



Il Costruttore Meccanico

Contents of Sets - 1983

Part No.	DESCRIPTION	ICM 6	ICM 7	ICM 8	ICM 9
1	Perforated Strip, 25 holes	10	10	15	16
1a	19 holes	---	---	---	---
1b	15 holes	---	---	---	---
2	11 holes	16	18	22	20
2a	9 holes	2	4	6	6
3	7 holes	4	6	8	12
4	6 holes	2	4	4	8
5	5 holes	12	12	22	30
6	4 holes	---	---	---	---
6a	3 holes	4	4	8	12
7	Angle Girder, 49 holes	---	---	---	---
7a	37 holes	---	---	---	---
8	25 holes	4	8	10	16
8a	19 holes	---	---	---	---
8b	15 holes	---	---	---	---
9	11 holes	2	4	4	6
9a	9 holes	---	---	---	---
9b	7 holes	---	---	---	---
10	Fishplate	10	16	26	26
11	Double Bracket	4	6	6	10
12	Angle Bracket	18	26	36	42
12a	1x1 holes	---	---	---	---
12b	2x2 holes	---	---	---	---
13	2x1 holes	---	---	---	---
13a	Axle Rod	1	1	5	6
14	20 cm	---	---	---	---
15	16.5 cm	---	---	---	---
15a	13 cm	---	---	---	---
16	11.5 cm	---	---	---	---
16a	9 cm	---	---	---	---
16b	7.5 cm	---	---	---	---
17	6 cm	---	---	---	---
18	5 cm	---	---	---	---
18b	3.8 cm	---	---	---	---
19	2.5 cm	---	---	---	---
19a	Crank Handle, Long, 17 cm	1	1	1	1
19b	Short, 10.5 cm	1	1	1	1
19c	Spoked Wheel	---	---	---	---
19d	75 mm	4	4	4	6
20a	Pulley	---	---	---	---
20b	50 mm	---	---	---	---
20c	Flanged Wheel	---	---	---	---
20d	28 mm	---	---	---	---
21	Flanged Wheel	---	---	---	---
21a	19 mm	---	---	---	---
21b	Rubber Ring for 22, 22a	---	---	---	---
21c	Rubber Tire for 20a	---	---	---	---
21d	Rubber Tire for 19b	---	---	---	---
21e	Rubber Tire for 22, 22a	---	---	---	---
22	Pulley	---	---	---	---
22a	25 mm	---	---	---	---
22b	Pulley w/o Boss	---	---	---	---
22c	25 mm	---	---	---	---
23	Pulley w/o Boss	---	---	---	---
23a	19 mm	---	---	---	---
24	Pulley with Boss	---	---	---	---
24a	19 mm	---	---	---	---
25	Bush Wheel, 8 holes	---	---	---	---
25a	19 teeth	---	---	---	---
26	Pinion	---	---	---	---
26a	25 teeth	---	---	---	---

These data reproduced by kind permission of Clyde Suttle who compiled them some years ago, so there may have been changes since. John Westwood has reported that it is expected that BRAL will be on the UK market this year and the agents are Hales, Adam House, Ripon Way, Harrogate HG1 2AU, Tel 0423 501151. See Don Redmond's letter elsewhere in this issue for the Canadian distributor.

P/N	Description	ICM 6	ICM 7	ICM 8	ICM 9
63a	Strip Coupling	---	---	---	---
72	Flat Plate	2	4	6	6
77	Triangular Plate	---	---	---	---
78	Threaded Rod	---	---	---	---
79	12.5 cm	---	---	---	---
80	15 cm	---	---	---	---
80a	20 cm	---	---	---	---
90	Curved Strip, Slotted, 5 holes	---	---	---	---
90a	Curved Strip, Stepped, 5 holes	---	---	---	---
94	Sprocket Chain, 1 metre	---	---	---	---
93	Multi-Purpose Gear/Sprocket, 30 mm	---	---	---	---
93a	50 mm	---	---	---	---
95	Sprocket Wheel	---	---	---	---
95a	19 mm	---	---	---	---
95b	25 mm	---	---	---	---
96	38 mm	---	---	---	---
96a	50 mm	---	---	---	---
96b	75 mm	---	---	---	---
97	Braced Girder	---	---	---	---
98	5 holes	---	---	---	---
98a	7 holes	---	---	---	---
98b	11 holes	---	---	---	---
99	19 holes	---	---	---	---
102	25 holes	---	---	---	---
103	Single Bent Strip	---	---	---	---
103a	Flat Girder	---	---	---	---
103b	5 holes	---	---	---	---
103c	6 holes	---	---	---	---
103d	7 holes	---	---	---	---
103e	11 holes	---	---	---	---
103f	19 holes	---	---	---	---
103g	25 holes	---	---	---	---
108	Cornex Gusset	---	---	---	---
108a	5x4 holes	---	---	---	---
108b	Flanged Bracket, LH 5x3 holes	---	---	---	---
109	RB 5x3 holes	---	---	---	---
115	Face Plate	---	---	---	---
115a	6 cm	---	---	---	---
115b	Threaded Pin with 2 nuts	---	---	---	---
116	Fork Piece	---	---	---	---
116a	Fork Piece, Small	---	---	---	---
116b	End Bearing	---	---	---	---
124	Reversed Angle Bracket, 1x2x1 holes	---	---	---	---
125	Reversed Angle Bracket, 1x1x1 holes	---	---	---	---
126	Trunnion	---	---	---	---
126a	Flat Trunnion	---	---	---	---
127	Ball Crank w/o Boss, 3x3 holes	---	---	---	---
128	Ball Crank w/ Boss, 3x3 holes	---	---	---	---
130	Eccentric, Triple Throw	---	---	---	---
131	Dredger Bucket	---	---	---	---
134	Crankshaft	---	---	---	---
136	Handrail Support	---	---	---	---
138a	Ship's Funnel	---	---	---	---
140	Universal Coupling	---	---	---	---
140a	Corner Angle Bracket, RH	---	---	---	---
140b	LN	---	---	---	---
159	Circular Saw Blade	---	---	---	---
160	Channel Bearing	---	---	---	---
161	Girder Bracket	---	---	---	---
162	Boiler, Complete, 9 holes long	---	---	---	---
163	Sleeve Piece, 3 holes long	---	---	---	---
164	Chimney Adapter	---	---	---	---
214	Semi-Circular Plate, 5 holes wide	---	---	---	---
187a	Conical Disc	---	---	---	---
187b	45 mm	---	---	---	---
187c	65 mm	---	---	---	---

