 1160, 1*2,4,6h. **D/B**: 1 #1038, 2*1*2h. **DAS**: 2 #1120, 1*3*1. **Rev. A/B**; 4 #1036. **Flat Trunnion**: 4 #1013. **Perf. Plates**: 4,1,1 #1012,1016,1021, 3*3, 5*7, 7*10h. **Flex. Plates**: 4,4



#1015,1019, 3*5,15h. Pulley: 4 #1048, 26mm Ø. Axles: 1,2 #1057,1065, 20, 70mm. Hook: 1 #1103. Bolts: 40,4 #1083, 1084, 6,8mm. Nut: 44 #1089. Headed Pin: 4 #1116. Buffer: 6 #1165. Axle Stop: 6 #1045. Spanner: 1 #1044. Screwdriver: 1 #1090.

The Goods Van For completeness, its parts (from the MCS Extra Sheet): **Strips**: 2,2 #1002,1007, 3,15h. **A/Gs**: 2 ea #1027, 15h, & #1169, 15h, 120°. **A/Bs**: 4,1,4 #1035,1119,1160, 1*2,4,6h. **D/B**:1 #1038,

2*1*2h. DAS: 2 #1120, 1*3*1h. Flat Trunnion: 4 #1013. Perf.



Plates: 7,1 #1016,1021, 5*7, 7*10h. Flex. Plate: 2 #1019, 3*15h. Pulley: 4 #1048, 26mm Ø. Axles: 1,2 #1057,1065, 20,70mm. Side Rail: 2 #1171. Hook: 1 #1103. Bolts: 26,4 #1083,1084, 6,8mm. Nut: 30 #1089. Buffer: 6 #1165. Axle Stop: 6 #1045. Spanner: 1 #1044. Screwdriver: 1 #1090.

The MODEL LEAFLETS There is one for the Loco & one for the Coach, and they are in the same style as those in OSN 25. That's to say a long sheet folded into panes 238*163mm: 5 for the Loco, 4 for the Coach. Both feature the real article on the front, plus a hand with the model on it, as below. After this there are, for the Loco/Coach, 4/3 large photos showing constructional steps, each with a parts lists. The reverse side is printed in black on orange. For each model there are 2 exploded line drawings of key stages in the build (as in OSN 25) with the parts labelled with their PNs and with a parts list for the stage. Plus for the Loco a diagram showing the position of the Motor & Switch. Finally the Illustrated Parts spread over 2 panes.



OSN 47/1223 MLADOST: S1

'New' System: OUR BOYS David Hobson kindly sent details of his recently acquired set, still strung and with only the Screwdriver & some of the N&B missing. If the parts look familiar that's because they are very like those of two other early post-WW2 UK systems, ARWILL &BELMONT, see 29/856, 37/1102, 41/1230, 43/1294, & 36/1076. But there is one big difference, OUR BOYS has 1" bossed Pulleys with Rubber Rings, against the 1" Discs in ARWILL & BELMONT.

The PARTS Details that can't be seen clearly in Figs.2 & 3 are the 4*8h Flanged Plate which has all its sides flanged, the green 2*2h A/B & 2*4*2h DAS, and the 2 Collars, one between each pair of Wheels.

Holes are at 1/2" pitch, as would be expected, but at 3.7mm Ø they are slightly smaller than those in ARWILL & BELMONT. The thread is again 4BA. The Pulley is brass, 1" \emptyset , and the Rubber Ring is $1\frac{3}{8}$ " o.d. Bosses & Collar are 3/8" Ø, single-tapped. The Axles & Crank Handle are about

3mm Ø, and are respectively 4 & 41/2"

The missing Screwdriver is described in the manual as 'chromium' but so is the actual black painted Spanner in the Set.

The Strips etc are dished with ragged holes and they are poorly finished. The black parts have a dull look to them.

The N&B (Fig.3) are brass, probably commercial items. The Bolt is roundheaded of about 1/4" Ø, & 3/8" u/h. The hexagonal Nut is about 1/4" A/F.

The SET The red box measures 15* 12*3/4" and the lid has no label. It is shown in Fig.1 with the manual on top of it. The N&B are in a small fawn envelope loose in the box. The Screwdriver would have been held to the left of the lefthand 3*8h Plate. The set contents are listed in the manual and, apart from the missing Screwdriver, are as in the box except that there should be 30 N&B.

The MANUAL It has 8 pages, 252* 182mm, including covers. Covers C2-4 are blank. The first inside page has the Bridge 'supermodel' in Fig.4, then 2 pages with 4

models on each. None of the models are named, and the 3 model pages have no text at all. The 8 models run from a Settee to the Flying Machine more than the ARWILL and I wonin Fig.5. They include a Mobile Crane (Fig.6) & a rudimentary Big Wheel dered if this might indicate which as well as Trolleys & domestic items. There is one rather poor photo for came first. But the extra parts in the each. Several need more parts than are in the Set, and one or two are former (4 Strips, 5 Pulleys, 4 Rings, similar to ARWILL models. The final page lists the parts with their the Axles, Collars, etc) would, using quantities – some have strange names, the Flanged Plate is a Centre Box MECCANO prices for the parts, & the Strips are called Plates. All the ARWILL names are different with account for all of the difference. Box-Plate & Strips for the parts above. The price is given on

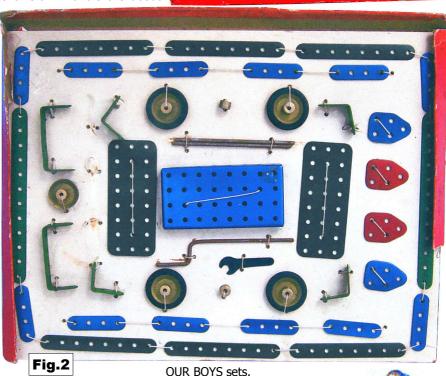


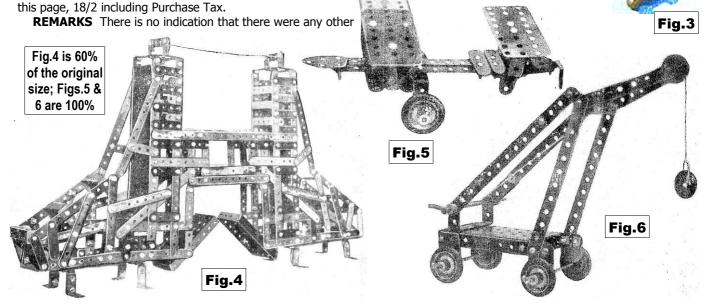
Fig.1

"Our Boys"

Constructional

Set

The OUR BOYS set cost 50%



Another CASTLE BUILDER CASTLE BUILDER was a Canadian system and the version described in MCS is fairly well known. Its date isn't certain but it was most likely introduced towards the end of WW1, see 16/458. The Illustrated Parts from a manual are shown in Fig.2 and a number of them, including the Pulleys, Gears, Sprockets, & Brackets, look like AMERICAN MODEL BUILDER. On the other hand the Perforated Plates & flat Sector Plate resemble the first version of the American MODELIT, and as with the latter, suitable lengths of A/Gs were provided to allow bolt-on flanges (see 8/186). It isn't known if any of these parts were bought in, or merely copied.

didn't know about until recently. Kendrick Bisset has kindly sent scans of the key pages of his incomplete manual, and Jean-Pierre Guibert has kindly agreed to my 46 using the illustrations of this new 47 version that are in his Encyclopédie. The parts are shown in Fig.3, and are listed in Fig.7. It is 49 reasonable to think that this was 50 a later version because there are 51 more parts in it, suffix 'a' PNs are 52 used, and the prices of parts common to both versions are higher. As an example the price of 25h A/Gs rose from 30c per

1/2-doz to 40c (Version 1 prices

from MCS).

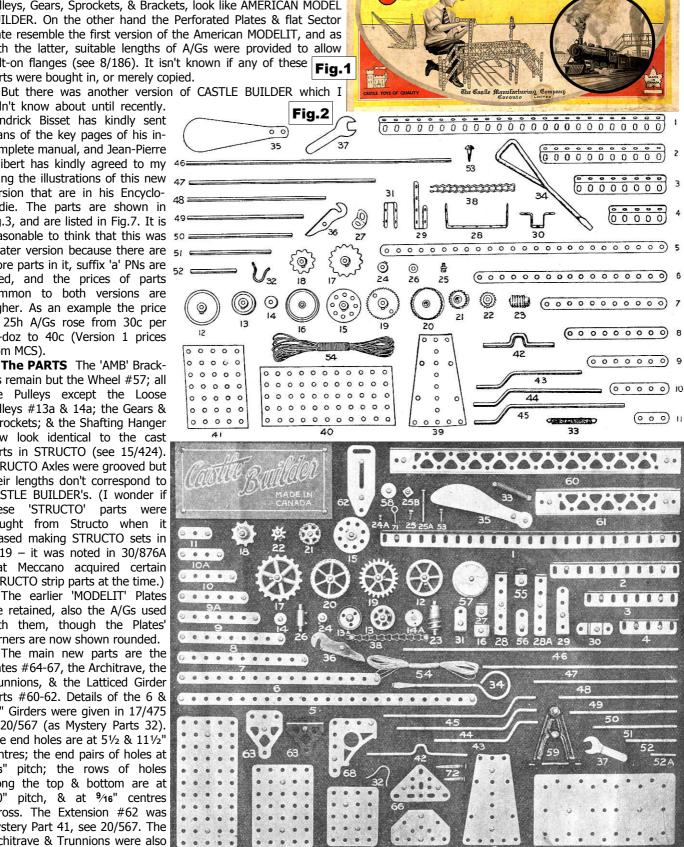
The PARTS The 'AMB' Brackets remain but the Wheel #57; all the Pulleys except the Loose Pulleys #13a & 14a; the Gears & Sprockets; & the Shafting Hanger now look identical to the cast parts in STRUCTO (see 15/424). STRUCTO Axles were grooved but their lengths don't correspond to CASTLE BUILDER's. (I wonder if these 'STRUCTO' parts were bought from Structo when it ceased making STRUCTO sets in 1919 - it was noted in 30/876A that Meccano acquired certain STRUCTO strip parts at the time.)

The earlier 'MODELIT' Plates are retained, also the A/Gs used with them, though the Plates' corners are now shown rounded.

The main new parts are the Plates #64-67, the Architrave, the Trunnions, & the Latticed Girder parts #60-62. Details of the 6 & 12" Girders were given in 17/475 & 20/567 (as Mystery Parts 32). The end holes are at 51/2 & 111/2" centres; the end pairs of holes at 5/16" pitch; the rows of holes along the top & bottom are at 1.0" pitch, & at 9/16" centres across. The Extension #62 was Mystery Part 41, see 20/567. The Architrave & Trunnions were also found in Canada with the Latticed parts. The latter seem to be an

original design; the Architrave, apart from its rounded corners, looks similar to the PRIMUS part.

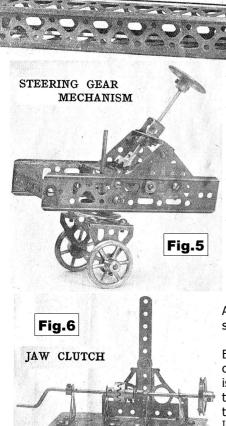
The SETS in Version 1 were progressive from 0 to 7 with linking sets 0A-6A. All the parts in Fig.2 were included and the No.7 was



quite large with 12x 25h A/G, 30x 25h Strips, 15 Gears, 250 N&B, 13 Plates with enough A/Gs to add flanges to all, and a Motor. (For reference the Version 1 Contents are given at the end.)

The Version 2 Contents in Figs.8 differ in several ways.

Fig.3



They contained 64 different parts against 56 but not all the new parts were included. Sets 0 & A were not progressive: sets AA & AAA together gave a No.1. The sets were generally smaller than before: the No.1 had 55 parts plus 26 N&B against 61+30; the No.6 365+170 against 388+200. There was no No.7 (474+250 before), nor a Motor in the No.4. All the sets from the AA upwards contained the Latticed Girders but at the expense of fewer Strips & A/Gs. Their usefulness in the smaller sets is doubtful.

The Manuals Fig.1 is the $^{33}_{34}$ Encyclopédie front cover & Kendrick's is identical except $^{1}_{2}$ Angle Girde

is identical except that to the right of the boy's neck is INSTRUCTION BOOK No.1. To hand the

Version 1 equivalent of the latter and from Kendrick's 8 remaining pages the two are very similar. They both have 16 pages, 101/2*61/2", plus covers, and their front covers are identical. All the models are carried forward with the same illustrations - they are quite simple and do not contain any parts that would have necessitated a change. None of course include the Latticed Girder. But by having the Illustrated Parts & Parts List on one page, p15 is spare and is used to introduce the CASTLE BUILDER GIRDER. Under the Fig.4 photo (of 4 Girders making an ERECTOR-style box girder) it is said to be the only girder that will fit every other steel Builder set, and that the holes along each side are a feature which allows endless opportunities for construction not possible in other Builders. No mention of the box girder (patented by ACG). Also shown are two mechanisms which use some of the new parts (Figs.5 & 6) with no text other than their titles. The Clutch has 2 Contrates, presumably operated by the vertical Strip. A Contrate can also be seen at the end of the steering column of the centre-pivot Steering but not what it engages with.

Version 1 Contents The quantities of parts are given for Sets 0-7 but without any initial zero values. Part #1 4,8,8, 10,12. #2 2,2,2,4,4,4,6,8. #3 4,4,8,8,8. #4 2,4,4,6,8,8,10. #5 2,6,12,12,18,24,30. #6 2,4,6,8,18,18. #7 2,4,6,12,18,24,30, 36. #8 2,4,6,6,6,12,18. #9 2,4,6,6,12,12,18. #10 10,10,10,20, 20,30,40,50. #11 2,4,6,6,12,12,18. #12 2,4,5,5,5,6. #13 4,4, 4,4,4,5,6. #14 1,1,1,3,3,4,4. #15 1,1,1,2,2,4,4. #16 4,8,8. #17 1,1. #18 1,1. #19 1,2,2,2. #20 1,2,2,2. #21 1,2,2,2. #22 1,3,4,5,6. #23 1,1,1,1. #24 4,6,6,8,10,15,20. #25 18,30,45, 72,100,150,200,250. #26 1,2,3,4. #27 8,12,12,24,36,48,60, 72. #28 1,2,4,6,8. #29 2,2,4. #30 1,2,2,2,3,4. #31 1,2,2,2,2, 3,4. #32 1,1,1,2,2,2,2. #33 1,1,1. #34 1,1,1,1,1,1,1,1. #35 2,4. #36 1,2,2,2,3. #37 1,1,1,1,1,1. #38 1,1. #39 2,2,4,4,4. #40 1,1,1,2,2,3,4. #41 1,2,2,3,4,4,5. #42 1,1,1,1,2,2. #43 1,1,1,2,2,3,4. #44 1,2,2,2,2,2,3. #45 1,2,2,2. #46 2,3,3. #47 1,1,3,3. #48 1,2,2,3,4. #49 2,4,4,5,6. #50 2,2,2,3,4,4,6,6. #51 1,2,3,3,3,4. #52 2,2,3,4,4,6,6. #53 4,4,4,8,8,8. #54 1,1, 2,3,4,4,5. #55 1,1,1,1. #56 Sht.,A,B,B,B,B,B,B,B.

o.	Part Pr	ice	No.	Part Pr	ice
٠.	121/2" Angle Girder1/2 doz.		35	Propellor Bladepair	20c
,	5½" " " "	30c	36	Pawlseach	10c
	4" " " "	25c	37	Wrench	5c
Ĺ	21/2" " " "	20c	38	Chainfoot	6c
	12½" Perforated Strip "	35c	39	Angle Plates, No. 1	OC
:	81/2" " " " " "	30c	00	Sectoreach	15c
ź	51/2" " ""	20c	40	Rectangular Plate, 21/2"	100
2	41/2" " " "	110	40	x 51/2"	15c
í	31/2" " ""	10c	41	Rectangular Plate, 21/2"	100
ha	3"2 " " "	8c	7.1	x 3½"	10c
í	21/2" " ""	7c	42	Crank Axle	8c
)a	2//2 " " "	7c	43		6c
l	1½" " ""	5c	44	4½" Crank	Sc
•	1½" Grooved Pulleyeach	20c	45	6½" "	Sc
ž	1" " " " "	15c	46	12" Axle Rod	10c
Sa.	1" " " free "	15c	47	8" " "	Sc
l	1/2" " " brass "	10c	48	6" " "	5c
la	12" " tin "	5c	49	5" " " " " " "	4c
	Bush Wheel"	20c	50	4½"" " Fig.7 "	4c
:	Double Bracketdoz.	30c	51	4½"" " Fig.7 "	3c
ŕ		25c	52	2" " " " "	2c
2	" " small"	20c	52a	1" " " "	2c
1	Gear Wheel, large "	25c	53	Wood Screwsdoz.	20c
í	Crown Gear Wheel,	200	54	Cordeach	5c
	large"	25c	55	Brackets 135°doz.	20c
l l	Crown Gear Wheel,	200	56	" 180°"	15c
	small	20c	57	Car Wheelseach	20c
)	Pinion"	20c	58	Washersdoz.	15c
3	Worm"	20c	59	Shaft Hangerseach	15c
Ĺ	Collars"	8c	60	12" Latticed Girder doz.	85c
la	Set Screwsdoz.	8c	61	6" " " " "	50c
5	Machine Screws, short "	8c	62	3" Girder Extension "	35c
ia	" " long "	15c	63	Trunnionseach	5c
ib.	Nuts "	4c	63a	Flat Trunnions "	5c
5	Shaft Couplingseach	20c	64	Rectangular Plate, 3"x6" "	20c
7	Brackets 90°doz.	15c	65	" 2"x2½" "	10c
3	Bent Strip, 9-holeeach	5c	66	Angle Plates, No. 2 45° "	10c
Ba	" " 7- " "	5c	67	" No. 3 45° "	10c
)	Hanger Strip "	5c	68	Architraves"	10c
)	Double Bent Strip "	5c	69	Motor with Switch " \$:	2.25
	Bent Strip, 5-hole "	5c	70	Book of Instructions"	25c
	Hook	5c	71	Screw Eyesdoz.	20c
3	Coll Spring	8c	72	Paper Fasteners100	40c
Ŀ	Screw Driver "	8c -			
	e Lander Deep Land			Programme and the second control of the seco	