P/N	Description	ICM 6	ICM 7	ICM 8	ICM 9
188	Flexible Plate	---	---	---	---
188a	5x3 holes	---	---	---	---
188b	5x3 holes, Plastic	---	---	---	---
189	7x3 holes	---	---	---	---
189a	9x3 holes	---	---	---	---
189b	11x3 holes	---	---	---	---
189c	19x3 holes	---	---	---	---
190	25x3 holes	---	---	---	---
190a	5x5 holes, Plastic	---	---	---	---
191	7x5 holes	---	---	---	---
192	9x5 holes, Plastic	---	---	---	---
192a	11x5 holes	---	---	---	---
192b	19x5 holes	---	---	---	---
116c	25x5 holes	---	---	---	---
215	Fork Piece	---	---	---	---
57b	Worm Support Bracket	---	---	---	---
57c	Pulley Block	---	---	---	---
57d	Clockwork Motor N.I.	---	---	---	---
57e	Screwdriver	---	---	---	---
57f	Large	---	---	---	---
57g	Small	---	---	---	---

Contents of sets were counted from a single set of each No. Errors are quite possible. Except for ICM 9, bolts packages were not opened or counted. Small axle rod boxes were not opened and counted, except ICM 7, which broke open during shipping. ICM manuals are entirely graphic drawings, negating any language problem. We are having "Standard Mechanisms" manual, included in ICM 9 set, translated into English.

Strips and Angle Girders are bright plated; Plates and Flat Girders are painted Dark Green; Larger Pulleys, Face Plates and ornamental parts are painted red; Boiler, Ship's Funnel and Conical Discs are painted Dark Green; Flexible Plates vary in colors (red, black, blue, yellow).

All gears and pinions are machined. 25 mm and smaller Pulleys and Flanged Wheels are cast alloy metal. Larger Pulleys are welded together. Tires are rubber and match dimensions of early products of other manufacturers. All strips are same thickness. Plates, Boiler and Ship's Funnel are at least 1 mm thick. The entire system is very robust.

BRAL UPDATE Brian Rowe recently send two multi-language leaflets (in Italian, English, French, German and Spanish), probably from 1991, one showing the range of sets available and the other the parts in the system. First the sets, there are the standard sets 2-6 in cardboard cartons and 7-9 in wooden boxes, and 8 'kits' which make one smallish model each, except that two are shown for the SPACE SHIP. No Set 1 or Conversion Sets are mentioned, and no motor is listed although the tortoise shown below appears to contain the old style electric motor. The main sets are listed as ICM 2 (90002) to ICM 9 (90009); the lids of Sets 2-6 are very colourful, each showing several models and an exploded view of the steering gear of a tractor.

The colours of the parts are not consistent between Sets 2-6 and 7-9, and the various models shown. For what it's worth all the Strips look as if they might have a bright finish; in the smaller sets rigid Plates are blue, flexible (plastic?) Plates yellow, small Pulleys bright, and the 3" Pulleys in Set 6 are red. In Sets 7-9 rigid Plates are again blue, flexible Plates are red or blue, Braced Girders and 2" and 3" Pulleys are red, Spoked Wheels (MECCANO 19a) are bright, and what might be Conical Discs are yellow.

The Kits are as follows:

- KTX 90050. SPACE SHIP. (Looks like the set described in OSN 5, p89.)
- KTE 90053. elekit. (Helicopter on floats.)
- KTE 90054. motokit. (Motorcycle with fairings.)
- KTS 90055. sidekit. (Motor scooter with sidecar.)
- KTA 90056. helpkitcar. (Breakdown truck with crane on the back.)
- KTE 90057. jeepkit. (Open Jeep.)
- KTE 90058. idrokit. (3-engined high wing seaplane.)
- KTE 90062. BIG FOOT. (Cross country type pickup truck with relatively large wheels.)

These are all attractive looking models with 'Stickers' used to give greater realism. From the small illustrations shown, it looks as if some special parts (not listed in the second leaflet) are used, for example the floats on the aircraft and the large wheels on the BIG FOOT. The colours of the parts vary from model to model.

The second (huge, 25"x19") leaflet shows the parts around its edges, surrounding various simple mechanisms and examples of constructional techniques. New 4-figure Part Nos are used and there are a few changes in the parts listed compared to those in MCS:

- #3076 looks like a MECCANO Spring Clip and replaces the MCS #35. This change must have occurred some time ago because a set bought in the mid 1980s contained the MECCANO type.
- MCS Parts 35b (type of Screwdriver), 40 (Cord), 66, 66a, 67 (MÄRKLIN Pulley and Flanged Circular Plates) are not in the new list.
- New are #3088 (Collar with 4 tapped holes), 3241 (85mm dia Ball Thrust Race), an extra Hook, and 3227 (5mm Bolt).

The new parts, and those which show features not seen in MCS, are shown opposite. The MÄRKLIN style #90/3149 may be new, it is not illustrated in MCS (the part shown as 90 there is really 90A), but in a similar list #90 is shown exactly as a MECCANO #90. All the parts with their new PN's are shown in new MCS pages.



The name of the manufacturer of BRAL is given in the leaflets as BRES S.R.L. instead of the former Roberto Braglia; the 'Via Paolo Lomazzo, 34' address remains the same.

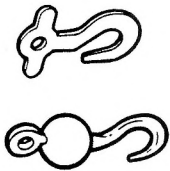
NEW PAGES FOR MCS: BRAL (C): X1.3/4g,3/4h. [1 Sheet]

AMENDMENTS TO MCS: SETS: Add, "In 1991, Standard Sets 2-9 plus 8 small kits called SPACE SHIP, elekit, motokit, sidekit, helpkitcar, jeepkit, idrokkit, BIG FOOT." **MANUFACTURER:** Add "Later BRES S.R.L., at the same address."



Gomma per puleggia
3013 liscia Ø 25
3014 c/batt Ø 25
3015 " Ø 50
3016 " Ø 75

Gancio c/peso
3109 piccolo
3110 grande
3111 piatto

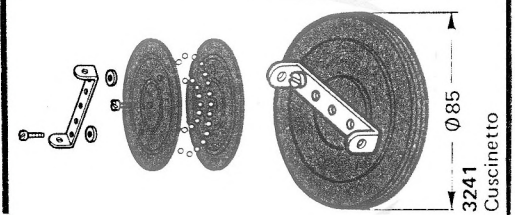


bral Kit



ICM 6 90006

580x400x55 mm. - Kg. 2



3076
Fermaglio



3088
Bussola 4 fori



3148
Striscia perforata ad arco piccolo raggio



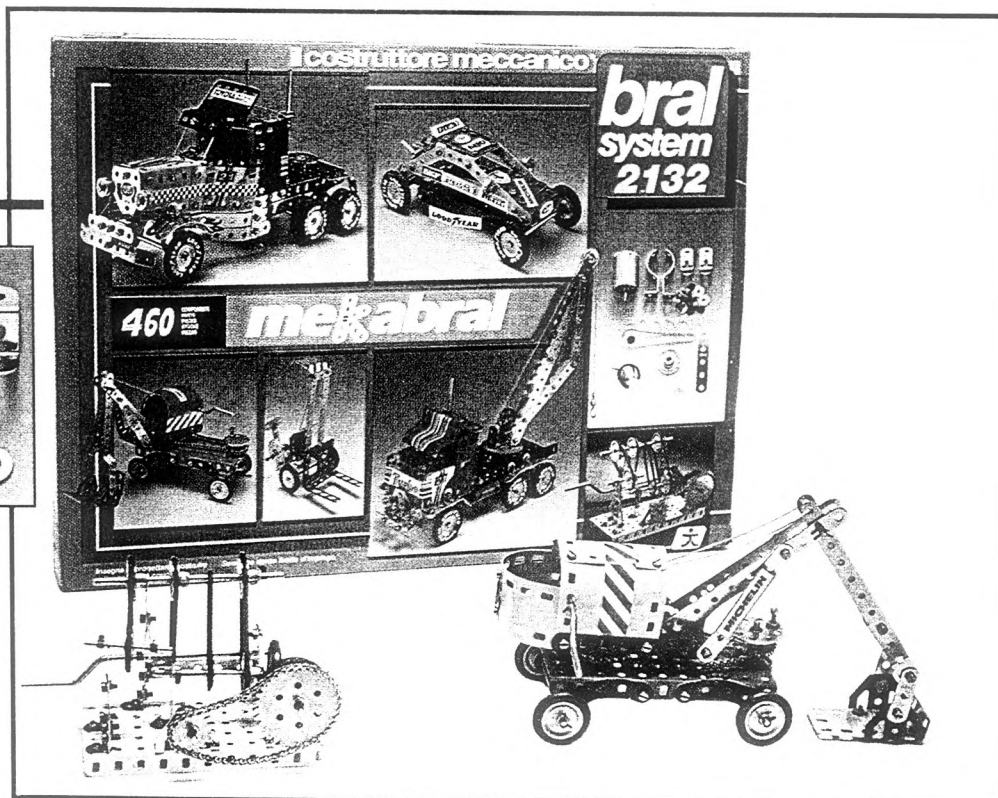
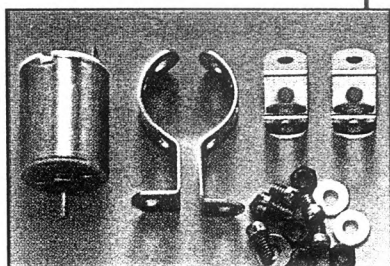
3149
Striscia perforata ad arco grande raggio



3241
Cuscinetto

BRAL 1992. Following on from the review of BRAL in OSN 8/142, Brian Rowe has lent me a later Leaflet for what is believed to be the 1992 range of sets. Of the main outfits there are still 5 in cartons and 3 in wooden boxes but the old Set Numbers of 2-9 have gone, replaced by 4-figure Reference Nos of 2021, 2130-3, 2241-3. The illustrations of the wooden boxed sets are identical to those in the 1991 Leaflet (but see below Brian's notes on a #7 Set he bought recently); the smaller sets are shown closed, the lids are basically as before but with certain changes. The Set No is replaced by the new Ref No; and, except in the smallest Set, the steering gear in the panel below the Ref No, is replaced by a small electric motor, and various oddments such as mounting Brackets, and parts to make an ON-OFF switch. The centre panel now contains the word MEKABRAL, and the number of parts in the set, in bold numerals - 250, 300, 390, 460 and 560 respectively.