Angle Girder, 12147	0.	Name .	0	A	AA	AAA	1	1A	2	2A	3	3A	4	4A	5	5A	6
3	1	Angle Girder, 121/2"	٠,				٠.			4							12
5 Perforated Strip, 12½°	2	" " 5½"		2	2		2		2			2	4			4	
5 Perforated Strip, 12½"	4							:::				6		2		2	10
S	5	Perforated Strip, 121/2"				2	2		2		4		4				
9	7			2	2	2	4		4	6	10		10	• • •	10		10
12 Grooved Pulley, 1/2	9	" " 3½"						1	1	i	2		6		6	10	
12 Grooved Pulley, 1/2		" " 3"·															8
17 Sprocket Wheel, large		Growed Pulley 116"	6	9	9		9		9	3	12						48
17 Sprocket Wheel, large		" 1", free						2			2		2		2		$\tilde{2}$
17 Sprocket Wheel, large		" " 1"		4							4						4
17 Sprocket Wheel, large					1		1		1		1	•••	1			4	9
11 1		Double Bracket							i	3	4		4				4
Worm	17	Sprocket Wheel, large					2.00										1
Worm							٠.				٠.	٠٠;	٠;		· · i		1
Worm		Crown Gear Wheel, large	::		=	ia R	-		:					1	i		ĩ
Worm	21	Crown Gear Wheel, small			Ŀ	19.0	a						٠.	2			2
241 Collars. 24a Set Screws. 24a Set Screws. 25a Machine Screws, short 25a Machine Machine Machine Machine Machine Machine Machine 25a Machine Machine Machine Machine 25a Machine Machine Machine Machine 25a Machine Machine Machine Machine Machine 25a Machine Machine Machine Machine 25a Machine Machine Machine Machine Machine 25a Machine Machine Machine 25a Machine Machine Machine				٠.					٠.		٠.	2	2			1	
24a Set Screws.		Collars					::							4	8		
25b Nuts.	24a	Set Screws		4	5		5		5								
25b Nuts.	25	Machine Screws, short	12	18	24	2	26				48	20			112	44	
Shaft Coupling			12	18	24	2	26	8			56	20	76		124	46	
Brackets 90°	26	Shaft Coupling										1	1	5	6		6
Name		Brackets 90°	6	8	8		8	4	12		12	12	24			18	
Name		ment Strip, 9-noie			¨ i	· · · · i	2	2	4	2	6		6		9		
30 Double Bent Strip. 31 Bent Strip, 5-hole. 32 Hook. 33 Coil Spring. 33 Coil Spring. 34 Serew Driver. 35 Propellor Blade. 36 Pawls. 37 Wrench. 38 Chain. 38 Chain. 39 Angle Plates, No. 1 30 Rectangular Plate, 2½"x5½" 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			Acres de		1000000										200		100
31 Bent Strip, 5-hole	ю.	Name	0	A	AA	AAA	1	1A	2	2A	3	3.4	4	4A	9	5A	6
Coil Spring	00																-
Coil Spring									1	1	1				2		2
36 Pawls. 7 Wrench	31	Bent Strip, 5-hole		. ,	1		1		1		1 1 1		1		2 2 1		2 2 1
36 Pawls. 7 Wrench	31 32 33	Bent Strip, 5-hole		. ,	1		1		1		1		1		2 2 1 1		2 1 1
Wrench	31 32 33 34	Bent Strip, 5-hole		. ,	1		1		1		1		1		2 2 1 1 1		2 1 1
39 Angle Plates, No. 1	31 32 33 34 35	Bent Strip, 5-hole Hook Coil Spring Screw Driver Propellor Blade	i	i	1 1		1 1		1		1		1		2 2 1 1 1 1	· · · · · · · · · · · · · · · · · · ·	2 1 1 1 2
40 Rectangular Plate, 2\(\frac{1}{2}\)\(\frac{1}\)\(\frac{1}{2}\)\(\frac{1}{2}\)\(\frac{1}{2}\)\(\frac{1}{2}\)\	31 32 33 34 35 36 37	Bent Strip, 5-hole Hook Coil Spring Screw Driver Propellor Blade Pawls.	i	i	1 1 		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1		1		1		2 2 1 1 1 1 2	 2	1 1 1 2 2
41	31 32 33 34 35 36 37 38	Bent Strip, 5-hole Hook Coil Spring Screw Driver Propellor Blade Pawls Wrench Chain.	i	i	1 1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1		1	· · · · · · · · · · · · · · · · · · ·	1	i i :::	1 1 1 2 1	 2	2 1 1 2 2 1 1
50 " " 41/2"	31 32 33 34 35 36 37 38 39	Bent Strip, 5-hole Hook Coil Spring Screw Driver Propellor Blade Pawls Wrench Chain Angle Plates, No. 1	i	i	1 1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1	2	1 1 1	···· 2	1 1 2 1 2 2	i ::: ::: i	1 1 1 2 1	 2 1	2 1 1 2 2 1 1 3
50 " " 41/2"	31 32 33 34 35 36 37 38 39 40 41	Bent Strip, 5-hole Hook. Coil Spring. Screw Driver Propellor Blade Pawls. Wrench Chain. Angle Plates, No. 1. Rectangular Plate, 2½*x5½* 2½*x3½**	i	i	1 1 i		1 1 1 1 1 1 1		1	1	1 1 1	···· 2	1 1 2 1 2 2 3	i i i i	1 1 1 2 1 3 2 4	2 1 2 1	2 1 1 2 2 1 1 3
50 " " 41/2"	31 32 33 34 35 36 37 38 39 40 41 43	Bent Strip, 5-hole. Hook Coil Spring Screw Driver Propellor Blade Pawls. Wrench Chain. Angle Plates, No. 1 Rectangular Plate, 2½"x5½" 2½"x3½" Crank, 4½".	i	i	1 1 1 1		1 1 1 1 1 1 1 1 1		1	1 2	1 1 1	···· 2	1 1 2 1 2 2 3	i i i i	1 1 1 2 1 3 2 4	2 1 2 1	2 1 1 2 2 1 1 3
52 a a 1 a 1 a 1 a 1 a 2 a 2 a 2 a 2 a 4 a 4 a 4 a 4 a 4 a 4	31 32 33 34 35 36 37 38 39 40 41 43 46	Bent Strip, 5-hole Hook. Coil Spring. Screw Driver Propellor Blade Pawls. Wrench. Chain. Angle Plates, No. 1. Rectangular Plate, 2½"x5½" 2½"x3½" Crank, 4½" Axle Rod, 11½"	i	i	i i i		1 1		1	2	1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2	1 1 2 1 2 2 3 2 2	i i i i	1 1 1 2 1 3 2 4	2 1 2 1	2 1 1 2 2 1 1 3
53 Wood Screws 4 4 4 4 8 8 56 Brackets, 180° 1 1 1 1 2 1 3 1 4 8 8 57 Car Wheels 4 4 4 4 4 8 8 60 Latticed Girder, 12" 2 2 2 4 4 8 8 4 12 12 61 " 6" 2 2 2 4 4 8 8 4 12 12 62 Girder Extension, 3" 2 2 4 8 8 12 16 63 Trunnions 2 2 2 2 2 4 4 4 66 Angle Plates, No. 2 2 <td>31 32 33 34 35 36 37 38 39 40 41 43 46 48 50</td> <td>Bent Strip, 5-hole Hook. Coil Spring. Screw Driver Propellor Blade Pawls. Wrench. Chain. Angle Plates, No. 1. Rectangular Plate, 2½"x5½" 2½"x3½" Crank, 4½" Axle Rod, 11½"</td> <td>i i i i i i i i i i i i i i i i i i i</td> <td>i</td> <td>i i i i i i</td> <td></td> <td>1 1 1 1</td> <td></td> <td>1</td> <td>2</td> <td>1 2 1 3 3</td> <td>2 1 3 1</td> <td>1 1 2 2 3 2 4 3</td> <td>1</td> <td>1 1 1 1 2 1 3 2 4 3</td> <td>2 1 2 1</td> <td>2 1 1 2 2 1 1 3 4 5 3 2 6 3</td>	31 32 33 34 35 36 37 38 39 40 41 43 46 48 50	Bent Strip, 5-hole Hook. Coil Spring. Screw Driver Propellor Blade Pawls. Wrench. Chain. Angle Plates, No. 1. Rectangular Plate, 2½"x5½" 2½"x3½" Crank, 4½" Axle Rod, 11½"	i i i i i i i i i i i i i i i i i i i	i	i i i i i i		1 1 1 1		1	2	1 2 1 3 3	2 1 3 1	1 1 2 2 3 2 4 3	1	1 1 1 1 2 1 3 2 4 3	2 1 2 1	2 1 1 2 2 1 1 3 4 5 3 2 6 3
53 Wood Screws 4 4 4 4 8 8 56 Brackets, 180° 1 1 1 1 2 1 3 1 4 8 8 57 Car Wheels 4 4 4 4 4 8 8 60 Latticed Girder, 12" 2 2 2 4 4 8 8 4 12 12 61 " 6" 2 2 2 4 4 8 8 4 12 12 62 Girder Extension, 3" 2 2 4 8 8 12 16 63 Trunnions 2 2 2 2 2 4 4 4 66 Angle Plates, No. 2 2 <td>31 32 33 34 35 36 37 38 39 40 41 43 46 48 50 51</td> <td>Bent Strip, 5-hole Hook. Coil Spring. Screw Driver Propellor Blade Pawls. Wrench. Chain. Angle Plates, No. 1. Rectangular Plate, 2½"x5½" 2½"x3½" Crank, 4½" Axle Rod, 11½"</td> <td>i i i i i i i i i i i i i i i i i i i</td> <td>i</td> <td>i i i i i i</td> <td></td> <td>1 1 1 1</td> <td></td> <td>1</td> <td>2</td> <td>1 2 1 3 3</td> <td>2 1 3 1</td> <td>1 1 2 2 2 3 2 2 4 3 2</td> <td>1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2</td> <td>1 1 1 2 1 3 2 4 3 3 4 3</td> <td>2 1 2 1</td> <td>2 1 1 2 2 1 1 3 4 5 3 2 6 3 4</td>	31 32 33 34 35 36 37 38 39 40 41 43 46 48 50 51	Bent Strip, 5-hole Hook. Coil Spring. Screw Driver Propellor Blade Pawls. Wrench. Chain. Angle Plates, No. 1. Rectangular Plate, 2½"x5½" 2½"x3½" Crank, 4½" Axle Rod, 11½"	i i i i i i i i i i i i i i i i i i i	i	i i i i i i		1 1 1 1		1	2	1 2 1 3 3	2 1 3 1	1 1 2 2 2 3 2 2 4 3 2	1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1 1 1 2 1 3 2 4 3 3 4 3	2 1 2 1	2 1 1 2 2 1 1 3 4 5 3 2 6 3 4
56 Brackets, 180° 4 4 4 4 4 4 8 8 60 Latticed Girder, 12" 2 2 2 2 4 4 8 4 12 12 61 " 6" 2 2 2 4 8 8 4 12 12 62 Girder Extension, 3" 2 2 2 4 8 8 4 12 4 16 62 Girder Extension, 3" 2 2 2 2 2 2 2 4 4 4 4 4 4 8 8 4 12 4 16 62 Girder Extension, 3" 2 2 2 2 2 2 2 4 4 4 4 4 4 8 8 4 12 4 16 62 Trunnions 2	31 32 33 34 35 36 37 38 39 40 41 43 46 48 50 51 52	Bent Strip, 5-hole. Hook Coil Spring Screw Driver Propellor Blade Pawls. Wrench Chain. Angle Plates, No. 1 Rectangular Plate, 2½"x5½" 2½"x3½" Crank, 4½". Axle Rod, 11½". " 6" " 4½". " 3½".	i i i i i i i i i i i i i i i i i i i	i	i i i i i i		1 1 1 1		1 1 1 3	3	1 1 2 1 1 3 3 3 1 2	2 1 3 1	1 1 2 2 2 3 2 2 4 3 2	1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1 1 1 2 1 3 2 4 3 3 4 3	2 1 2 1	2 1 1 2 2 1 1 3 4 5 3 2 6 3 4
60 Latticed Girder, 12" 2 2 2 4 4 8 4 12 12 61 " 6" 2 2 2 4 4 8 8 4 12 4 12 4 12 4 12 4 4 12 4 12 4 12 4 12 4 4 8 8 12 12 12 12 12 12 4 4 8 8 12 12 12 12 12 4 8 8 12	31 32 33 33 34 35 36 37 38 39 40 41 43 44 46 50 51 52 52 52 53	Bent Strip, 5-hole. Hook Coil Spring Screw Driver Propellor Blade Pawls. Wrench Chain. Angle Plates, No. 1. Rectangular Plate, 2½"x5½" 2½"x3½" Crank, 4½". Axle Rod, 11½". " " 4½". " " 3½" " " 2" " " 1" Wood Screws Fig.8	i i i i i i i i i i i i i i i i i i i	i	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1 1 3		1 1 1 3	3	1 2 1 3 3 3 1 2 2 1 4	2 1 3 1 1	1 1 2 2 3 2 2 3 2 2 4 3 2 2 2 4 4	1 1 1 1 1 1 1 2 2 2 2 2 2 4 4	11 11 11 11 11 11 12 11 13 22 44 33 33 44 44 22 8	2 1 2 1	2 1 1 2 2 1 1 3 4 5 3 2 6 3 4
60 Latticed Girder, 12" 2 2 2 4 4 8 4 12 12 61 " 6" 2 2 2 4 4 8 8 4 12 4 12 4 12 4 12 4 4 12 4 12 4 12 4 12 4 4 8 8 12 12 12 12 12 12 4 4 8 8 12 12 12 12 12 4 8 8 12	31 32 33 34 35 36 37 38 39 40 41 43 46 48 50 51 52 52 53	Bent Strip, 5-hole. Hook Coil Spring Screw Driver Propellor Blade Pawls. Wrench Chain. Angle Plates, No. 1 Rectangular Plate, 2½"x5½" Crank, 4½" Axle Rod, 11½" " " " " " " " " " " " " " " " " " "	i i i i i i i i i i i i i i i i i i i	i i	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 3	3	1 2 1 3 3 1 2 1 4 2	22 13 11 11 1	1 2 2 3 2 4 3 2 2 2 4 3	1 1 1 1 1 1 2 2 2 2 2 1	11 11 11 11 11 12 11 13 22 44 33 33 44 44 22 88 44	1 2 1 2 2 2 2 2	2 1 1 1 2 2 1 1 3 4 5 3 2 6 3 4 4 2 8 6
62 Girder Extension, 3 2 2 4 8 8 12 12 12 12 12 12 12 12 12 12 12 12 12	31 32 33 34 35 36 37 38 39 40 41 43 46 48 50 51 52 52 53 54	Bent Strip, 5-hole. Hook Coil Spring Screw Driver Propellor Blade Pawls. Wrench Chain. Angle Plates, No. 1 Rectangular Plate, 2½"x5½" " 2½"x3½" Crank, 4½" Axle Rod, 11½" " 6" " 4½" " 1" Fig.8 Wood Screws Cord. Brackets, 180° Corg Wheels	i i i i i i i i i i i i i i i i i i i	i	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 3	33	1 2 1 3 3 3 1 2 1 4 2 4	22 33 11 11 11	1 2 2 3 2 4 3 2 2 2 4 4 4 4	1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 4 4 4 4 4	11 11 12 11 33 22 44 33 44 44 42 28 84 48	1 2 1 2 1	2 1 1 1 2 2 1 1 3 4 5 3 2 6 3 4 4 2 8 6
62 Girder Extension, 3 2 2 4 8 8 12 12 12 12 12 12 12 12 12 12 12 12 12	31 32 33 34 35 36 37 38 39 40 41 43 46 48 50 51 52 52 53 54 55	Bent Strip, 5-hole. Hook Coil Spring Screw Driver Propellor Blade Pawls. Wrench Chain. Angle Plates, No. 1 Rectangular Plate, 2½"x5½" " 2½"x3½" Crank, 4½" Axle Rod, 11½" " 6" " 4½" " 1" Fig.8 Wood Screws Cord. Brackets, 180° Corg Wheels	i i i i i i i i i i i i i i i i i i i	i	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	22 1	1 1 1 1 2 1 1 1 4	33 11 44 11 44 44	1 2 1 3 3 1 2 1 4 4 4 4 4	2 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 2 2 3 2 4 3 2 2 2 4 4 4 4	1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 4 4 4 4 4	11 11 11 11 11 12 12 14 13 22 44 44 44 42 88 88 88 12	1 2 1 2 1 2 2 2 2 2 2	2 1 1 2 2 1 1 3 4 4 5 3 2 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
66 Angle Plates, No. 2 2 2 2 2 4 2 6 68 Architraves 2 2 2 2 2 2 2 2 69 Motor 1 1 1 1	31 32 33 34 35 36 37 38 39 40 41 43 46 48 55 55 2a 55 66 61	Bent Strip, 5-hole. Hook Coil Spring Screw Driver Propellor Blade Pawls. Wrench Chain. Angle Plates, No. 1. Rectangular Plate, 2½"x5½" 2½"x3½" Crank, 4½". Axle Rod, 11½" " " " " " " " " Fig.8 Wood Screws Cord. Brackets, 180°. Car Wheels. Latticed Girder, 12"	i i	i i i i i i i i i i i i i i i i i i i	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	22 1	1 1 1 1 2 1 1 1 4	33 11 44 44 44 44	1 2 1 3 3 3 1 2 2 4 4 4 4 8 8	2 2 3 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 2 2 3 2 4 3 2 2 2 4 4 4 4	1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 4 4 4 4 4	11 11 11 11 12 11 3 2 2 4 4 3 3 4 4 4 4 2 8 8 8 8 12 12 12 12 12 12 12 12 12 12 12 12 12	1 2 1 2 2 2 2 4	2 1 1 2 2 1 1 3 4 4 5 3 2 6 8 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
68 Architraves 2 2 2 2 2 2 2 2 2 2 2 69 Motor 1 1 1 1	31 32 33 34 35 36 37 38 39 40 41 43 46 48 55 55 2a 55 66 61 62	Bent Strip, 5-hole. Hook Coil Spring Screw Driver Propellor Blade Pawls. Wrench Chain. Angle Plates, No. 1. Rectangular Plate, 2½ x5½ x3½ x3½ x3½ x3½ x3½ x3½ x3½ x3½ x3½ x3	i i	i i	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	22 1	1 1 1 1 2 1 1 1 4	33 11 44 44 44 44	1 2 1 3 3 3 1 2 2 4 4 4 4 8 8	2 2 3 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 2 2 3 2 4 3 2 2 2 4 3 4 4 8 8 8	1 1 1 1 1 2 2 2 2 2 4 4 4 4 4 4 4 4 4 4	11 11 11 11 12 11 33 22 44 33 44 44 22 88 44 48 81 12 11 11 11	1 1 2 1 2 2 2	2 1 1 1 2 2 1 1 3 4 4 5 3 2 6 8 8 8 8 8 8 1 1 6 1 1 1 1 1 1 1 1 1 1
69 Motor 1 1 1	31 32 33 34 35 36 37 38 38 39 44 44 48 55 55 52 46 66 66 66 66 66 66	Bent Strip, 5-hole. Hook Coil Spring Screw Driver Propellor Blade Pawls. Wrench Chain. Angle Plates, No. 1 Rectangular Plate, 2½"x5½" Crank, 4½" Axle Rod, 11½" " " " " " " " " " " " " " " " " " "	i i	i i	11 11 11 11 11 11 11 11 11 11 11 11 11		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	22 1	1 1 1 1 2 1 1 1 4	33 11 44 44 44 44	1 2 1 3 3 1 2 2 4 4 4 4 8 8 8 2	2 2 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 2 2 3 2 4 3 2 2 2 4 3 4 4 8 8 8 4 2	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	11 11 12 11 33 22 44 33 34 44 22 88 44 88 12 11 12 12 14 14 14 14 14 14 14 14 14 14 14 14 14	1 2 2 2 4	2 1 1 1 2 2 1 1 3 4 4 5 3 2 2 6 3 4 4 4 2 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
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Snippets. 'New' Brazilian System: ARGOS As can be seen from Figs.1-5 this system combines wooden Blocks with Rods joined by J-shaped Clamps. The concept is as in the post-WW2, single set American/Canadian LIL'N-GINEER (see 27/781), the German ROBO, & the Spanish EL INGENIERO MECANICO, but it has a few extra parts, more sets, & more ambitious models. Fig.5, probably taken from the back of the manual, gives details of (presumably) the maker in São Paulo. All the printed material seen, except the manual covers in Figs.1 & 5, has text in English as well as Portuguese