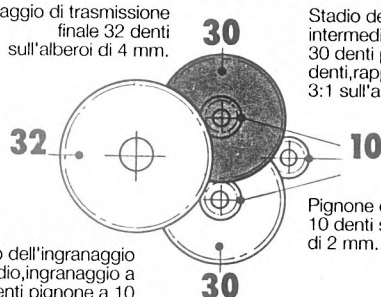
Art. 2132
460 PEZZI
71 MODELLI



The word MEKABRAL has no doubt been coined to emphasise the inclusion of motors in most of the sets, and the mechanical potential of the sets is demonstrated by the models shown alongside the 2131-3 Outfits in the Leaflet, with simple drives of various types, using Sprockets and Chain in the case of the two larger sets. Two motors are shown in the Leaflet, the A1000 which is the one in the 'carton' sets, and the A2000 which appears to be a similar motor but the drive is through an attached, self-assembly gearbox. Its casing is transparent plastic and it can be fitted with various combinations of yellow, plastic gears giving 6 different reductions of up to 2332.8:1. Both motors are shown powered by 2 AA batteries held in a translucent holder. Brian's #7 Set contains the A2000 type Motor and the Battery Holder, and some of the details given above come from a Leaflet in his Set which shows how the unit is put together. The A2000 Motor is rated at 1.5-6 volts and the output speed of the gearbox is given as 2.6 rpm with the highest possible reduction, although the voltage at which this is achieved is not stated.

stadio 6
rapporto 2332,8:1
velocità 2,6 g.p.m.

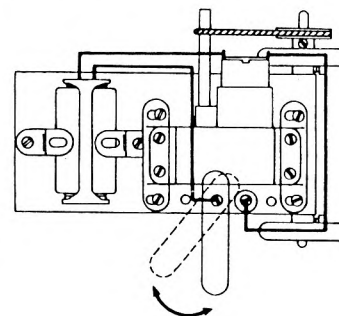
Ingranaggio di trasmissione
finale 32 denti
sull'albero di 4 mm.



Stadio dell'ingranaggio
intermedio, ingranaggio a
30 denti pignone a 10
denti, rapporto dello stadio
3:1 sull'albero di 2 mm.

Stadio dell'ingranaggio
intermedio, ingranaggio a
30 denti pignone a 10
denti, rapporto dello stadio
3:1 sull'albero di 2 mm.

Pignone di trasmissione a
10 denti sull'albero motore
di 2 mm.



A range of small 'Kits' is continued but of those in 1991 only the 'jeepkit', 'elekit', and BIG FOOT are included; the additions, all attractive models although a good deal of plate bending is needed to build them, are as follows:

- Art.90063. TRACTOR. 4-Wheel tractor fitted with shovel or fork lift.

- Art.90064. SANDY EXPLORER. A 3-wheel motorcycle with twin headlamps.
- Art.90065. LADY CAR. Morgan type open 2-seater.
- Art.90066. CROSS CAR. With rear wing, imitation rear engine, small front and large rear wheels.



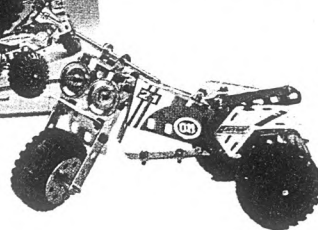
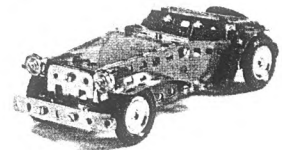
**Art. 90066
KIT CROSS CAR**



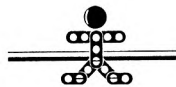
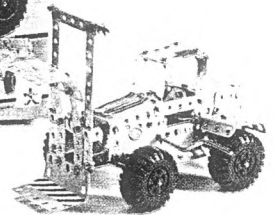
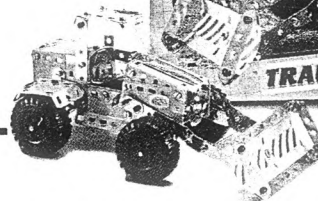
**Art. 90065
KIT LADY CAR**