The Sets Nos.1-4 are illustrated in the manual, together with brief details, though those for Set 3 can't be seen. Fig.2 shows the No.4: it has 3 layers of parts in a box 54*34*8cm, with 683 parts including 148 Clamps, & 76 models are claimed.



Bank: Set N.* 4.1 contains 535 attorned paints and 148 clamps, total 683 pieces, to book at least 76 beautiful models.

Fig.2

The No.3 has 2 layers of parts, the smaller er sets one. The latter have 146, 244 parts, including 18,34 Clamps,

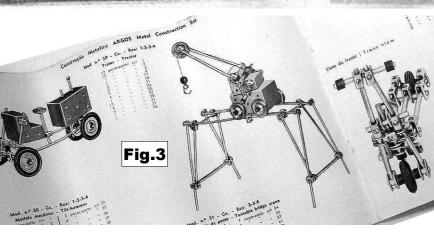
in boxes 50*30*5 & 54*34*6cm, for 30 & 53 models. The LIL set had 101 parts, including 16 Clamps, for 15 models. ROBO had only a few more parts for 18 models. So both were appreciably smaller than the No.1. The No.1's backing card was like ROBO's in having a large figure of a robot printed on it, though they are not quite the same design. So perhaps ARGOS was initially inspired by ROBO and then it was decided that the system had potential worth exploiting.

The Parts 2 of the 3 the wooden parts match LIL/ROBO & from scaling, their main dimensions are similar; but ARGOS also has the thinner rectangular Block. From what can be seen, the other

parts probably include all the LIL/ROBO ones. The white Sail etc (never actually included in the LIL/ROBO sets) can be seen in the centre of the large tray in Fig.2 with a Saddle on either side of it. Extra ARGOS parts almost certainly included longer Rods.

included longer Rods. **The Manual** The cover is shown in Fig.1.

Fig.3 shows part of 2 model pages: the Tractor can be made with Set 1, and is a LIL/ROBO model; the Crane & Scooter are for Set 2.





OSN 47/1427 ARGOS: S1



MOBILO MOBILO was a French rod system which claimed to have only 3 different parts. It appeared in 1919 and continued for an unknown period into the 1920s – perhaps not very long judging from the few sets which are seen.

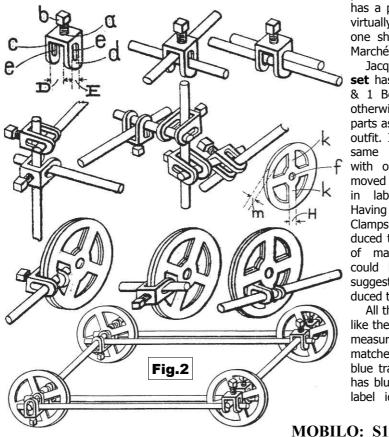
The 3 parts were the Rod (though in 5 different lengths), the Wheel (though in 2 diameters), and the U-Clamp. Sets also included a Box Spanner and a Tape Measure.

These notes are based on a No.1 set, probably near complete, & a leaflet with it; an unnumbered set, complete, belonging to Jacques Pitrat; some patent material from David Hobson: and a few Ebay photos. Thank you to everyone.

HISTORY MOBILO was patented in Switzerland in March 1918 by John Albert Chappuis, Engineer, 87 rue du Nord, La Chaux-de-Fonds, a city some 60km east of Besançon, just across the border from France. A French patent, 490268, is dated May 1918, and a UK patent, 117252, was applied for in April 1918 and accepted in July. An American patent, 1309240, was filed in May 1919.

A copy of the UK version is to hand and claims that the 3 elements can be used to make models, and that the parts are dimensioned to give maximum versatility. The details can be seen in the figures below taken from the patent.

Despite its Swiss connection MOBILO's claim to be French arises from 'Fabrication Française' on the box lids & manual cover. Nothing is known of the maker but the Manual & Leaflet were printed in Paris, and entries to a MOBILO competition



were to be sent to 20 Rue Richer, Paris (IXe).

The first known ad for MOBILO was in December 1919, and another in a 1920 Bon Marché catalogue, shows one set with no indication of any others. Two versions are known of this unnumbered set, one with slightly fewer parts than the other. Eventually there was a small range of outfits: Nos.1, 2, & 3 with linking sets 1A & 2A, and a small Mobilo Essai (Trial or Sampler) set.

The PARTS, less the 4 other lengths of Rod, are shown below, at near their natural size. All are nickelled steel. Rods



are 3mm Ø with sheared ends, and are 20,40,80,160,320mm long. The Wheels are 30 & 33½mm Ø and vary in width from 1.3 to 1.55mm. The Clamp has 7mm slots; its set screw has a square head 3½mm A/F, and is 6½mm u/h. The thread is the old French standard: 3mm Ø, .6mm pitch (not the ½" BSW currently in the Database). The Box Spanner has a 3.2mm Ø transverse hole through the handle's outer necking. The part is used in one model as a gun barrel but is shown there with a knurled handle and no necking. The Tape, see Fig.5, is metal, 32cm long, 12½mm wide, & marked MOBILO. The small part next to the Box Spanner in Fig.5 is in the style of the other parts but is not mentioned anywhere and is probably an alien — it's large end is tapped and it has no obvious use.

The SETS The original unnumbered '30-Clamp' set contained 10,10,10,10,5 Rods 20,40,80,160,320mm long; 10,5 Wheels 30,33mm Ø; 30 Clamps; 2 Box Spanners, & a Tape. 93

MOBILO

parts in all. The Leaflet has a photo of it, right, virtually identical to the one shown in the Bon Marché ad.

Jacques' '22-Clamp'
set has only 22 Clamps
& 1 Box Spanner, but
otherwise the same
parts as the '30-Clamp'
outfit. It also has the
same manual but
with one page removed and 2 stuckin labels added.
Having only 22
Clamps greatly reduced the number
of manual models that

could be made, but, as Jacques suggested, it was no doubt introduced to increase the number of potential purchasers.

All the unnumbered sets have the same blue boxes with lids like the No.1 (Fig.1) but without the set number. Jacques' box measures 33*15½*2½cm and its base (Fig.5 overleaf) matches the one in the Bon Marché ad. A set seen on Ebay has blue trays forming the partitioning. (A second Ebay box also has blue trays but the box looks to be black and its lid has a label identical to the manual cover (Fig.6), with a red

OSN 47/1428

Fig.4



surround. I wouldn't be surprised if it were a misguided restoration.)

The 6 later sets are listed in the Leaflet and it says that the Essai, 1, 1A, 2, 2A, & 3, have, respectively, 64, 140, 122, 262, 146, & 4?? parts. The digits following the '4' for the No.3 have been abraded away but the total might well be 408.

The No.1 to hand has a black box 33¼*20½*2½cm and the lid is shown in Fig.1. The red circle with '1' in it looks to have been stamped on. Some of the parts are in 2 blue trays, about 11*4cm, and there would have others of different sizes originally. As found it contained 12,12,12,12,8 Rods 20,40,80, 160,320mm long; 12,8 Wheels 30,33mm Ø; 58 Clamps; 2 Box Spanners; & a Tape. That makes 137 parts against the 140 given in the Leaflet. Perhaps there were 60 Clamps originally but what of the other one? Possibly the manual.

The manual with the Set was the original version. It has no mention of the numbered sets but there could of course have been another leaflet about them and the extra models that could be made.

A larger set has been seen on Ebay. Its box is in the same style as the No.1, with blue trays, but at 33*55cm (as scaled) much larger. The centre pages shown of its manual are as in the original version.

The MANUALS The original '30-Clamp' manual has 48 art paper pages, 210*130mm, plus covers (of slightly corrugated card). Most of the text is printed in blue. The front is shown



the cover. C2 is plain. p1 is the title page & p2 is blank. p3 has an Intro with mention that the parts are nickelled. p4 is about the 3 parts; p5 has the set's contents, a price list of extra parts, and says

Fig 29

Le projectile est une poulie que monte plus ou moins haut suivant

PIÈCES

NÉCESSAIRES

Roues de

28 Brides

Barres de 320

20

30

Fig.7

monte plus ou moins haut suivant la force du coup frappé à l'extrémité du levier. ENREGISTREUR

FORCE

DE

d'une façon charmante' (have fun in a delightful way) by using MOBILO parts to outline the main features of a picture of a church set in a landscape. Well, maybe. pp7-12 show 14 basic constructions including a crank handle, fast & loose pulleys, and a 4-tooth pinion with an 8-tooth gearwheel. p13 shows a Rod being curved by using Box Spanners, one of which is slid over each end, through the transverse hole. pp14-47 have 47 models from TOUR (Tower) to LA TOUR EIFFEL. The model on p28 is OBUSIER EN BATTERIE (Howitzer & Limber). Each model has a Fig. No. but in random order. p48 is about a model competition with 10 prizes from a gold Oméga watch plus 3 sets, to some extra parts. C3 has a detachable entry slip stuck on it to be returned by 31 Mai, but no year. C4 carries just a small printer's logo with DRAEGER IMP. PARIS under it.

The models are illustrated by excellent quality halftones and

made with the Set. p6 shows how youngsters can 's'amuser

The models are illustrated by excellent quality halftones and many carry a signature which looks like G. Onkelinx. The small models are two to a page and have one photo each; the largest has 3 larger photos over 3 pages. Building instructions are limited to a few words for a few models but the photos are adequate for the smaller models, and perhaps for the others if one has experience of the system.

The '22-Clamp' manual is the 30-Clamp one above but with p5/6 carefully removed (undoubtedly by the manufacturer). This of course because p5 had the contents of the 30-Clamp set. It was replaced but a small label stuck on the back cover giving the 22-Clamp inventory. p5 also had a price list for extra parts and this was replaced by another small label stuck onto p1. Some of the prices were slightly lower.

Another Manual? The Aeroplane on the manual page in Fig.4 is on a lefthand page but in the manuals above it is on a righthand one. The model on Fig.4's right page is the Howitzer – it it on the back of the Aeroplane page in the manuals above.

The Models The 30-Clamp set's 27 models are mostly small, with a good many Trucks, Barrows, etc, and domestic items. But a few are more interesting including a Mobile Crane, the Try-Your-Strength Machine left, a cord driven Joy Wheel, the Howitzer (Fig.8), & a Monoplane (though it doesn't have a tailplane).

The **22-Clamp outfit** only allowed 13 of the 27 models, and those are the less interesting ones.

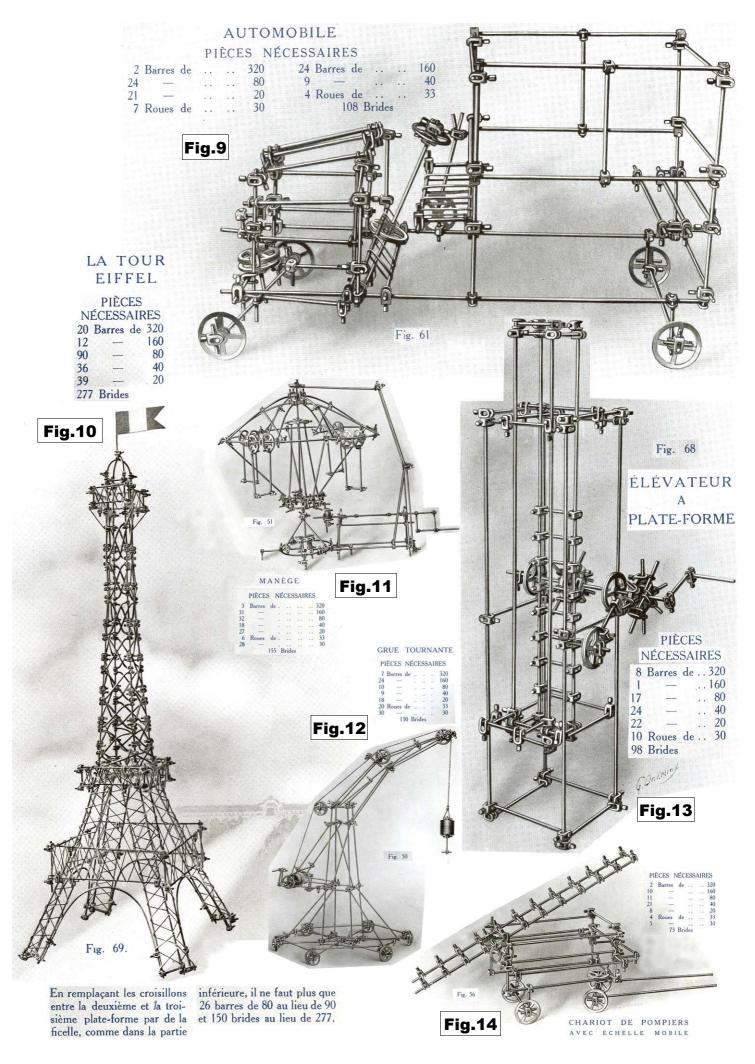
The **No.1's** extra parts allow only one more model over & above the 27. a CATAPULTE (LANCE-PIERRES) (Ballista) on p29.

The larger models are generally much more advanced and include a Fire Escape (Fig.14), a credible Arched Bridge, a Windmill Pump (but there's no pump), a Lift (Fig.13), a Rotating Crane (Fig.12), a Chassis with centre-pivot steering, a slightly strange looking Pick-up Truck based on the

Chassis, a Van (Fig.9) with different centre-pivot steering, a gear-driven Cake-Walk, a

that all the models through p28 can Fig. 30 PIÈCES NÉCESSAIRES 6 Barres de. 160 4 Roues de . . 33 Fig. 30 a .. 40 6 3 30 Brides BATTERIE OBUSIER EN .. 20 1 Clef-tournevis

OSN47/1429 MOBILO: S2



Roundabout (Fig.11) again gear-driven, a 32cm diameter Big Wheel, and the Eiffel Tower (Fig.10) which could be built with 5 of the 30-Clamp outfits if the cross bracing Rods in the upper tower (S-shaped!) were replaced by cord (as in the lower levels). All the models illustrated are their original size except Figs.11,12,14 at 50%, and without their extra views.

USING The PARTS Below the method suggested in the Manual to make a fast pulley. The wall thickness of the Box Spanner makes it difficult to keep the Wheels tight together. The assembly looks a little neater if only 1 or 2 of the 30mm

Wheels are used because then a 20mm locking Rod can be used. Loose pulleys are as the tup in Fig.7 with just one Clamp on the axle at either side.



I made one or two of the simple models, then

the Try-Your Strength Machine, and then the Howitzer & Limber. The Clamps held the Rods firmly and structures were adequately rigid. The Set Screw's tip is slightly rounded and this allows cross Rods to pivot slightly within the Clamp's sides but this would only be a (minor) problem if the Rod's other end was free. It would have been better though if the end of the set screw had been concave. The Box Spanner turned by hand was adequate for most joints but a Rod as a tommy bar could be put through the transverse hole if necessary. This isn't suggested in the Manual and could have led to the 9 Clamps with stripped set screws found in the No.1 Set. (They were replaced by 5 BA screws – they were a tight fit and could only be used because the Clamps' tappings were on the loose side.) Inevitably the Box Spanner couldn't be used in some tight corners and a normal spanner proved essential in such cases.