**Art. 90064
KIT SANDY**



**Art. 90063
KIT TRACTOR**



Brian sent the following notes on his #7 Set. The wooden box is nicely made but it contains only two trays, not the four shown in the Brochure, and they are the rather flimsy, plastic recessed type, like the ones in CONSTRUCTION Sets. The Strips (7 sizes, $12\frac{1}{2}$ " down to $1\frac{1}{2}$ "), Angle Girders ($12\frac{1}{2}$ " and $5\frac{1}{2}$ "), and Brackets are nickel plated, and not too bright some of them. There are no gears, only two Mazak Sprockets, 2" and 1", with a short length of Chain. The 2" and 3" Pulleys are red with brass bosses; smaller Pulleys and the 4 small Flanged Wheels are of Mazak with integral bosses. Braced Girders are red and there are a pair of $5\frac{1}{2}$ " and a pair of $12\frac{1}{2}$ ". Metal Plates are painted powder blue with two $2\frac{1}{2}$ "x $2\frac{1}{2}$ ", one $5\frac{1}{2}$ "x $2\frac{1}{2}$ " and two $3\frac{1}{2}$ "x $2\frac{1}{2}$ " Flanged Plates, and two Flanged Sector Plates. Flexible Plates are plastic, some red and some yellow, and include two $12\frac{1}{2}$ "x $1\frac{1}{2}$ ". Other parts are a pair of $5\frac{1}{2}$ " Flat Girders, 4 Windmill Sails, Curved Strips and Trunnions, all in the powder blue; the one Semi-Circular Plate is green; 2 sets of small plastic Tyres, but none for the $2/3$ " Pulleys; two metal Bush Wheels with brass bosses, 5 brass Collars, a Swivel Bearing, but no Couplings; plastic Clips and a black plastic Propellor. There are no Driving Bands and no String. The Motor with Gearbox and Battery Holder are as already described. Compared with current MECCANO the Strips and A/Gs are thinner but the metal Plates are heavier gauge.

There are 3 manuals with the Set, the 2/3, 4/5/6, and #7, so denoted although it seems that these Set Nos are no longer used. Brian lent the #7 and it was rather disappointing, 16 models, most of them quite small, and only one or two that used anything like the full range of parts in the Set. On the whole they are quite attractive to look at, but none include any but the simplest mechanical movements, and none use the Motor, or the Sprockets, except as the base of a gun. There is one view of each model, no Parts List, and it's not in several cases clear how the model is to be made. There is a note in the back of the Manual, in Italian only whereas the other (brief) text is in 5 languages, that the models are only meant to show the way and give ideas, but this isn't I think altogether achieved. For example the Flanged Wheels are only used in a decorative way, as headlights for instance.

The contents of the #7 Set described above is clearly less than given in OSN 3/30, not only are there

now no Gears or Coupling, but the number and variety of other parts seem to be reduced. Some differences could be due to omissions when the Set was packed, but since no Set Contents is provided there is no way of knowing what should be in it. I note in passing that the first model in the #7 Manual, a Tractor, needs two Tyres for its 2" Pulley rear wheels, and neither Brian's Set, nor the OSN 3 #7, includes them. The Motor/gearbox is a plus of course in the new #7.

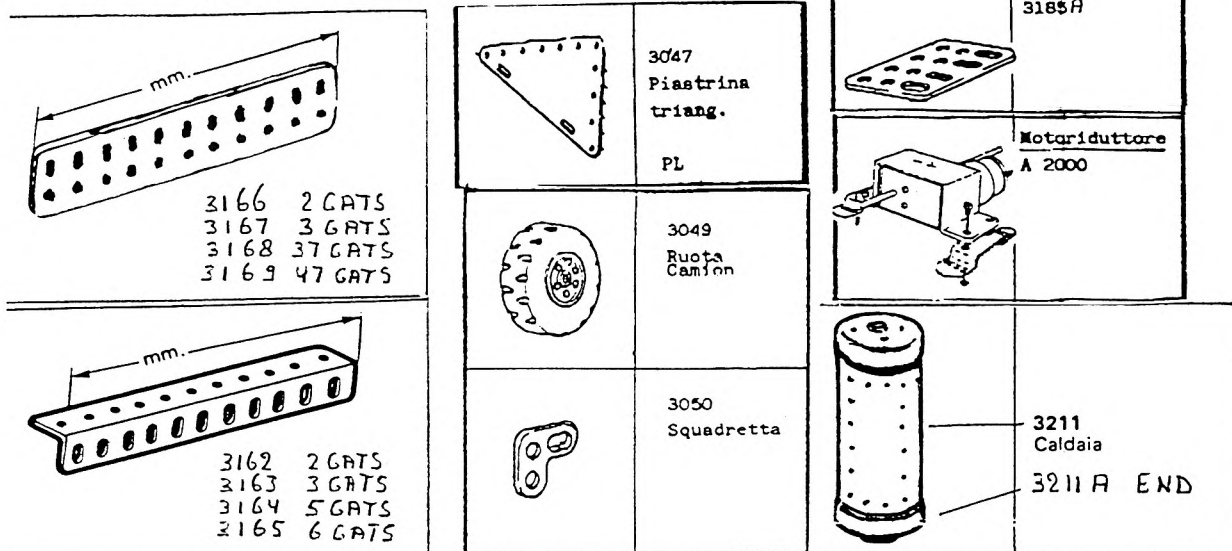
SUMMARY OF MANUAL. #Name: BRAL. #Details of maker: BRAL, Via P.Lomazzo,34, 20154 Milano. Italia. #Dates &/or Ref Nos: None. #Page size: 240x160mm deep. #No of pages: 20 inc covers, all unnumbered. #Language: Italian, French, Spanish, English, German. #Printing: Black line drawings, with some halftone shading, on art paper. Cover is red with varicoloured parts on light blue squares, and white lettering plus black BRAL. #Page Nos of Parts List & highest PN: None. #Page Nos of Set Contents & highest PN: None. #Sets covered: #7. #No of models for each set: 16. #Name, Model No, Page No of first & last model of each set: [Models have no nos or titles] Tractor, 3. Bulldozer, 18. #Other notes: Manual was in a 1992 Set, but shows outdated maker's name and address.



AMENDMENTS TO MCS: SETS: add "In 1992, Standard Sets #2021, 2130-3, 2241-3; plus 7 small Kits called jeepkit, elikit, BIG FOOT, TRACTOR, SANDY EXPLORER, LADY CAR, CROSS CAR."