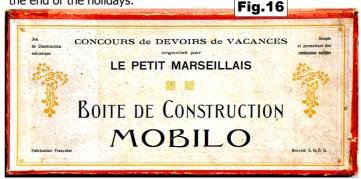
One problem was that to attach, say, a cross member, both its ends had to be engaged in the Clamp before either could be tightened. This wasn't difficult for the simple models but in tight corners in the Howitzer, or where parts had to be sprung apart, as in the uprights of the 'Machine', one wished for a second set of hands. The other problem was that the only way of creating a bearing was to use the centre hole of a Wheel which had been clamped to a suitable Rod (as in Fig.2). This looked very clumsy in small models and for the Howitzer it would have been impossible for the hinged frame which

elevates the barrel. The only alternative was to only partially tighten the Clamp through which the axle passed. But then said Clamp would often be free to move sideways and collars either side of it would be needed. These are made from a Clamp with a 20mm Rod through it (as outside the Howitzer's Wheels) and said Rod, besides looking rather ungainly, can be difficult to fit into the space available. A 10mm Rod would have helped, or better still, a longer Set Screw to avoid the need for a Rod at all. This problem was overcome in the Howitzer but only by using numerous non-MOBILO washers to form spacers.

The Try-Your-Strength Machine wasn't a great success as the tup was too heavy to rise more than a few millimetres.

Ignoring their drawbacks, the models made were thought attractive looking, partly due to their delicate air, partly to the still very shiny nickel finish of the parts.

POSTSCRIPT Jean-Pierre has kindly sent details of an unusual set which he obtained recently. The lid below shows that it was a prize in a competition sponsored by Le Petit Marseillais, a newspaper in the south of France. J-P explained that between 1907 & 1939 numerous local/regional newspapers issued 'school' exercise books of 'homework' for children to complete during the long summer holidays, and some, as an incentive, awarded prizes for the best efforts at the end of the holidays.



Apart from the lid and the box being red instead of blue, the set is the 22-Clamp outfit already described. The manual too is the same except that the leaf with pp47/48 has been removed as well as pp5/6. This no doubt because p48 gives details of the 'standard' competition with 10 prizes, and might have caused confusion. The stickers giving the set contents and the prices of spare parts are as before.

OSN 47/1431



Another PAJTÁS Set Jean-Pierre Guibert kindly sent details of his set, thought to be complete or very nearly so. It is basically the same as my example described in 46/1397 but with a few differences.

The Parts Of the parts in the OSN 46 set J-P's has 4 DAS, 6 A/B, 8x 11h Strips, 2x 90mm Axles. 2 Collars, 38 Nuts, 22 CH

plus 8 RH Bolts (both are 9mm u/h, the CH is 6.9mm \emptyset), and

MOBILO: S4

Screwed Rod

Fig.2

18x 8.8mm \emptyset nickelled Washers (there were actually 2 in my set, but were inadvertently not mentioned).

Parts not in the earlier set are, except for a 5cm Screwed Rod, shown left. In the Set were: a Screwdriver, & a 3mm \emptyset Drift, both steel, 1 each of the Double Bent Strip & 2h high D/B, & of 5 & 9cm Screwed Rods. 2 each of said Rods are needed in the manual models, as for example in 46/Fig.4.

Other differences. The hole pitch is exactly 12.85mm; bosses, at 11.5mm \emptyset , are smaller; and Strips are 12.5mm wide against 13.0.

The Box is identical to mine except for some differences to the lid label (Fig.1). It has 2 boys instead of a boy & a girl, the models on the table are the same but are seen from a different viewpoint, and the BFV logo is much smaller. Not noticed at the time, one of the Vatera sets mentioned in OSN 46 had the same 2 boy lid except that it had the larger logo.

The Manual As before (see 38/1145) it consists of 6 sheets inside a wrapper, and all are identical except that the PR on the back of the wrapper starts with '65 3846' (though the first figure is blurry and may not be correct) instead of '66. 17'.

OSN 47/1431 PÁJTAS: S4

An EIFFEL Manual Something on this small German system with aluminium parts was given in 10/247. Now a little more, mainly from scans of a manual kindly sent by Urs Flammer, but also from some sets seen on Ebay. EIFFEL was made by Dietze & Wieland of Munich 13. The dates for the firm in Baukästen are 1940-48, with c.1944 for EIFFEL itself. Eisenzeit gives 1940-48 for the latter. There were 2 sets, a Normal & a Doppel.

EIFFEL-BAUKASTEN

The Manual has 36 pages a little smaller than A4 (the same size as the lid label, Fig.1),

and p1 is shown left. It may though have had outer covers with the front identical to the lid label - as do 3 of the 5 manuals of this type seen on Ebay. p2 has the Manual's contents, and p3 a Forward which says that the models through p25 can be made with the

Fig.1

the Doppel (Double). p4 has a photo of Doppel set, as in Fig.1 & 10/247, though with the parts in the various compartments arranged somewhat differently. All the manual's illustrations are good quality photos. p5 has 'EIFFEL' made with Strips etc. The parts are listed on p6, with the quantities in the 2 sets, and they are illustrated on p7. pp8 & 10 have constructional hints referring to photos on pp9 & 11. pp12-25 show 12 Normal models from Schubkarren (Wheelbarrow) to the Auto shown below on pp24-25. pp26 have 7 Doppel models from Stellwerk (Signal Box, with a signal gantry) to Loco-

Fig.2

Normal set, the rest with pattern of partitioning.

motive on pp34-35. There is a Parts List for each model but no instructions. The back page (p36) is blank save for the printer, Franz Brandl, Inh. Gebr. Appel, München.

For a system of this size, and despite some of the parts being a little unusual, the models are generally above par in appearance, and of a good size. But apart from the steering in 2 vehicles they are simple mechanically. The Normal models include a slewing Crane, a Letter Balance, a Railway Goods

Wagon, a Bridge, a Scooter, & the Auto in Figs.4a & b.

The Doppel models are even better, with a Windmill, Eiffel Tower, Big Wheel, the Water Wheel with double trip hammers in Figs.3a & b, a 4-4-0 Loco, and a Lorry with a slightly different version of the 'Ackermann' steering in Fig.4.

The photos of the models below are only a fraction of their original size but I think all the details can be seen with a magnifying glass.

Another Manual One Ebay manual has the same text on the title page as Fig.2 but rearranged & with EIFFEL straight & not curved. It was with a Normal set and probably contains only the Normal models. As seen it had no outer covers.

The Sets The boxes measure about 31*20*234 & 34*24* 234cm but are otherwise very similar with the same label &

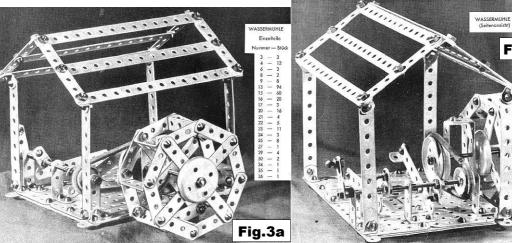
The contents of the Normal Set are: 4x #1, Rev. A/B 2*1*1h. 4,1x #2,8, D/B 2*1*1, 3*1*3h. 2,6x #3,4 A/B 3*2, 1*1h. 2,3,2,6 #5-7,9, DAS 2*7,5,3*2, 1*3*1h. 1,1,1x #10-12, Dble. Bent Strip 1*1*7,5,3 *1*1h. 54x #13, hex Nut. 5x #14, Full Nut. 30,14x #15,16, RH Bolt, 6,10mm. 2x #17 Perf. Plate 7*5h. 6,8,8,12,8,8,4,4,4x #18-26, Strip 3,4,5,7,9,11,15,25h. 1x #27 Spring Cord. 4,4,4x #28-30, Pulley Disc 62,42,24mm

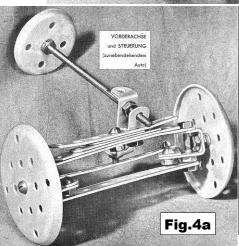
Fig.3b

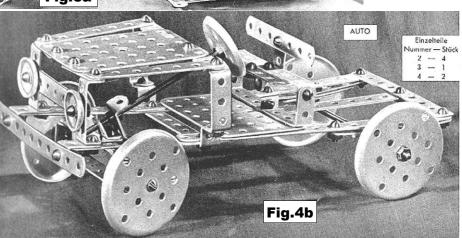
Ø. 1,2,2,1,1x #32-36, Screwed Rod 30,52,76, 100,140mm. 2x #37 Spanner. 1x #38 Screwdriver. 1x #39 Manual.

(All holes are round & the thread is M4. The Full Nut (Hohe Sechs+ kantmutter) is called up for many of the models but I can't see it in them to say why it is needed.)

The **Doppel Set** has twice the quantity of parts #1-37, and 1 each of #38 & 39.







OSN 47/1432

EIFFEL [1]: S1

Snippets. DURALEG: a 'New' East German System: Jürgen Kahlfeldt kindly sent some details, via Thomas Morzinck, of the one set known of this small system. It is thought to date from the 1946-48 period and the box lid is shown right. The parts (Fig.2, from the manual) are more or less a copy of STABIL but are made of alloy and at 12.6mm, their hole pitch is very slightly greater than STABIL's 12.5. DURALEG seems a strange name — could it be that the first part of it

came from Dural, the trade name of an aluminium alloy at the time. Nothing is known of the maker but the manual's printer was Paul Mock of Mühlhausen (near Eisenach).

The Parts in Fig.2 look like STABIL except for the number of holes in the Wheel Disc #15, and the 24t Gear #14 (see 13/355). Notably absent from the selection of parts which one might expect are the Flanged Plates & their centre Perforated

Plates. As will be seen the manual models are mainly adaptations of STABIL Nr.50 models, and the DURALEG set has more Strips, A/Gs, and N&B than the Nr.50 to compensate for the 'missing' Plates.

The Set The quantities of parts in it are as follows, following the order of the parts in Fig.2: 6,8,6,6,4,4, 2,4,2, 8,1,2,2,1,2,5,2,2,4,1,1,2,1,2,50,75,1, 1,1. Also some Cord with no PN.

The Manual has 10 pages, made from 5 sheets, 103/4*18cm, stapled

together. p1, the cover, is identical to the lid label except that it is in B&W. p2 has the Illustrated Parts (rearranged in Fig.2) & p3-8 show 10 models from the Cable Car in Fig.3 to a horizontal rotating arm with a car at each end, Garten+ karussell. There is a Parts List for each except the two in Fig.4, and a few

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Fig.1

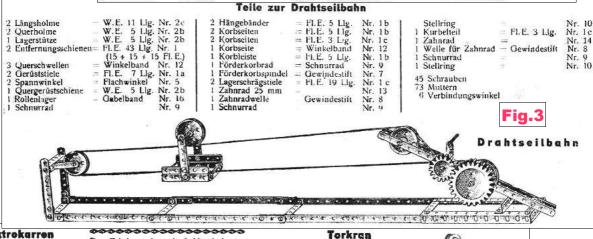
lines of building instruction in a few cases. Apart from 2 small models the others are all STABIL Nr.50 models in a prewar manual, but adapted to use the parts in the Set and redrawn accordingly.

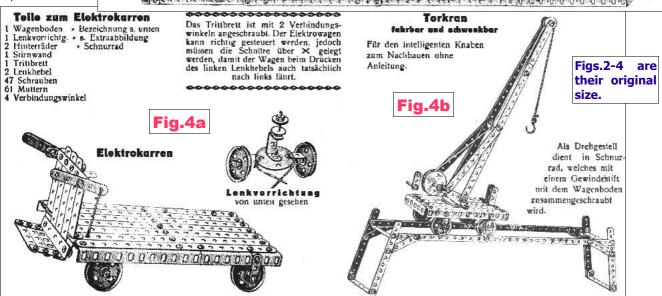
This rework for the Draht+ seilbahn in Fig.3 is poor in that the vertical members which support the higher end of the mechanism frame have been omitted. The other 'large' models are a

reasonable Rope Conveyor, a Lorry with centre-pivot steering & a Paddle Steamer, though both rather skeletal, & a Lathe which looks very similar to the STABIL model but the printing is too poor to see the details clearly – it is the only model other than the Drehtseilbahn to use the Gears.

p9 has the Set Contents and a paragraph headed Zur besonderen Beachtung! (Precautions?); the back page, notes about the possibilities of the Set & some constructional hints.







Snippets. More on GLUCK's Aero/Zep Sets. Four items of interest from Ebay add to the notes in 45/1374. The first two reinforce the BUILD-A-PLANE, TEN IN ONE connection, the third is a 3-engined model, and the fourth a photo of a model built from the BUILD-A ZEP outfit.

No.300 in 45/1374, but at 15*12", slightly smaller. The label is

the same design and covers the whole lid. The model leaflet is in the same style as the TEN IN ONE, and the '30-in-1' on its title page, right, indicates the number of models in the the Leaflet. Illustrated The Parts page is identical to Fig.4 in OSN 45 except that it has 30-in-1 in the centre



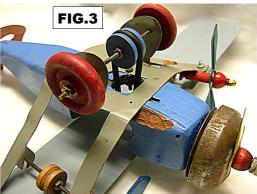
panel and one additional part is shown (in the frame to the left of the Wing in 45/Fig.4). It is a DAS and is listed as #27 'Small Forms - four pieces used for connection wings'. Right, the 4 in the Set – they scale at 1.6" long. The set has 2 Wings and so these parts would provide the interplane struts. The

Wings are the same size as the TEN IN ONE parts but the lower one has a rectangular FIG.2 centre cutout to accommodate the Rubber Band drive to the undercarriage Axle. Apart from the extra Wing and the DAS, the Set has the same contents as the TEN IN ONE. One of the Ebay photos shows some of the small parts including Bolts with round heads and 3 sizes of hex Nuts. 2 of the latter, the largest & smallest, can be seen in 45/Fig.9. Some flat Rubber Strip is also shown but nothing can be seen of how it is attached to the Prop Shaft and at the tail.

Next another **TEN IN ONE set** which is the same as the one described in OSN 45 but has 2 points of interest.

First, the Wing is held in the box by a card wrapper with 'BUILD-A-PLANE' on it in large letters. Secondly, it is said that the yellow circle bottom right on the lid (see 45/Fig.3) has 'GEM | GMC Products | As Bright as the Name' in it.

The 3-Engined Model. Below, the underside view of it A BUILD-A-PLANE No.150 outfit has a red box like the shows the shafts of the outboard motors running in the lugs of



the #18 Wing Strut/Undercarriage. The red cylinder behind the Prop is likely to be the part #8 and not the #13 Motor. The wing span was given as 20", much than the 11½" in the known sets, and too

long for the No.300 box mentioned in OSN 45. So perhaps there another set, or perhaps the Wing is a foreigner.

The Zeppelin Model. Below, the photo from the Ebay item – nothing was said of the make but the 'Spirit of Youth' on the side tallies with the same name under the model on the Set's lid in OSN 45. The model was said to be 161/2" long. The red 'wheels' on either side of the lower Fin look to be standard Gluck Pulleys and perhaps originally the lugs under the Gondola carried more 'wheels'. The Nose is suspect because in another photo it is clearly red and distinctly too large to be a good fit on the main body.



GLUCK: S2 OSN 47/1434

Snippet. 'New' German System: TECHNIK/ One other German TECHNIK (without the **TECHNIC** TECHNIC) is known, a small set shown in Baukästen. Its lid is quite different to the present one shown below, and, as will appear, its parts are unlikely to be the same. As can be seen the set was made by Ludwig Schreiner and the words around the logo are Rehburger Spielwaren. There was a city called Rehburg between Hanover & Bremen until 1974 (when it was renamed Rehburg-Loccum) so perhaps TECHNIK was made there. Nothing positive is known of its date but the lid's text in German & English suggests soon after WW2.

One edge of the box and the parts in it are shown right.



Which of them, if any, are original is unclear but none match the long-slotted ones of the lid. There looks to be a very small spring motor to the right of the DAS, top centre. The box was said to measure 16*19*3cm and the pitch of the holes in the Strips above it scales at 11mm, and 13\%mm for the lighter grey Strips on the left The parts in the Baukästen TECHNIK set



OSN 47/1434



MÄRKLIN MINEX This account is based on a draft kindly supplied by Kendrick Bisset, some notes from Thomas Morzinck, a Nr.02 set & a few Gears to hand, & some Ebay photos. With a hole

pitch of ¼" MINEX was a half-size version of standard MÄRKLIN Metall-Baukasten (itself an outgrowth of MECCANO). It had a number of parts not in the standard system, notably Flexible Plates, and many of the parts were made of aluminium alloy (at the time the use of aluminium rather than steel was encouraged by the government). Another innovation, for the first time Rubber Tyres were included in Märklin sets.

The system was introduced in the Spring of 1939 at the Leipzig fair and the earliest PR known is 0639. It was heavily promoted with a lot of different ready-assembled models made available for dealers to exhibit. Emphasis was given to the possibility of models to suit the H0 model railways which had been introduced in the mid-1930s. The volume of MINEX models would be one-eighth that of 1/2" pitch systems.

Production ended at sometime during WW2 and MINEX was not reintroduced afterwards. That did not stop others from launching small-scale systems soon after WW2: the German MIGNON & GLORIA, both with a hole pitch of 6mm, the 7mm East German OLYMPIA, the Austrian METEOR & the Belgian MINIATOR, both at 8mm.

The PARTS Although the pitch was reduced by half, also the width of strip parts, other key dimensions had lesser reductions. **Holes** were 2.9mm, **Axles** 2.8mm, & the **thread** had an o.d. of 2.7mm (the N&B fit 6BA well but the thread could have been a non-standard metric type).

Materials & finishes. Fig.4 shows the parts as in the manual's Illustrated Parts; Fig.2 some parts from a Nr.02 set with a few MÄRKLIN ½" parts for comparison. Brackets (the black parts in Fig.4) are steel, as are the flanged parts, the Railing #081/25, & the Perforated Plate #0170 (they are all painted red). Pulleys, the Flanged Wheel #020, & the Bush Wheel are red Bakelite with a brass bush moulded into those with bosses. Nearly all the other parts are aluminium alloy (exceptions are mentioned later) with most bare but the Plates #0150-0154 yellow.

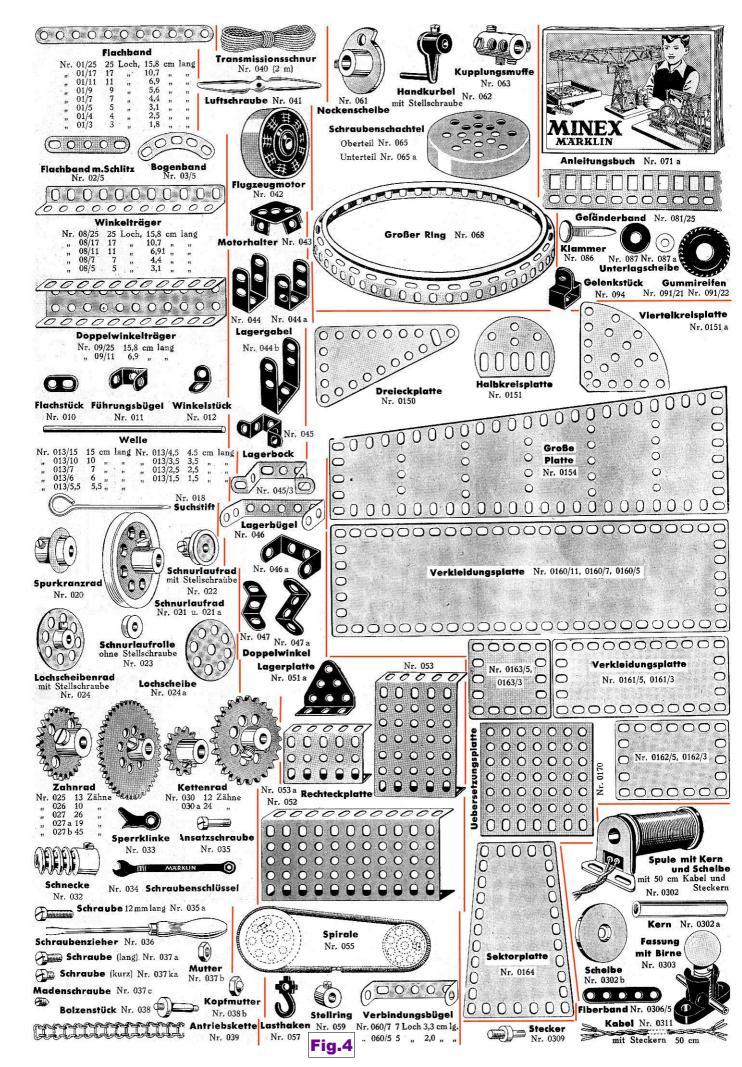
Now some notes on the parts, and points of interest about those to hand & seen in photos. **Slots** are 4mm long. **Bosses** are single-tapped. Strip parts & A/Gs are .7mm thick. The Drift #018 is 3mm Ø and just to big to enter the holes. **Pulleys** #021a, 022, & 023 are 19, 11 & 8mm Ø. The Bush Wheel #024 is 19mm Ø; the Wheel Disc #024a 18mm, & 1mm thick. Gears. The 13t Pinion #025 & 26t Gear #027 mesh at 1/2" centres and are 9.8 & 18.2mm o.d., with 3 & 11/2mm face width. Their Module is .65 (39 DP) the same as standard MÄRKLIN. The only integer ratio from the 5 Gears is 2:1. The Worm is brass. The Screwdriver is 123mm long o/a and has a wooden handle. Again its shank is just too big to pass through holes and in any case its end is splayed. N&B: Nuts #037b are 5.0mm A/F; the Bolts' neat tapered cheesehead is 4mm Ø. #037a & 037ka are $5\frac{1}{2}$ & $3\frac{1}{2}$ mm u/h. All are steel, brassed except that 037ka is blackened - it is often used in bosses. The Aero Motor scales at 11/8" Ø in a photo and has black cylinders inside a silver casing. The Hand Crank #062 & the Collar #059 are zinc castings, blackened & brassed respectively. The Collar is 7.0mm Ø & 6mm long. The **Tin Lid & Base** of the small parts tins, #065 & 065a, are $8\frac{1}{2} \& 40$ mm o.d., and are red painted steel or aluminium, .35mm thick. They also serve as Wheels, and the Base has an impressed pulley groove, see Fig.2, so it can be used as a



large Pulley. The pair can also form a slewing crane bearing, as in some of the models. The **Tyres**

Dear				IIIC .	OI.		models. The		yıc	3
PN	Name Set	: 1	2	3	M	PN	Name Set: 1	2	3	М*
1/25	Strip	4	4	8		41	Propeller		- 1	
1/17	_ `			2		42	Aero Engine		1	
1/11	_	4	8	10		43	Engine Brkt		1	
1/9	_	Ċ	•	4		44	2h high D/B 1	1	1	
1/7	_			4						
	_	_	40			44a	– shorter		1	
1/5	_	6	10	12		44b	– 2h wide		1	
1/4	_	2	4	6		45	Dble Bent Str		1	
1/3	-	2	4	6		45/3	5h span		1	
2/5	Slotted Str			2		46	DAS 2*5*h		1	
3/5	Curved Str		4	4		46a	– 1*2*1h		1	
8/25	A/G		4	8		47	Rev A/B	2	2	
8/17	_			2		47a	- 2h centre	_	2	
8/11	_	4	6	8		51a	Trunnion		2	
8/7	_	7	U	2				4	2	
	_			4		52	Flgd Pl 5*11h 1	1	2	
8/5	_		4			53	– 5*7h		2	
9/25	U-Girder			2		53a	– 5*3h		2	
9/11	-			2		55	Spring Cord	1	1	1
10	Flat Brkt	2	4	10		57	Hook 1	1	1	
11	D/B	2	4	6		59	Collar 4	6	12	2
12	A/B	8	8	20		60/7	DAS 1*5*1h 2	4	6	
13/15	Axle	-	-	1		60/5	- 1*3*1h 2	4	6	2
13/10				2		61	Cam	4	1	2
			2	2				^		
13/7	Fig.	3	2	2		62	Hand Crank 1	2	2	
13/6				2		63	Coupling	_	1	
13/5,5			_	2		65	N&B Tin, Lid 1	2	3	1
13/4,5		2	2	2		65a	Base1	2	3	1
13/3,5	_		2	2		68	Lge Flgd Ring		1	
13/2,5	_	2	2	2	4	70	Manual Nr.1 1			
13/1,5		1	1	2		71a	– Nr.1-3	1	1	
18	Drift		1	1		81/25		•	2	
20	Flgd Whl		•	4		86	Paper Clip 76 1	30		19
21	Pulley		4	4	1	87		4	4	13
21a	i uney		7	2	1		Washer, Ige 4			
	-					87a	– small 4	6	10	
22		4	4	4	1	91/21	Tyre, Ige	4	4	
23	Loose Ply	1	2	2		91/22	small4	4	4	
24	Bush Whl	2	2	4		94	Connector		2	
24a	Whl Disc	2	4	4		150	Triang PI		2	
25	Gear 13t			1	1	151	Semi-circ PI		2	
26	– 10t				1	151a	Quadrant PI		2	
27	– 26t			1	1	154	Tapered PI		2	
27a	– 19t				2		1 Flex Pl 11*25h		1	
27b	– 45t				1	160/7			i	
30	Sprocket 12			1					2	
	•	ι				160/5				
30a	– 24t			1		161/3			2	
32	Worm			1		161/5			2	
33	Pawl			1		162/3			2	
34	Spanner	1	1	1		162/5	– 5*7h 2	2	2	
35	Pivot Bolt	1	2	2		163/3	– 3*5h		2	
35a	Bolt 12mm		1	2		163/5	– 5*5h	1	2	
36	Screwdriver	1	1	1		164	Sector PI		1	
37a			75	150	50	170	Perf Pl 7*7h			2
37ka			25	50	00					1
					ΕC	301	Elec Motor			I
37b				210		302	Coil, Core, Disc		1	
37c	Grub Screw	•			sses)		Bulb &Holder		1	
38	Thr'd'd Pin	2	4	4		306/5	Fibre Strip		2	
38b	Domed Nut	2	4	4		309	Plug		2	
39	Spkt Chain			1		311	Cable		1	
40	Cord	1	2	2		* N	Notor Set Nr.0301	IG		

OSN 47/1435 MINEX: S1



MINEX: S2 OSN 47/1436

#091/21 & /22, now hard, are 33 & 19½mm o.d. off the Pulley. The larger one has 'MÄRKLIN' on each sidewall; #/22 has no marking. Of the **Flexible Plates** only the two smallest have been seen. They are aluminium only .2mm thick and easily distorted. The **Plates** #0150 to 0154 may be thicker – #0154 is used unsupported as an aircraft wing (if they are painted could they be steel?). The **Motor** #0301 (right) was 20v a.c. its dimensions, from an ad, 4.5*3.5*

Fig.5

5.5cm. Its sideplates were Bakelite and the lever switch on the front gave forward & reverse. I'm not sure what the protrusion bottom left is – it isn't shown in other photos. It may be one of the male connectors out of position. The front of a 4-page Leaflet with the Motor, PR 0939, showed a workshop with it driving line shafting to 6 or so machine tools.

The SETS While this system is distinguished by the size of the parts, it is not limited by their range. 114 are listed including the Motor & electrical parts, and all were used in the 3 main outfits: 01, 02 & 03, and a Motor outfit, 0301G. See Fig.3 (lengths are given by the number of holes following the slash in the PNs, or in centimetres for the Axles). There were also connecting outfits 01A & 02A, and the Motor was available separately. The range of outfits seems fairly small for a system with so many different parts. In terms of their quantities, the 3 main sets, ignoring the Paper Clips in them, correspond to somewhere between Sets 0 & 1, 2 & 3, and 4 & 5 of the standard MÄRKLIN range, though with many differences in their composition.

Set boxes were red with labels identical to the manual cover in Fig.1. They were large, from $34\frac{1}{2}*26\frac{1}{2}*2\frac{3}{4}$ cm for the 01 to $54*39*4\frac{1}{2}$ cm for the 03, and the parts were clipped, mostly individually, to a card, or two for the 2-layer 03. Said cards were part blue, part cream, but all blue for the second 03 one.

The MANUALS #071a for Sets 1-3 has 96 pages, 253*178mm, plus covers, and the front in shown in Fig.1. pp1-16 are printed on pink paper. The PR is TON 0639 r on p1. pp1-2 has the Intro, pp3-11 Basic Constructions, and pp12-16, after one page about circuit diagrams, has 9 electrical models. Some are details e.g. an electromagnet for a Crane; some complete models e.g. an electrically operated Railway Signal. In all they run from Nr.46, 3 batteries in parallel, to Nr.54 Unterbrechermotor – an Electric Engine with a Coil as its single cylinder.

The 100 models for Set 01 are on pp17-43, from Nr.01-1 Säge (2-handled Saw) to 01-100 Panzerkreuzer (Warship). There are 0- & 00-gauge railway models, 13 in all, with a Level Crossing Barrier for both gauges, an 0-gauge Buffers, and the rest Signals various. The other models include a wide range of domestic items, small trucks, carts, trucks, a Lorry, aeroplanes, guns, machine tools, windmills, cranes, & ships. Most are reasonable models considering the size of the Set. Good use is made of the Tin Lid & Base, but the Set's 2 Flexible Plates are only used in a few cases.

There are 36 models for 02 from No.02-1 Schlepper (Tractor) on p44 to Derrickkran on p71. Again a good selection of appreciably more interesting

models but with emphasis on machine tools (10), Cranes (7) & commercial vehicles (4). There are no railway models. The Flexible Plates are more in evidence though with only 3 in the Set a Lorry looks rather skeletal. Mechanical features are largely confined to cord drives, centre-pivot steering on the Tractor, and luffing on two of the Cranes. None of the Cranes has a means of preventing undemanded lowering of the load. Two models that caught my eye: a pretty Flying Aeroplane Roundabout (Fig.9), and a Futterschneidmaschine (Food Slicer).

The 13 03 models are more advanced and are more or less fully plated where appropriate. They run from 01-1 Elektrische Klingel (Electric Bell, with the bell an Elex part not in the Set) on p72 to Großer Synchronmotor (with an 11cm \emptyset , 16 pole wheel driving a piston) on p87. Other notable models are an Eddy Current Brake, a Lorry with 'proper' steering, a similar Breakdown Lorry (Fig.10), a Grabbing Crane, a Crane similar to the one on the cover (the Beam Engine isn't in the Manual), a Gantry Crane (Fig.8), a Tram, & a Monoplane. And one railway model, a Loading Gauge.

Most of the models are new designs with few, if any, adaptations of the $\frac{1}{2}$ " models, and it is strange that they include so few motor vehicles. Just one Lorry for Set 02, another, plus a variant, for 03, and no cars at all. One 02 & two 03 models are driven by the Electric Motor mounted outside the model.

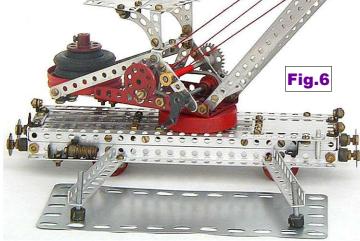
iA good halftone is provided for each model, together with a Parts List, some line drawings of details where necessary, and constructional notes for some of the more complex models. Also an account of the real life subject in many cases.

p88 has a photo of an 85cm high Windmill 'supermodel', and the next 4 pages carry ads for MINEX & other Märklin constructional sets. Then the Illustrated Parts on pp93-95, the Set Contents on p96, and another supermodel, a splendid Warship, some 130cm long, on C3, see Fig.11.

#070 GB is the English version for Set 1. It has 16 pages, 255*177mm, including covers, and the front in as Fig.1 but in B&W. The PR is A 0739 r on p3. p2 shows the parts in the Set & their quantities,

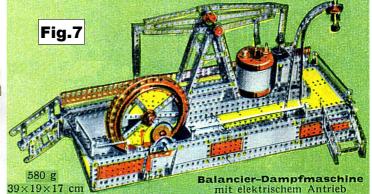
pp3-4 has the Intro, & pp5-6 Basic Constructions. pp7-15 has the first 50 models of the 100 in the main manual, from Saw to Field Howitzer with Limber. p16 shows 6 models from the larger sets including an excellent 03 Overtype Steam Engine & Boiler that isn't in the main manual.

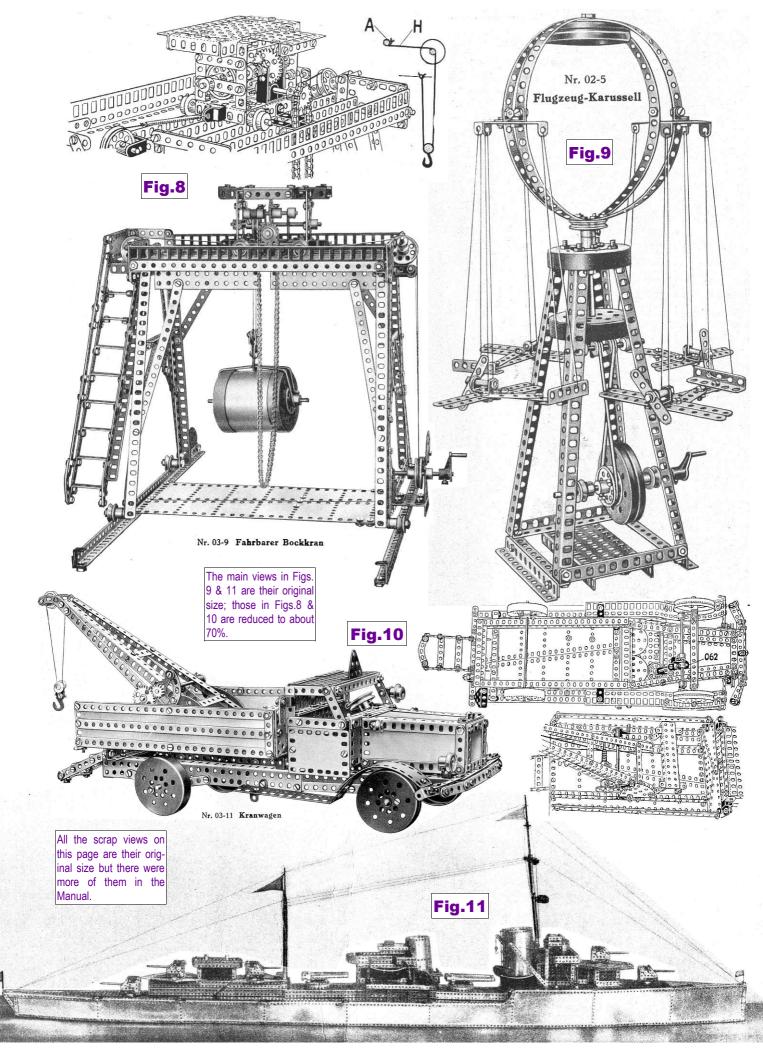
The MODELS Figs.6 & 7 give an idea of the look of actual models: the Railway Crane from my 02 set (plus the Gears & a standard MÄRKLIN postwar Flexible Plate under the model's outriggers); the Beam Engine from a Märklin brochure.



OSN 47/1437

MINEX: S3





MINEX: S4 OSN 47/1438

The DELTA-X GALAXY SETS DELTA-X was the name used in America in the 1970s for a system made by the Japanese Epoch Playthings. It had a few unusual parts and a hole pitch of 14.0mm, see 11/288 & 29/845. Space sets were mentioned in 27/811 but with no details other than sketches of 3 of the parts. Now thanks to John Peach there is information on 2 of the likely 4 sets in the space series, one called Galaxy Warship, the other Galaxy Station.

The Warship set is #7993 and the picture right covers most of the lid. The insets were along its top and a panel to its left describes the Set as having: Sturdy steel construction parts and plastic components; steel hardware and all necessary tools; wind-up motor; battery operated "laser" light; magnetic spaceman; steel cor interchangeable space play accessories; colorful flag and decorative decals.

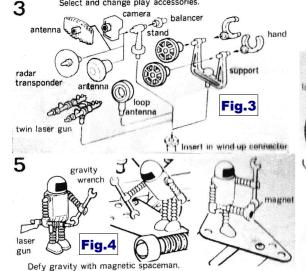
The instructions are inside the lid with the large exploded view in Fig.2 plus 6 small panels showing particular features. For example, Panels 3 & 5 in Figs.3 & 4. The metal parts are the white top & bottom halves of the main fuselage, and the double Fin unit; the red ones, the Wings & Tailplane. As can be seen many of the parts bolt together – the fuselage halves for instance by their 4h long side flanges, which also carry the Wings. The plastic parts are grey and in some cases they push together. The finished model scales at over 25cm long.