MOTORS: Add: "Introduced 1992: A1000 3v Motor and A2000 3v Motor with Gearbox."

FOOTNOTE ON 1992 PARTS Since this piece was written Brian has received from a Dutch friend and passed on, a photocopy of an Illustrated Parts List later than the one mentioned in OSN 8. This includes all the parts in the MCS Pages X1.3/4g-h plus some others, obviously added after the list was first prepared; all of these are shown below. The Motor A1000 is not mentioned. Notice that although the List is nearly all in Italian the use of English (END) and Dutch? (GATS = holes) in the written additions. Perhaps last minute updates by Brian's friend.



SCIENTIFIC BOUNDOOS - COMMENTS ON MCS. Under COMMENTS in the MCS entry it is said that the PNs and models are similar to those of MECCANO. This is true but there is an even closer resemblance to 1920s MÄRKLIN. The drawings of the models are identical line for line to those in a 1920 MÄRKLIN manual and the same is true of the parts: the only exception is #44 which was still the MECCANO shape in 1920, the next list to hand, for 1931, shows the revised pattern, exactly as in the S B List.

Was this then a case of a Dutch manufacturer copying MÄRKLIN, or was it simply MÄRKLIN using a second name for its product in Holland, and perhaps elsewhere. I would guess the latter but only because there are no Titles, Parts Lists or Instructions shown for the S B models, whereas there are in the MÄRKLIN manual, and this might mean that they are grouped together for all the models elsewhere in the manual, a method sometimes used for foreign language manuals, so that only the text part had to be altered for each country.

AMENDMENTS TO MCS (as necessary, depending on version)

COMMENTS: Replace by, 'The only information available is shown. The parts, their numbering, and the models are identical to 1920s MÄRKLIN.'

help. In one such there is a reference to using bulbs from an electrical construction set called LETRIXMEC, made by the same firm.

SUMMARY OF MANUAL. #Name: METALMEC Scatola N.5. #Details of maker: OPSET. #Dates &/or Ref Nos: None. #Page size: 247x167mm deep. #No of pages: 56 inc covers, all unnumbered. #Language: Italian, Introduction also in English and French. #Printing: Halftone photos. Cover in colour with light brown background, boys with red and blue jumpers, and a mainly red model. #No Parts List or Set Contents. #Sets covered: 1-5. #No of models for each set: 1,16; 2,17; 3 or 4,8; 4 or 5,5; 5,6. #Name, Model No, Page No of first & last model of each set: 1: BILANCIA,7 [No Model Nos]; SEGA A NASTRO,15. 2: MOTOCARRO,16; JEEP,25. 3 or 4: TRANSATLANTICO,27; CATAPULTA,33. 4 or 5: SEGA PORTATILE NASTRO,35; MORTAIO SEMOVENTE. 5: GRU PER COSTRUZIONI EDILI,41; MOTOCARRO RIBALTABILE,51. #Other notes: the Manual is a little disorganised, models appearing twice have been ignored, and the first 16 models, said to be for Set #5 have been assumed to be Set #1 models.



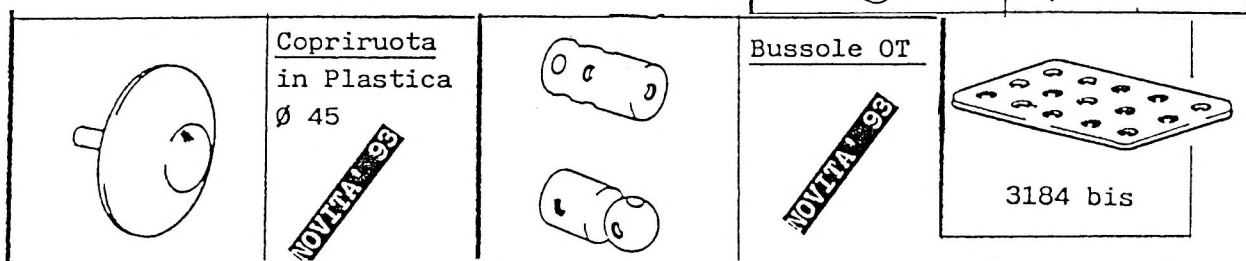
New MCS pages show two other #5 models, photocopies of the parts, and the contents found in Set #5.

BRAL NEWS. Tobias Haffter kindly sent some BRAL leaflets and dates for them. The sets described in OSN 7/142 were current into 1992 and were replaced by the MEKABRAL range (see 8/190) later in that year. The official Illustrated List of Parts for 1992-93 includes, with one or two minor differences, the extra parts noted in OSN 8, and there are other changes, mostly additions. Details are as follows:

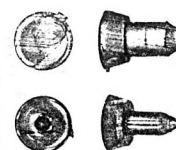
- The Boiler #3211 is shown without ends and the Boiler End, 3211A in 8/192, is now 3048 Tappi Caldaia; likewise the Plate 3185A becomes 3185 bis.
- Most of the new parts are shown below. 3184 bis is no doubt the 3184 (Channel Bearing) opened out; the others (New for '93) have no PNs and only one, Copriruota (Push-on Wheel?), has a description. The others, all made of brass (OT), are called Bussole (Bearings), and might be similar to MECCANO Parts 63c,64,136a,173a,179.
- New parts not illustrated are 3011 bis, Metallo c/bus (Wheel Disc maybe, 3011 is a Bush Wheel); and 3204 bis which is labelled twice, once as Plastica and below Plastica Traspar. - 3204 is the 11x5 hole Flanged Plate but a plastic, transparent version, it doesn't sound likely. Also the Flexible Plates 3186-91 are marked as being in two versions, plastic and metal, the latter have 'bis' after the PN.
- Two deletions, the 75mm Tyre 3016 and the Wire Screwdriver 3239.