The Motor is black and looks like the one shown in 11/289 (for the STEEL CONSTRUCTION KIT model) It is mounted in the fuselage behind the cockpit and is wound from underneath. It drives the the rear Wheels – the front Wheels are not shown in Fig.1 and the model can in fact sit on 3 Feet which would be bolted to the underside of the fuselage, rather than the 4 Wheels. The winding spindle extends upwards and the various space play accessories (Fig.3) push onto it. So they rotate as the Motor runs. The details of the flashing Light will be clear from Fig.2. The Spacemen (Fig.4) is white with

be clear from Fig.2. The Spaceman (Fig.4) is white with jointed limbs and magnets in the feet. It scales at (very approximately) 7cm high.

A Set seen on Ebay says it was made in 1978.

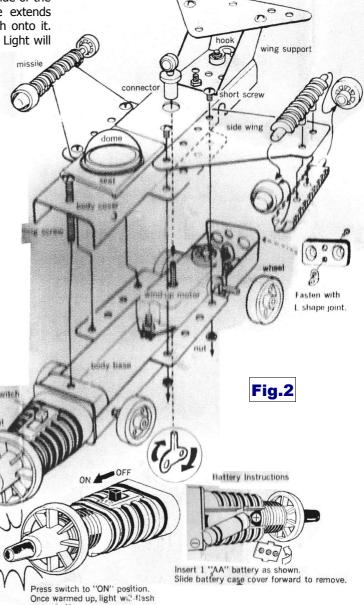
The Station set is #7994 and the lid has the same layout as the Warship. The description too is the same except that 'Operating Winch' replaces the 'Wind-up motor'. The picture has suffered and only the bare outlines of the model can be seen. The main parts seem to be a rectangular base, which may include the 81/2*151/2cm part with 45° flanges in OSN 27, and a square section tower sitting on one end of it. Its 2 sides that can be seen are made from the other 2 OSN 27 parts, with the righthand Plate at the base's short side. Said Plate has 2 Trunnions bolted to the shorter slotted holes and a cord with Hook runs over a Pulley between their apex holes into the Plate's long slot. A transparent dome sits on top of the tower and a Spaceman stands on a small platform alongside it. Another tower of about the same height but of smaller, circular section is attached near the top of the main tower, on the side Select and change play accessorie





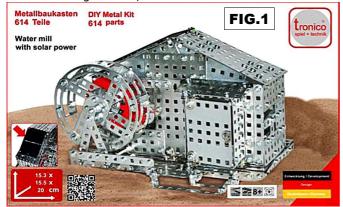
opposite to the one with the Trunnions. It has the Light at its summit.

John wrote that the metal parts are strong, and that the N&B have a brass look & run together excellently.



OSN 47/1439 DELTAX: S2

TRONICO. John Peach & Paul Goodman kindly sent items of interest. John had bought the Wind Turbine set (see Fig.4 of 46/1395) from a branch of a shop called Nauticalia. It is Art. No.10131, has 592 parts, was made in China, and bore the TRONICA name. 3 other Solar sets were shown on the box, a Ferris Wheel #10132, an Oil Drilling Station #10134, and, the least interesting of the 3, the Water Mill #10333 below. These

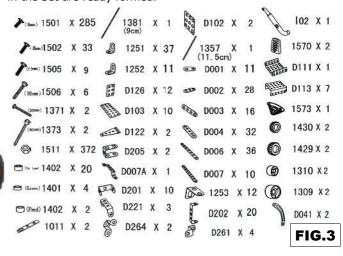


sets are no longer listed and a hunt for photos on the web (those on the box are very poor) yielded only the Water Mill above, from a shop in Australia. The best model is probably



John also bought one of the TRONICO Tractors that were described in 46/1396, and, see www.tronico.de, other models have been added to the range since OSN 46. One is the Linde Forklift Truck H30 (#10092) in Fig.2, with 668 parts. It is to the usual ½6-scale and is said to be steerable

Paul also bought a Tractor set but from a MECCANO enthusiast (it has originally also come from Nauticalia) with the model, the Massey Ferguson, ready made. It is 11" long, 61/2" wide, 71/2" high, and is all metal apart from the Wheels & a few trim items. The Instructions are in the form of 20 building steps in B&W over 7 A3 sides plus an A4 sheet with 6 colour photos of the finished model. The model isn't powered. As found the alignment of the front wheels looks doubtful and the Steering Wheel doesn't turn them. It's clear from the parts that an offset Pin at the bottom of the steering column is meant to operate the steering but just how is unclear from the Instructions. The parts in the Set are shown below. The Bolt lengths are 6, 8, 12, 18, 30, & 50mm, and the plastic Spacers #1402, 1401, 1402 are yellow, green, & red. Parts #1570 form the seat, and #1573 is the Steering Wheel. All the Strips are shown straight and the Instructions show them being formed where necessary by hand. But those in Paul's model look very free from any sign of kinking, and I wonder if the actual parts in the Set are ready formed.



TRONICO: S2 OSN 47/1440

Snippet. 'New' System: another DER KLEINE INGENIEUR With its dedicated parts for a fairground ride Car, and seeming emphasis on fairground models, the Ebay set right appears to be different in character to the other three

known DKI's (DKI1-3), all probably small systems. DKI1 was mentioned in 17/476 & a small set with STABIL-style parts is shown on p220 of Baukästen. DKI2 looks akin to METALLIX and a small set with light-coloured, probably aluminium parts, was described in 43/1320. Finally DKI3, a small set was shown in 44/1324 with contents consisting of Strips, and small circular parts running on Screwed Rods.

The name on the lid of the present set is hard to read, and the words under it are indecipherable but the Ebay announcement mentioned 'BÖHAG Gera' – presumably the maker, situated in Gera, a city 60km south of

Leipzig. '1940s' was also mentioned, and if correct, probably means that the system was East German.

Little can be seen of the parts in the present set beyond Strips, A/Gs, Pulleys with tapped bosses & Rubber Rings (or Tyres), and the parts for the Cars.



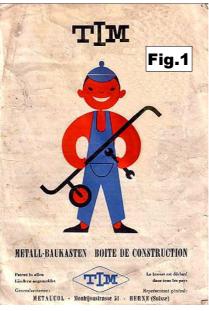
More TIM TIM, a set to make child-size toys, Scooters etc, was described in 34/1025. Urs Flammer recently acquired a set in Switzerland and kindly sent some notes about it, plus photos of the two models he had made.

The Set is the same as the one in OSN 34 but in addition to the model sheets it included a leaflet & an order form. The former is one sheet folded to give 4 sides and has the front in Fig.1. The back page has a price list of separate parts; the inside pages constructional hints in French &

The Order Form, in Italian as well as French & German, is a freepost card addressed to Firma Metaucol, Monbijoustrasse, Berne, and this firm is named as Représentant Général on the the front of the Leaflet. Also the construction hints are signed Tim, Metaucol, Berne. This supports the view in OSN 34 that TIM was probably Swiss, and further suggests that TIM was probably made by, or for, Metaucol.

The date given in OSN 34 of 1949 or soon afterwards, is suggested by the French also supported because the seller of Urs' set thought that his father had bought it from a cycle shop in about 1951, and Urs judged that from the address & general layout of the Order Form it is likely to have been from sometime in the early 50s.

The parts, mostly metal but with yellow painted Wooden Plates, are as in OSN 34 but Urs noted that the threads are, as would be expected, metric: M4 & M8. Also that the part with a question mark by it, bottom right in 34/1025, is used to lock the Saddle, to prevent it from turning. It is not mentioned in the instructions, nor is it included in the Price List. The Wheel is fitted with a centre bronze bearing (and not the ball race system more of a toy for fathers than for youngsters.



version of the Instructions) and it was to be lightly greased. Light greasing was also

suggested to ease assemble if any difficulties were met.

Urs' models are shown in Figs.2 & 3. The Scooter is 100cm long, its Saddle 50cm high, its handlebars 80cm. The Trailer's platform is 36*85cm and it is shown being put to good use.

Fig.2

In conclusion Urs wrote that that construction of the models was relatively simple but the size of the parts makes the



Snippets. The DUX 121 & 122Z Train Outfits. Notes on the manual models from these sets, and the Loco Outfit Nr.120, were given in 43/1299. Now to hand Ebay photos of the 121 & 122Z sets (the 'Z' is for Zusatzkasten, (Add-on Set)) because its models need parts from the smallest standard set Nr.101.

To the right, the 121's lid (its bottom has been cut off by a few centimetres). It is one of the

two DUX lid designs, the 122Z lid is the other type with the same layout but with a Fire Escape replacing the Crane.

IVERS 121

Fig.2 shows the 121 and all the major different parts can be seen (see OSN 43 for the contents of the sets). Presumably some of the parts are stacked. Another photo shows the blue box open and it contains the rest of the parts: N&B, A/Bs, Axles, Spanners, & Buffers. It also contains a woodenhandled Screwdriver not called up in the inventory.

Fig.3

As explained in OSN 43 there was one manual which covered all of the

three Railway sets. The one shown with the 121 has the expected cover, as in Fig.4 in OSN 43.

Below the 122Z and, assuming some stacking, it is complete (the 60mm Smooth Shafts, #1041b, are below the centre Roof Sheets #120/1).





'New' System: CURTAIN WALL **BUILDER** My thanks to Kendrick Bisset for details of a Set No.620 from this American architectural system, and to Jacques Pitrat for notes on a No.630 outfit. The models are said to be $\frac{1}{8}$ " to the foot, as for HO trains. The 620 set is shown right, the cannister is cardboard with a metal lid, just like TINKERTOY, and CWB was made by the same firm, The Toy Tinkers Division of A.G.Spalding & Bros. Inc., 807 Greenwood St., Evanston, Illinois (near Chicago). 'Patents pending' is printed on the cannister & on the Model Leaflet. The only date known is © 1959 on the Model Leaflet.

The PARTS Most of them are shown in Figs.1 & 2, & the latter also includes some sketches of details. 8 of the 17 parts are painted steel: pierced Window Wall panels (WW), bluegreen with silver, impressed ridge uprights), 11/2" high & 1, 2 & 3" long); Solid Walls (SW, similar to WW but not pierced, and in the same 3 sizes); and the Outer & Inner Corners (OC, IC) finished to match the Panels. Each

metal part has a tab on one side flange & a slot in the other. Short round spigots are formed into the top flanges of the Walls & Windows and their bottom flanges have a row of 3.1mm Ø holes at 1/4" pitch.

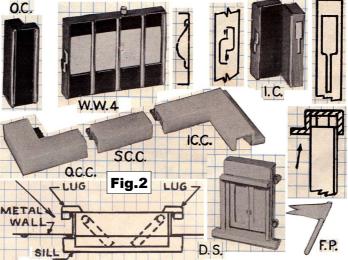
5 parts are off-white plastic: the Coping parts (OCC, SCC, ICC); the Door Section DS, 1" wide, with 2 opening doors, & grooved sides; and the Flag Pole FP.

The yellow plastic transparent Windows are in 3 widths to suit the Window Wall panels. The Roof Sheet is the rolled cardboard sheet to the right of the tube in Fig.1.

ASSEMBLY Walls are made from the steel parts. The tabs & slots engage to join the Wall &

Window panels to each other & to the Corners. The Windows spring into tabs at the top & bottom of the window framing. The Door Unit slides over the flanged ends of the Walls or





simply locate in the holes in the walling above. The Coping parts are pushed down over the top of the finished walls. Only flat roofs are possible and the Roof has to be cut to fit the model so that it lies on the inner flanges of the coping (arrowed in Fig.2). If one storey is set back on all sides from the one below it isn't located in any way. The Flagpole is pushed into a hole 'to be punched in the roofing'.

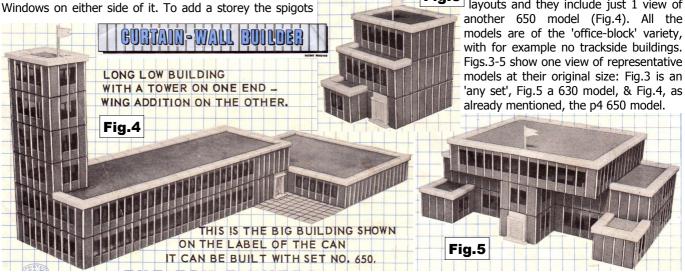
The SETS There were 5 sets, Nos.610 to 650, from \$2 upwards. All were packed in similar cannisters but with a different size for each set. The 630 is 357mm high & 141mm Ø; the others range from approximately 28cm*11cm Ø to 47cm*16cm Ø. No set inventories are known but the smallest must contain most, if not, all of the

different parts. According to the cannisters the 620 has 123 pieces and the 630, 197.

The MODEL LEAFLET is headed 'CURTAIN-WALL BUILDER (with a hyphen) Plan Book', and is a sheet folded over to give 4 pages 81/2*11". Most of the parts are illustrated and pp1 & 4 have guite thorough instructions on how the parts are assembled and models constructed. The models are on pp2-3: 4 are shown which can be made from any set, plus

3,2,1,1 for Sets 620-650. A front view & floor plan is shown for each, and a rear view for most, but there is no Parts List. p4 also has 6 examples of different building Fig.3 layouts and they include just 1 view of

'any set', Fig.5 a 630 model, & Fig.4, as



KA-KA-HA Something on this rare early 1950s East German system was given in 36/1090 and, with a few details, in 43/1317. Now thanks to Urs Flammer, a much fuller account based on his set & two manuals. (Urs confirmed that KA-KA-HA was from East Germany, the 'W' in the 1951 manual's PR in OSN 43 was a red herring because there is a 'P' instead in the 1952 manual to be described.) There is nothing to indicate the set size but as with appear it may be a No.2, and for convenience I'll called it so. Figs.1 & 2 show the lid, open box, & the different parts in it (with the N&B inset at a larger scale). It contains more parts than would be expected.

The PARTS Holes are 4.2mm at 12.8mm pitch. The thread is M4. The parts in the inventory given in the manuals are as follows, with my names, comments as needed, & quantities in curly brackets: • 12,9,7,5,3h **Strips** (11h Strips are shown in some manual models and are called up in some of their Parts Lists) {6,4,4,8,6} • 12,5h **A/Gs** (in Fig.2 a 5h is overlaid on the right end of the 12h) {4,4} • Brackets, Angle, Flat, & Double {8,8,3} • Loose Pulleys, Large & Small {4,4} • Double Bent Strip {3} • 1*3,5*1h DAS {4,4} • Spanner {2} • Screwdriver {1} (missing but 2 with wooden handles are shown in OSN 43) • Nut {60} • Bolt {50} • Flanged Plates, Large & Small {1,2} (the Large is 5*11h with slotted holes in the flanges; the 3 Small in the set are 7*5.6h & 5*3h. all with round flange holes • Screwed Rods, 90,60,25mm {2,2,1} • **Rectangular Plate** {1} (Missing and it is something of a mystery. Its size is unclear in the manual models, but possibly 3*7h or 5*5h. However its German name is Rech+ teckplatte but Platten (Plates) of these sizes are called up in some of the larger models as well as a Rechteckplatte.).

Other parts which are used in the No.2 manual models are • **Rubber Ring** for the Small Pulley {4} • **Flanged Disc Pulley** {2} (unlike the other part it is made of Dural).

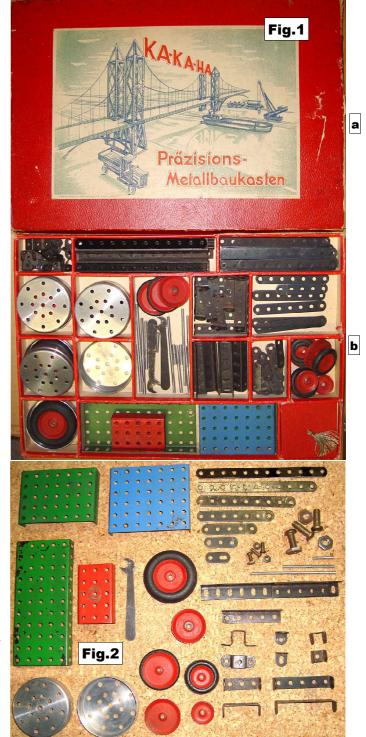
Parts used in the larger manual models are • **Rubber Ring** for the Large Pulley (as in the Set), **21h Strip & A/G**. • **Plates** 5*5h, 5*7h, & 3*7h.

As well as a 21h Strip & 21h A/G the OSN 43 set contained an 8h long **Flanged Sector Plate**, credible because it matched the $7*\underline{6}h$ Flanged Plate in colour. And looking at that set again the part described as a Girder Bracket is almost certainly a $\underline{5}*3h$ Flanged Plate.

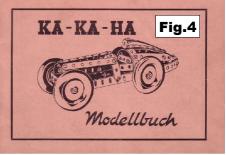
The MANUALS The 1950 (from its PR) manual has 16 coloured pages including covers, $21*14\frac{1}{4}$ cm. The front is shown in Fig.3. p2 (=C2) has the inventory and the first 3 of 29 models – they go from Leiter (Ladder) to Windmühle on p14. p15 has a farewell message, and p16 is blank except for the PR: Setz und Druck: H(20) Buchdruckerei G. Satke, Halle 29428 30 9 50 1500. There is one large drawing of each model and a Parts List for all but the first 13 – the latter small, simple models labelled Abb.1-13 with their names on p4. The rest of

the models, a good selection, are a little larger and though quite simple mechanically, generally look the part. All the models can be made (more or less) from the inventory parts and the 2 'other parts' above. No mention is made anywhere of there being more than one, unidentified set. One of the smaller and 2 of the larger models are shown on the right side of Fig.5. (For greater clarity all the Fig.5 models have had their background colour removed.)