The material from which some of the parts are made is shown: all 'brassware', all gears, Sprockets 3019-23, and the Pulleys 3002 and 3007 (15mm with boss and 38mm) are brass; the Flanged and Bush Wheels, the Sprockets 3017-18, all the remaining Pulleys less than 38mm dia, and the Chimney Adaptor are labelled ZAMA, which is I think the zinc based MAZAC alloy. The 77mm Spoked Wheels are cast aluminium.

Peter Kessler wrote that the small 'Kit' models are rather flimsy but can easily be improved by adding a few extra parts.



PRESS-FIX. I've never seen a PRESS-FIX Set so I was agog when Geoff Wright showed me a PRESS-FIX box recently. Unfortunately it wasn't the PRESS-FIX in MCS but a plastic set from the same company. But quite possibly the plastic Plugs and Sockets that are used instead of nuts and bolts are the same; they are shown opposite, the o/d of the Socket is .187" and that of the Plug, .128". Also the plastic Wheels look as if they might be the ones described in MCS, they are a push fit on the .172" dia steel Axles and two of them together form a Pulley. On the Instruction Sheet is Copyright 1959 so if the dates in MCS are correct the plastic PRESS-FIX came after the metal version.



SMALL ADS

• WANTED: the group Constructorama, 23, rue Thenard, 10800 Saint-Julien Les Villas, France, seeks information on the following systems: MILO, MECO, WI-DI, WALU-METALL, DORFAN, PIC, JUNIOR, MARX, K.DO, TAKA, TECNIO, MÉCAFER, TRIC ET TRAC, MONITEUR EL, BATIFIX, MULTIMAKE, USINAUTO, COSMOS, MEX, NEO-STRUCTOR, FALCO, TAK i HAK, STABILO, BOY, TECHNO, OMOCHIYA.

• If anyone can help by providing for sale or loan, any German, French or British TRIX Construction literature of any description, preferably pre-war, it would be a great help in the research that I will soon be embarking upon, the results of which it is hoped will be published. I also require pre-war boxed sets of any size, no individual or loose parts please unless they belong to the Sand Motor Set. Four sets that have eluded me and are urgently required are the Scientrix, the German equivalent Experi-Trix and Chemie-Trix, plus the Motosand (Sand Motor). Not strictly Trix Construction but very interesting and also required is the Trix Funk-Trupp (Morse apparatus). It would be helpful if you contact me first by telephone or in writing so that a discussion about the information or the items on offer can take place -

A. Matthewman, 12 Ballagarey Road, Glen Vine, Isle-of-Man, IM4 4EA. Tel: 0624 851 693 or Fax: 0624 852 329.

• For sale. Parts and model leaflet (no box) from two Chinese CONSTRUCTION MODELS No.2 Sets. S/driver and Cord missing from both. Older Set missing 2 Clips and about 15 N&B, its leaflet shows green plastic plates not the yellow of the actual parts. Leaflet of newer Set selotaped together. Price £5 each plus post, from the Editor. (Each weighs about ½kg.)

• Several CONSTRUCTION (E. German) No.101 linking sets for sale. See MCS for contents. Unused with all packing but boxes may be a little damaged and a few of the nickel parts may show slight rust. Quite nice overall though. There was no manual in this Set. Price £6 each plus post, from the Editor. (Weight about ¾kg.)

• For sale. The #7 and #14 Indian PLANO Sets described in OSN 10 (p258). They are unused and believed complete, including manuals, but the boxes are a little battered and a few parts in the #14 have also been damaged in transit. They weigh about .6 and 4kg respectively. Offers to the Editor please by the end of November.

• For sale. 1931/32 No.7 ERECTOR red wooden box. Somewhat scratched and label faded; complete with all external (rusty) metal fittings but no inner tray/packaging. Beautiful full colour label inside lid showing model Excavator. Box contains over 80 well used parts (no N&B), about a third of the original contents, but some are from a later period. There are 8 Gears and 18" of Chain but no other 'interesting' parts. Weight 3kg, of which the parts are about half. £18 plus post, or offer, from the Editor.

• I am writing a history of STABIL for OSN and seek information on the following:

Manuals for Sets 53-55 of 1920 or earlier; Sets 49-52 of about 1924; the Erfinder-Baukasten (Inventors Sets) 57-58; STABILA (a Set

for girls); RECORD (wooden parts).

Any Parts Lists before 1936, and the names and numbers of the first and last models in any STABIL manual.

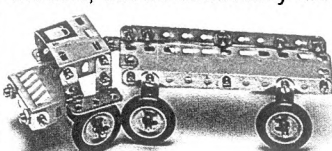
(Note. Manuals usually have their date on the front or back cover, together with the Edition (Auflage) No.)

Also wanted, a STABIL Ball Bearing, #146, or replica, and the Accessory Outfit 53a.

Please contact Werner Sticht, Henneberger Weg 10, D-97762 Hammelburg, Germany. Home phone: 9732 5387.

• INDEX for OSN 1-10. 7 A4 sides. From the Editor, price including post, £1.20 UK, £1.70 overseas.

Serie "i superkit" from BRAL René Mikkers kindly lent me a colour leaflet showing the 6 Sets in this new series. There's no date on it but these sets are currently available. There are 3 small model sets called 'miniBRAL': MB 90070 JEEP, 90071 BETONIERA [beton=cement], and 90072 TRUCK. As can be seen they are simple models and don't to me look quite as good as other recent small BRAL models, but no doubt they are cheap and easy to build.