The 1952 version has 24 pages of the same size, with pink covers and beige inside pages. Fig.4 is the front cover. p2 has the inventory, identical to the 1950 one, and a Parts List for the Rennwagen on the cover. The next 29 models on pp3-15 are as before but the first 13 are not in the same order. Then there are 8 slightly larger models. 6 are marked as needing Set 2 & 2a and the other 2 would also need both sets (one, an Electric Truck, has no name or Parts List). The 8 models go from Traktor 1 on p16 to Fahrstuhl (Lift) on p23. The models

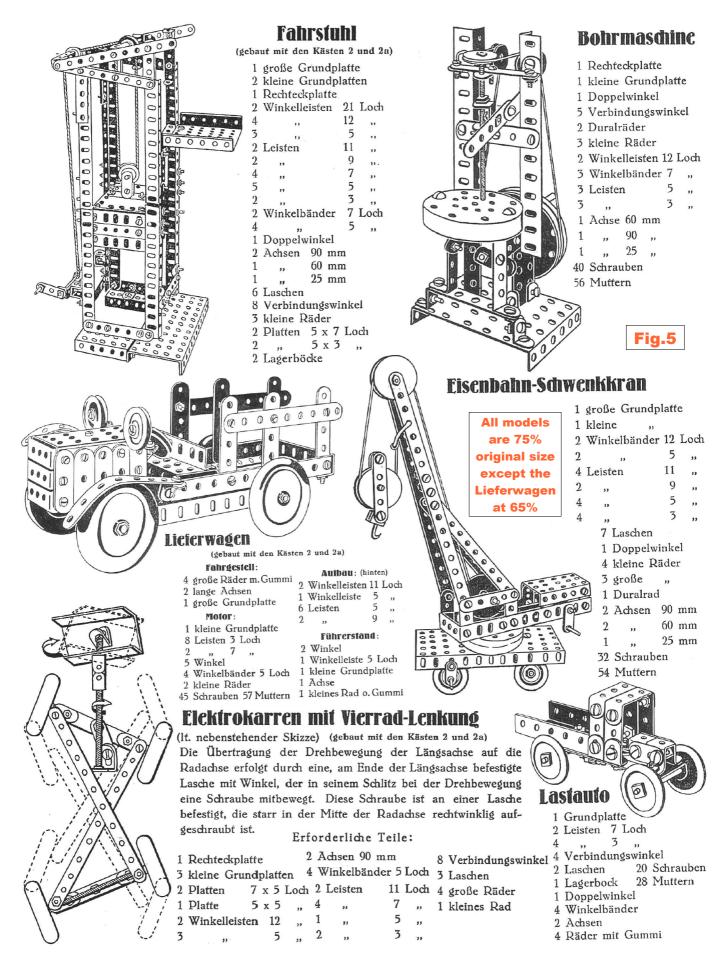






include the 3 in Fig.5, 2 Tractors, a Crane, and a Mechanical Fretsaw. P24 has the same farewell message, a recommendation for Sets 2a & 3a, and the PR: Setz und Druck: IV/10/6 Buchdruckerei G. Satke, Halle P 335 500 31494/52.

The SETS That the larger models in the '1952' manual need Sets 2 & 2a points to the smaller ones needing only Set 2 – hence the notion that Urs' set is a No.2. It might of course be an early unnumbered set, or a No.3, assuming such a set existed, but both possibilities are less likely because the PR for



Urs' lid label gives it a date of 1952, and although his set has the large Rubber Rings & extra Flanged Disc Pulleys, it has no 21h parts and none of the Plates used in the 2+2a models. Also the box of the Ebay set in OSN 43 is larger than Urs' and so might be a No.3, or a No.4.

The No.2 box measures 270*390*25mm and the maker is

shown in small print along the bottom of the lid label: Phönix-Produktiv – Genossenschaft, GmbH, Halle/S.

From the manual models the parts in the Set 2a included 4 Large Rubber Rings, and 2 each of the 3*7 & 5*5h Plates, and of the 21h Strip & A/G.

SCIENTIFIC This name on the lids of this Dutch system is accompanied by Bouwdoos meaning construction set. As mentioned in 8/192 many features of SCIENTIFIC match those of MÄRKLIN, particularly the set contents & the manual models.

This account is based on 2 sets to hand, a No.1 & 1A, both incomplete and without manuals, plus some sets seen on Ebay: 1 each of a 0 & 0A, 2 each of Nos.1 & 1A, and one No.2. My thanks to Jan Ringnalda for the information he sent.

The SETS Although only Sets 0-2 have been seen there was almost certainly a No.3 as well, and perhaps a No.4. Fig.3, translated from the Dutch, has the Set Contents of Sets 0-2 with the 'A' sets omitted. The contents of the various sets are identical to early 1920s MÄRKLIN outfits. Justification for the No.3 comes from seeing No.3 models in a manual and from a spare parts price

list which has all the parts needed for an early 1920s MÄRKLIN No.3 (plus one other, see below). The evidence for a No.4 is a manual cover which has 'No. 0 t/m 4' (0 through 4) on it, and said manual is included in the Price List.

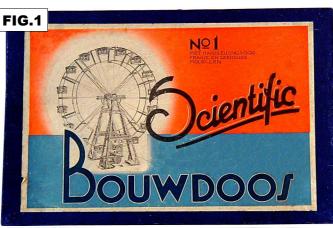
The BOXES The No.1, 1A, & 2 boxes seen are dark blue, or possibly black for some. Labels for the main sets, 31½* 21cm, are as Fig.1, and feature the early MÄRKLIN Big Wheel, with a similar design for the 1A but without the model. A label inside the lid gives the set contents. The No.1 & 1A both measure 35¾*24*3½cm; the No.2 is 49*44cm. Partitioning gives them 10, 9, & 22 compartments respectively. The 0 & 0A have similar boxes but they are smaller and scale at 32*21cm & 29* 15cm. Their labels are basically as the 1 & 1A in design but with small changes to the layout of the wording.

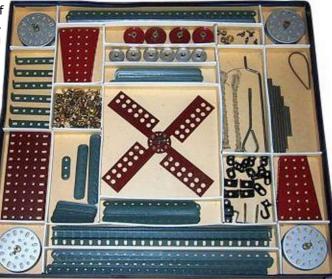
The PARTS Many of the parts can be seen in Fig.2, a No.2 set. The only main part missing is the 5*7h Flanged Plate. The only parts which differ obviously from their MÄRKLIN counterparts are the Windmill Sail with its round holes, the Flanged Pulley with no face holes, and the Bush Wheel in the centre of the Windmill Sails which appears to have 16 face holes – in the one other Bush Wheel seen in a set it has the usual 8 holes.

The parts in the price list but not in Set 2 are: #4, 6h Strip; #9, 11h A/G; #18, 3cm Axle; #21, 38mm Pulley; #25,26, 18, 14mm Pinions; #27, 35mm Gear; #32 14mm Worm; #33, Pawl; #46, 2*5*2h DAS; #53, Small Flanged Plate; #66, Large Flanged Disc; #68, Bandjes (Bands – the only

part without a MÄRKLIN equivalent – the MÄRKLIN #68 was the 19.5cn \emptyset Flanged Ring, a part only in Set 6).

The Parts to hand The main ones missing are the Flanged Plate, the Flanged Disc Pulley, & the Bush Wheel. Of the parts shown right the 5h Strip is prewar MÄRKLIN for





comparison. **Holes** are 4.1-4.3mm at 12.7mm pitch, but 12.65 in the A/G. **Slots** are 7.8mm but 8.3 in the A/G. The **thread** is 5/32" BSW'. **Bosses** are single-tapped with a bore of 4.1mm and deeply recessed peening. **Axles** are 4.05mm Ø. **Strips** are 13-13.4mm wide except the 25h at 12.0. Their line of holes is sometimes offset from the centreline. The **D/B** is

11 **Double Bracket** 1 4 12 Angle Bracket 8 12 12 15 Axle 13cm 3 Axle 11½cm 2 3 3 15a --16 Axle 9cm 1 2 2 2 17 Axle 5cm Crank Handle 19 1 1 1 __ 4 20 Flanged Pulley --Pulley 25mm 4 6 6 22 23 Loose Pulley 12mm 1 1 1 24 **Bush Wheel** 1 1 1 4 6 6 35 Spring Clip 36 Screwdriver 1 1 37 Nut & Bolt 25 30 65 2 Cord 4m 40 1 1 44 Dble Bracket 2h high 1 1 1 45 Double Bent Strip 1 47 2 2 Reversed A/B __ 1 52 Large Flanged Plate 1 1 2 54 Flanged Sector Plate 1 2 55 Spring Cord 1 1 57 Hook 1 1 1 59 Collar 2 4 60 DAS 1*5*1h 1 4 6 61 Windmill Sail 4 67 Flanged Disc Pulley 2 4 FIG.3 17mm. The

1 2

16

2

2

2

0

-- 4 10

4

-- 1

9 9 12

-- | -- | 4

4 4 4

PN

1

2

2a

3

5

7

8

10

Part

Set:

Strip 25h

Strip 11h

Strip 9h

Strip 7h

Strip 5h

Strip 3h

A/G 25h

Flat Brkt

20mm wide; the 2h high version, 17mm. The **Pulley** has 25.2mm aluminium discs & a 10mm Ø steel boss. The **Flanged Pulley** has 35.5mm Ø aluminium discs and a 9½mm Ø brass boss. The holes in the **Windmill Sale** are 6.8mm Ø. The **Crank Handle** is 165mm long o/a. **N&B** The two Sets were in one lot and included two types: (1) Brass Bolt with 5.1mm Ø CH, & square steel Nut, 8.1 A/F; (2) Nickelled Bolt with 8mm RH, & square brassed Nut, 8.5mm A/F. Both Bolts are 8mm u/h. The **Set Screw** is steel, 5½mm u/h, with a 5.5mm Ø CH. A 4mm long **Grub Screw** was found in 2 of



OSN 47/1445 SCIENTIFIC: S1

the Collars. The **Spring Clip** has narrowed wings but is of soft or were made under licence remains to be seen. steel with little grip. Finish The A/G, DAS, & most Strips are dark green but the 25h is slightly lighter. The Sector Plate matches the Windmill Sail but both have probably been repainted. So originally they may have matched the Flanged Pulley. Brackets are painted black.

The EBAY SETS The Flanged Disc Pulleys in all of the sets look to be painted silver. The only Bush Wheel in them is red. In all the sets save the No.2 the red parts are a lightish shade. 3 have bluish-green parts similar to the prewar MÄRKLIN shade, one has dark green parts as in my sets, and one has a mix of the 2 colours. In the one set other than the No.2 with a Windmill Sail, it has rectangular cutouts, but there are parts from several other systems in the box. The set with the mix of green parts has a Sector Plate with only a single row of lengthways holes.

The MANUALS The Price List includes manuals 0-1, 0-2 & 0-4. The known covers are similar to the Fig.1 label. Otherwise nothing is known of them except that the illustrated parts & drawings of the models in the few pages seen are identical to those in prewar MÄRKLIN manuals, from the early 1920s in

The MÄRKLIN CONNECTION The parts in the sets to hand look like MÄRKLIN but, quite apart from their finish, none exactly match the German parts, and while adequate, none match their quality. It has been said that SCIENTIFIC existed prewar and there is no very good reason to think otherwise. However when MCS talks of the 1920s one may wonder because Märklin did not introduce coloured parts until around 1929. The use of the Märklin models and their distinctive shade of green paint would have almost certainly meant a Märklin connection but whether the parts came from Germany

One puzzle though. If SCIENTIFIC was introduced in the 1930s with Märklin's blessing why would an early 1920s Illustrated Parts be used in at least one manual? And could that early pattern Sector Plate seen in one Ebay set be genuine?

The parts in my sets would no doubt have been made in Holland after the war, either before Märklin got on its feet again or with their agreement. (The latter was presumable the case for the postwar Austrian METEOR which used MÄRKLIN models in its manuals, see 12/302.)

The argument that SCIENTIFIC was only postwar is more difficult. One could imagine a small system based on MÄRKLIN being launched soon after the war with models taken from whatever manuals were to hand but why would the change from the MÄRKLIN green to dark green have been made? If Märklin didn't object to their models being copied they would hardly baulk at the use of 'their' colour. Or was the change of colour the other way round, and if so why? To make the parts look more attractive perhaps but I'm not convinced. It would be interesting to know if the parts in the sets with bluish-green parts are like those described here or if they are exactly like MÄRKLIN.

POSTSCRIPT A No.1A seen on Marktplaats has silver Flanged Disc Pulleys, Strips etc in prewar MÄRKLIN green, MÄRKLIN pattern (ie with rectangular cutouts), lightish red Windmill Sails, and brass looking Flanged Pulleys with 4 face holes. It was said to be complete and to perhaps be from the 1950s. Another, also said to perhaps date from the 1950s, is the same except that the Flanged Disc Pulleys are blue and the DAS a lightish green.

SCIENTIFIC: S2 OSN 47/1446

Fig.2

Snippets. More on FRI-DIE Since Jacques Pitrat's description of his

set in 35/1048, 4 other sets have been seen on Ebay, including one with coloured parts.

2 sets have identical boxes to Jacques' & they have the same range of parts too, all black except lighter Wheel Discs (Jacques' were also lighter but

it doesn't show in the OSN 35 photo). Both these sets have more parts than Jacques' & one has over 50 A/Gs. Of the other parts it is likely that Sets should have 2 Hooks, 4 each of the Wheel & Pulley Discs, and possibly 1 or 2 Flat Girders. One set has the OSN 35 Model Leaflet; the other doesn't have one.

One of the other 2 sets one has the same box but it contains some additional different types of part (Fig.1) as follows. • 2x <u>3</u>*3h Flanged Plates, a long Flat Plate, & a Wire Screwdriver, all in the righthand tray. • 9h Flat Girders and 2 bright Strips, probably 3 & 8h long, in the neighbouring bay. • A bright part in the top left bay which may be a Disc appreciably larger than the Wheel Disc. Also in this bay a Pulley Disc with 4 peripheral holes, and another can be seen in the adjoining long bay. There was no Model Sheet with this set.

The fourth set is shown in Fig.2 and has the same size box as the others. Its lid is red with the same label nearly covering it, identical to the set with coloured parts on p218 in Baukästen. For reference the types of parts in this last set look like Jacques' except that it has 9h as well as 4h long Flat Girders, & its Screwdriver has a much shorter blade. The length of the Flat Girders in the Fig.2 set can't be seen.

Fig.1

New parts in the Set, assuming they are original, are the Tyres & the 2*2h yellow Plate in the bottom tray. At a glance I wondered if the latter was a backing card but on closer inspection it is probably flanged & looks about the size of the 3* 3h in the Fig.1 set. And I suppose that the hole that can be seen between it and the parts to its left is in the bottom of the tray and not in a light coloured Flat Plate. As in the Fig.1 set the red Pulley Discs

FRI-DIE-METALLBAUKASTEN

have the ring of 4 holes.

It isn't clear if it is a Leaflet or a Manual above the Set. The Bus on its front is a model on the reverse side of the OSN 35 Model Leaflet (which I omitted by mistake from the models shown in OSN 35). The PR was given as 754/500 11 48 KL.1, so a 1948 or 1954 date is possible - 1948 is at the end of FRI-DIE's mooted period. Richard Lüking G.m.b.H of Brackwede was also mentioned, a different name to the one in OSN 35, so possibly the printer.

FRI-DIE: S1 OSN 47/1446 When Märklin made MECCANO Parts David Hobson told me about a Dutch website, www.famoustoys.com. It is run by Henk Brouwer, a MECCANO enthusiast, and as well as items for sale, it has numerous photos of sets under the 'Collection' button, with brief details of them in English. Included are sets for the German market and a note about them which has points of interest. What follows is a paraphrase of it, with my comments in square brackets. The details of the manuals mentioned are taken from Henk's German Manuals page in the Meccano-Märklin section at www.nzmeccano.com/image-41457&page=, & Henk kindly gave permission to reproduce Figs. 1-4.

Up until 1911 MECCANO for European markets was handled by Weimar Brothers, a Rotterdam wholesaler. This ended over a dispute about patent rights for a system similar to MECCANO then being sold by Weimar [no doubt DER JUNGE MECHANIKER, see 20/568]. [A 1911 French Märklin catalogue from Maerklin Frères et Cie, 416 rue St. Honoré, Paris, included all the MECCANO sets of the time including HSMD, & extra parts #1-55.]

1912 to 1916 In 1912 Hornby opened a German distribution company called Meccano GmbH at Bürohaus Borse, Burgstrasse 28, Berlin C.2. Sets exported from Liverpool to mainland Europe had black finished parts, to differentiate them from STABIL's nickel. Fig.2 is a 1913-16 manual cover [with no mention of Märklin]; the same cover was used in 1912-13 but the model at the top was the Windmill & the price was 0.75 Pfg. These manuals were printed in the UK but a 1916 edition, price Mk. 1.50, was printed in Berlin, Manuals after 1916 all had the same style of cover but the text below the main MECCANO name varied. Lid labels were as Fig.1 but without the Märklin logo at the bottom of the Tower. [The Paris office was also set up in 1912 and as far as I know French sets had nickelled parts. On the black parts in the German sets, most sources suggest that they were made by Märklin for Meccano, but Henk is adamant that this is incorrect. Between 1912 & WW1 Märklin were supplying Meccano with C/W Motors, some 60000 all told it's said.]

After about 1916 the black parts were painted instead of chemically treated, and due to shortages during the war bronze painted Berlin C.2, Burgstr. 28, Bürohaus Börse steel replaced brass parts. Also a small box label with just MECCANO on it (Fig.5) was used from about the same time, and the N&B box had a plain label with a red dot on it. Such a set can be seen in Eisenzeit, Tafel 28. However it is suggested that these sets were sold through Märklin dealers [with sets for Meccano dealers as before?]. The firm in the text on a 1918 cover (Fig.3) is Märklin, Department Meccano, with wholesaling & distribution from what had been Meccano's Berlin address, & production & management at Göppingen (Märklin's factory). [Presumably Märklin were making these sets, after prewar stock from Liverpool was exhausted. Imports via say the Netherlands, neutral during WW1, would have been unlikely, certainly after 1916.] In 1917 Märklin obtained rights to the Meccano brand in Germany. A manual with Oct. 1918 printed in it has the same text as Fig.3 except that the

wholesaling & distribution is now also from Göppingen. [At the outbreak of WW1 the German government confiscated enemy assets, including Meccano's, and presumably Märklin had at least the right to carry on Meccano's business from then on.]

From October 1918 [the armistice was not until November] to August 1919 there were

joint Meccano-Märklin outfits. Softer steel was used for the Strips & they were a different purplish-black colour. The larger cut from a manual in Fig.4 has MÄRKLIN immediately beneath MECCANO, & has the Märklin logo as well as the usual Meccano ones [as in Fig.2]. It is dated 1919 from an Aug. 1919 PL stuck in it. [Some parts, perhaps from this period are stamped with the Märklin logo as well as MECCANO (Fig.6). I have 4 such, a DAS, and Strips with 6, 7, & 11 holes: 2 could be said to look somewhat purplish, the

other a not very intense black. They are not of very good quality, the hole pitch of the 11h is 12.6mm.]

MÄRKLIN sets were introduced in August 1919, at first using MECCANO boxes with green interiors and a red-edged label over the MECCANO one. At the end of 1919 the interior colour was changed to red and there was a change to the numbering system.

In 1928 after a legal dispute between the companies was settled, Meccano open a new sales office at Alte Jakobstrasse 20-22, Berlin SW.68. [My pet theory, with nothing at all to back it up, is that soon after the war ended the companies agreed that for 10 years MECCANO would not be sold in Germany and Märklin would leave the small model railway market in England to Hornby.]

[A Curiosity Leaving Henk's material, a German Ebay item showed 2 sets, a No.1 in a black box with the Fig.5 label, & the No.2 in Fig.7. Apart from the Set No. roundel, probably stuck on, & its language, the label is that of a 1-model set sold here in about 1913, see CQ36, p40. The English slogan 'You Make It Yourself' became 'Man Baut Alles Selbst' (You Build Everything Yourself). So presumably the 1-model set was sold in Germany at about the same time as here, & left over labels were used towards the end of the war. Fig.7 also shows the bottom of the original label & Henk suggested that it might well be from an HSMD Set A - the partitioning doesn't quite match the illustration on p46 of The Meccano System, but it does contain a bay large enough to take the HSMD 19*11h Flanged Plate. The Strips, Plates, etc in both boxes were black, but whether they were painted or chemically treated couldn't be seen. That there were labels & boxes left over in Germany seems to me to point to some sets at least being, at a minimum, assembled in Germany rather than being imported ready-made.]





Deutsche Arbeit

Anleitung zum Aufbau sämtlicher vorgezeichneter Modelle Eigenes Schaffen - Höchster Gewinn!

6 Grundkästen! aaaaaaa 5 Ergänzungskästen Fig.3 Für einmalige oder ergänzende Anschaffung!

ertrieb und Versand: Gebr. Märklin & Cie. Fabrikation und Geschäftsleitung: Abteilung MECCANO Detailverkauf in allen besseren Spiels und Lehrmittelgeschäften, bei Optikern usw.

Anleitungsbuch mit Vorlagen für über hundert unterhaltende und lehrreiche Modelle zu den dreizehn verschiedenen Meccano-Baukasten. Fig.4 Gebr. Märklin & Cie., Göppingen (Württemberg) Fabrik feiner Metallspictware - Abteilung MECCANO -





MECCANO-MÄRKLIN: S1

'New' System: EASY-DO As will appear this UK system is closely related to the ALUMINIUM CONSTR+ UCTION OUTFIT (ACO) & ELGIN, two small early post-WW2 systems which were discussed in 11/282, and which were virtually identical. To recap the structural parts & Wheels were aluminium alloy, holes were 3.9mm at 12.7mm pitch, but Strips were 9/16" wide. One of each type of the parts is shown in Fig.5. A few A/Gs seen have square corners. There were Sets 0 & 1, but also for ACO, a Set A identical to the No.1 (an ACO No.1 is said to exist but the 3 larger ACO sets seen have all been Set A). One strange thing was that there seems to have never been a manual for either - each set had a large drawing of a model on the lid, and a leaflet (always entitled ACO even in the ELGIN outfits) which extolled the system's virtues, gave the contents of Sets 0 & 1, and had small

drawings of 4 models, 3 very simple plus a 6-wheel Van or Bus. Nothing is known of the maker.

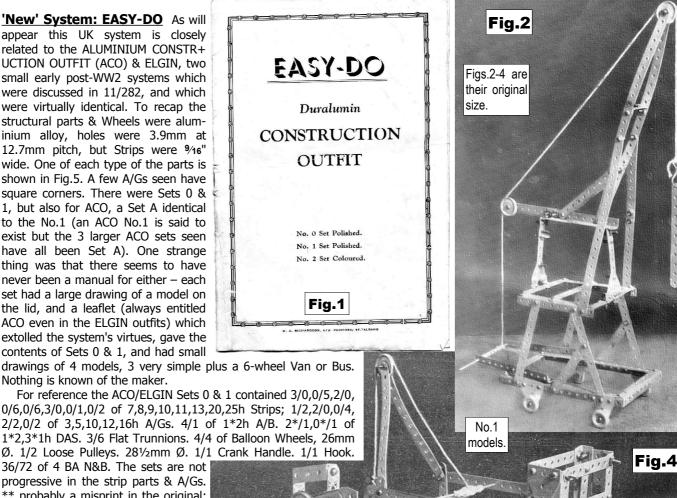
For reference the ACO/ELGIN Sets 0 & 1 contained 3/0,0/5,2/0, 0/6,0/6,3/0,0/1,0/2 of 7,8,9,10,11,13,20,25h Strips; 1/2,2/0,0/4, 2/2,0/2 of 3,5,10,12,16h A/Gs. 4/1 of 1*2h A/B. 2*/1,0*/1 of 1*2,3*1h DAS. 3/6 Flat Trunnions. 4/4 of Balloon Wheels, 26mm

36/72 of 4 BA N&B. The sets are not progressive in the strip parts & A/Gs. ** probably a misprint in the original: 2x 3h & no 2h DAS are found in the No.0 and one at least is needed in the featured Digger.

EASY-DO The only material known is a booklet with 8 unnumbered pages, 185*124mm which goes some way towards being a manual. The front, Fig.1, lists Nos.0 & 1 Sets 'Polished', and No.2 Set 'Coloured'. At the bottom is the printer, H.A.Richardson, St. Albans. p2 has a photo of 4 Set 0 models, p3 an intro half of which is word for word the same as in the ACO leaflet, & p5 has more promotional text including that to show the full range of models 'would spoil the

inventive mind of the young enthusiast'. p7 has an entry form for a model competition with a Presentation Set offered for any model printed in the booklet. Also on this page the maker: Messrs. H. F. Pepper & Co., Tudor House, 13 Alma Road, St. Albans, Herts.

The other pages, 4, 6, & 8 have photos of 5 models, 2 of which are in the Set 0 group, and the others can, it is implied, be made from Set 1. One of the No.0 models is the Digger on the lid of the ELGIN No.0 set in OSN 11, the others: a Ship, a Monoplane, & the Windmill in Fig.3. Little detail can be seen in the photos of the Plane & the Ship but the latter is 35h long. All 4 models look as if they could be made from the parts in the ACO/ELGIN No.0.



Similarly the 3 No.1 models, a Propelled Windmill (it can be pulled along but the rotor is cord driven from a Crank Handle), the Crane in Fig.2, & the Breakdown Lorry in Fig.4, look possible from an ACO/ELGIN No.1. All that is said of the No.2 is that it is a

coloured 'De-luxe Model'.

So it seems that the EASY-DO Sets 0 & 1 may well have had the same content as the ACO/ELGIN ones.

It is said of the boxes in the Booklet that 'The children shown on the front of the box were the actual constructors of the Models illustrated from the No.1 Sets.'

Chronology One can only surmise. The fact that ACO is the heading on the Leaflet found in ELGIN sets might indicate that ACO appeared before ELGIN. ACO seems a descriptive but not inspiring name, and perhaps it was thought that ELGIN had pleasant connotations. EASY-DO,

> an unappealing name, could Fig.5 have come last on the basis of boasting a manual of sorts, and the talk of a No.2 Set 'Coloured'. The popularity/time span of the sets may be indicated from the number of items seen over the years: ACO: 1 Set 0, 3 Set A; ELGIN: 6 Set 0; EASY-DO: 1 Booklet.



Fig.3

STOKYS in 2012 This year is Stokys' 70th anniversary, and perhaps because of that some 50 new parts have been added, over 30 sets, & various accessories. They are all new to me since the notes at 44/1337 in 2011, but some of the sets mentioned here may have been introduced in 2011, perhaps late in the year – the only items shown as new on the Stokys website are the Solar parts.

The PARTS Most are different sizes of strip parts, Girders, Plates, etc. I'll mention only those of more interest.

A new **Univer-sal** (right), G725, replaces the one with Fork Pieces shown in OSN 44.



The **Sliding Shaft** is now available in 5 lengths, K192-6, up to 215mm retracted & 250mm extended.

S-Girders, P085, 088, 1*2*1h with 45° flanges, 5 & 8h long.

A 127mm Ø **Tyre**, RZ34, with the 2 pairs of **Hubs**, RY33-4, right. And a **Wheel**, R080, with a 78mm tyre on a dark cream painted hub.

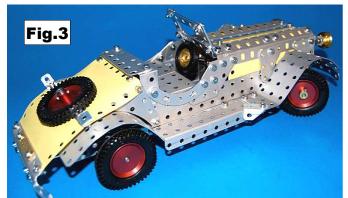


Solar parts which can be seen in Fig.14: a **Panel** (it has 3 bays), and a **Motor** (the yellow box with the red Cable).

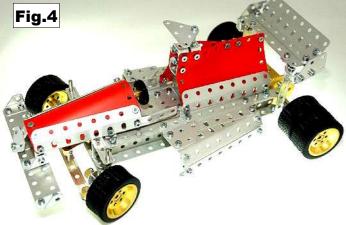
The **3-4 Set Manual**, DX33, has increased in price from 8 to 10 francs so possibly it has changed.

Discontinued Parts. A **D/B**, E036, made from a flat strip without raised edges. A **Wheel**, R073, with a 72mm tyre. The earlier **Universal**, BG24. The rather elegant **Handle Crank**, K021, (Winding Handle would be a better name – it is shown bottom centre of the first group of parts in 23/671).

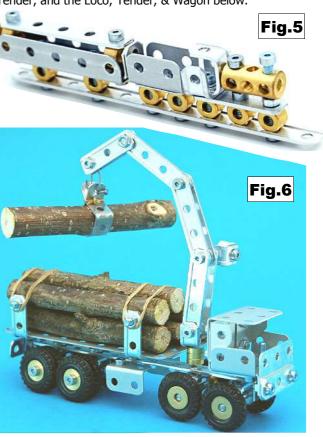
The SETS Auto sets, GA01-2. They have the same number of parts as before but the 3 models shown are new versions of those in the original manual. See 13/335 for the



original of the one above. Below the new F1, the old one is on the box lid in 8/174.



Next 3 **Micro models**, SN70-72, a Loco, the Loco plus Tender, and the Loco, Tender, & Wagon below.



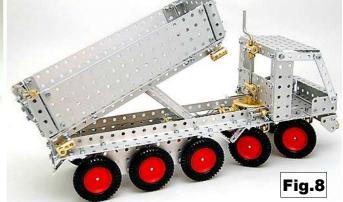
Then 4 new **Mini models**, SN84, 86-7, 93, an articulated Low Loader, the Lastwagen mit Elefantkran above, a Bulldozer, & a Helicopter.

Single-model Lorry Sets. The range has been increased by 11 outfits to 15. All 15 use the same wheels, and all have steering, mostly with the steering wheel on the cab roof. And they all have the same cab, as in the models below and in the Skip Lorry in Fig.1 of 44/1337. The cab looks rather empty and

it seems a pity not to have a seat in it, and perhaps another steering wheel.

SN01-4 all have 4 wheels. Right #02; #01 has a flat bed. #03 & #04 are #01 with an articulated trailer, the #03 has a flat bed & #04 a 16" long van body.





OSN 47/1449 STOKYS: S7

SN10, 11, & 15 are 6-wheelers, #10 with a flat bed, #11 with a load container, & #15 with an articulated tipping trailer.

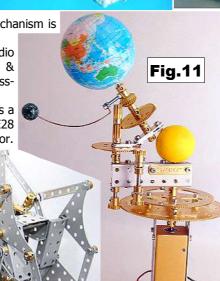
The remaining 5 models, **SN21-**3, & 25-6, have 4-wheel steering, and #21-23 have the steering wheel in the cab. #21-3 & #25 have 10 wheels. SN21 is a flat bed, #22 too but with a load container which, by a linkage, slides over the back of the Lorry, tipping at the same time. #23 is a Side Tipper. The model in Fig.8, from the Stokys website, is not actually listed but it is shown because it gives an indication of the tipping mechanism. #25 is similar to #21 but has only 8 Wheels. #26 is #25 with an articulated low loader trailer with 6 wheels, some 18" lona.

Other Sets SN06 & SE06 are **Designing Machines**, the

same models but hand- or Motor-driven. The mechanism is simpler than the earlier design noted in 23/673.

SE30 is the **Tractor** in 44/1337 but radio controlled. The set contains an Accumulator & Charger, presumably for the Receiver, & it is stressed that the Set does not include the Motor M132.

SN27 is a 4-wheel 'Quad' 15cm long. SN28 is a beefy looking Pick-up Truck, 37cm long, and SE28 is a R/C version, again without a M131 Motor. SN53 is 31cm long Space Shuttle.



Wheel by friction from Fig.12

Fig.10

a small rubber-tyred

wheel on the Motor's output shaft.

Finally GM10, a set for schools to demonstrate simple mechanics. Illustrated are a belt drive between 2 sizes of Pulleys, and a suspended weight which might be a plumb bob or a rotating pendulum.

ACCESSORIES I don't have a complete earlier list but items new to me are a follows.

The 2.4GHz, 4-channel R/C Transmitter, M153, & Receiver, M152, listed separately. Also 2 Servos, M125-6.

The Solar Panel, a 4v Motor for it, & various accessories.

Three 12v Geared Motors, M031-3, smaller than the existing ones and of lower power.

A 12V, 5A Rheostat, M116,

with a switch either sides of a knob.

An 11v, 850mAh lithium-polymer Accumulator, M141, measuring 35*35*61mm, and a Charger for it.

M144. Brass Nameplates, B102-3, as in Figs.11 & 12, spanning 4 & 5 holes.

A Mouse Mat XW07.

All the electrical items above are in the usual yellow boxes except the conventional looking R/C Transmitter, & the Battery Charger in a blue case.

PS There are now 520 parts in the STOKYS system against 280 towards the end of the original owners, Gebr. Stockmann.



Fig.9

model. Next **SE40**, the **Orrery** (Fig.11) driven by an electric Motor. It replaces the SN40 unpowered version. The latter didn't include the globes but nothing is said about them for the SE40.

Wheel with 8 cars (Fig.10). Neither the small

nor the large version is the same as the earlier

SN41 is the Quartz Clock in Fig.12 with I suppose a commercial motor.

SN50 is an hand-powered, 12-footed Walking Machine; **SE50** is the motorised version above and the Set includes a Motor, Accumulator, & Charger.

SE91 is the radio controlled version of the **Racer** SN91. It is shown with the red Plate as in OSN 44 but elsewhere on the website it has a Solar Panel as in Fig.14. The drive is to one

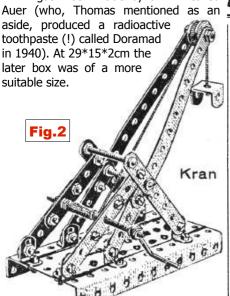
> STOKYS: S8 OSN 47/1450

More on KW-Metallbaukasten.

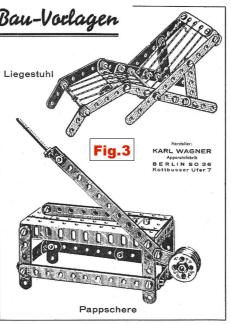
Notes on this 1947-48 system were given in 40/1198 and since then Jürgen Kahlfelt has kindly sent more information via Thomas Morzinck. Two boxes are now known, as well as a manual from February 1947, earlier than the Model Sheets described in OSN 40.

The system's name is on the box lid label right. It can also be seen, on the smaller of the two known boxes, in Eisenzeit, Tafel 60, and in Baukästen, T216 on p219.

The Boxes The earliest measures 29*21*6cm and originally housed a WW2 gas mask made by a firm called Bau-Vorlagen

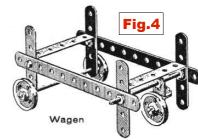






The Manual was produced by the same printer as the Model Sheets and had the same page size. Its PR was 117.200. 2.47.4679 and it had 16 pages including covers. The front cover is identical to Fig.2 in OSN 40 (but turned anticlockwise to give portrait format, as was also the case for the OSN 40 Sheet – in each case the other sides are printed the right way up). There are 15 models, one to a page, from Sägebock (Saw-horse) to the Kran in Fig.2. Of these 8 were

carried forward into the 1948 Leaflet and



the others are quite simple models, a Music Stand for instance. But they do include 3 wheeled models, two 2-wheel Barrows and the Wagen above.

Returning to the OSN 40 piece, in case it wasn't made clear there, the front of the 1948 Model Sheet is shown left.

Finally Kottbusser Ufer, the street in KW's address, is now Paul-Linke-Ufer. It is little more than 1km from Harzer Straße, STABIL's home.

Bauvorlagen

OSN 47/1451

KW METALLBAUKASTEN: S2

'New' System: METALL BAU KASTEN H O. Thanks to Urs Flammer and Jurgen Kahlfeldt some details of this small German, system, possibly from the DDR. The box, right & below, measures 227*161*23mm. Perhaps the load on the Crane indicates that the Set is a Nr.0, or more likely it is a logo based on 'H O' - if so does anyone recognise it?

The parts are made of aluminium with 4.5mm holes at 12.0mm pitch, and the thread is M4.

The 11 parts are: Strips 2,3,5, & 8h; an A/B; 1*3*1h & 1*5*1h DAS; an 8hole Wheel Disc; a Screwed Rod about 7cm long; a large hex Nut; and a long roundheaded Bolt with a reduced diameter smooth end.



FIG.1

The unusual Bolt points to a period soon after WW2 when it was no

Bild 5: Auto

doubt the best of what was available.

Bild 2: Windmühle

The Model Leaflet in Fig.3 is printed on one side only.