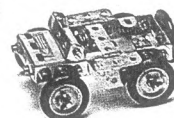


MB 90070

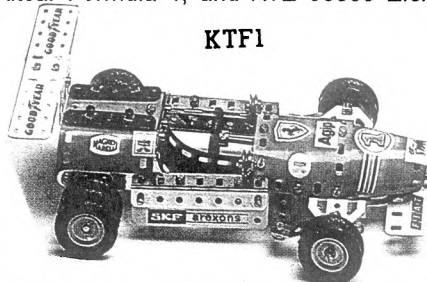


MB 90071

MB 90072



Then there are 2 sets called 'bral MEDIUM': KTF1 90051 Kitcar Formula 1, and KTE 90053 Elekit elicottiero. That's



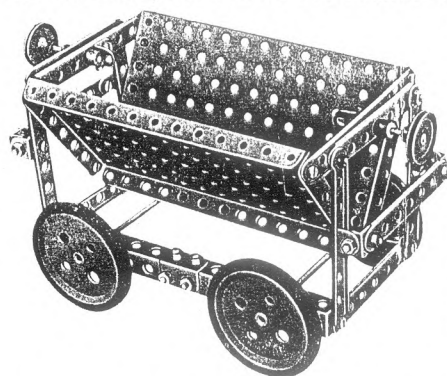
KTF1

the helicopter set that was shown in 7/143; the racing car looks a nice model but somehow doesn't quite capture the lines of current F.1 cars.

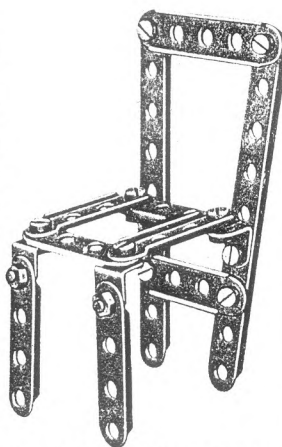
There is no sign of it being powered, but from its appearance, it may have working steering.

The final Set is a 'bral MAXI', KTC 90052 Camionkit, and 3 models are shown for it, all using the same chassis and a special cab which looks as if it's a one piece metal pressing, though it might be plastic I suppose. One of the models has a crane on the back, another a digger, and the third has

A MONTEX LEAFLET That's the Spanish MONTEX, with Strips that have lips on their straight edges, and 22-hole A/Gs, not MECCANO X under one of its aliases.

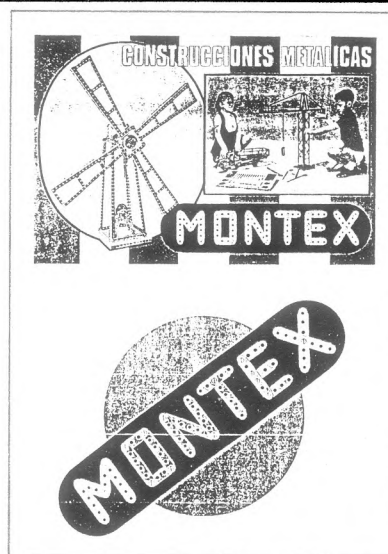


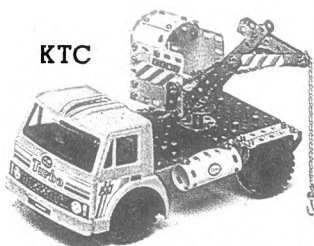
Courtesy of José Moreno I now have a photocopy of a 3-panel Leaflet which is different to the Leaflet or Manual on which the MCS entry is based.



There's nothing in MCS which actually shows the name but on the front cover of this Leaflet, there it is, not once but twice. Also on this cover are a Windmill, and small illustrations of the Set and the Crane in MCS. The large 'R' on the cover in MCS is on the back of the Leaflet and is the logo of Estampaciones Metálicas ROVIRA, and the factory address is given: Pasaje Rosé, 42; Hospitalet de Llobregat; Barcelona. Teléfono 337 25 40.

15 models are shown (including the Windmill) with just a halftone of each - no Model No., title, or list of parts required. The models range from a simple Chair to the Crane and Big Wheel shown in MCS.





KTC

a dozer blade mounted at the front. The illustration on the box shows a spare wheel on top of the digger's cabin.

The parts in all but the Camionkit look to be in standard BRAL colours, and are predominantly red and nickel. A few parts may be nonstandard, such as a black Flexible Plate as the driver's seat in the Racing Car. The cab of the Camionkit looks an orangy yellow and the Plates in it are either yellow or black.

René also sent a list of BRAL parts and this shows no changes since those noted in OSN 9/227. Part 3011 bis is an 8-hole Wheel Disc but with an 8mm central hole. The A2000 motor (described in 8/190) is still current.

MÄRKLIN FOR 1994

Ernst Leuthold, Werner Sticht and Geoff Davison were all good enough to send catalogue pages showing the new Sets introduced for 1994. The main change is a new, large Outfit, m100 (ref 1080), and the E60 (1081) which converts the existing m60 into the m100. With 1454 parts in it, the m100 is a good size, about the same as a pre-1970 No.9 MECCANO. Few details are given but the two models shown (bottom right) include chain drives and a pair of bevel gears; two 'multipurpose' gears are also used in the Beam Engine as a 'sun and planet' linkage between the crankshaft and the connecting rod. No mention is made of a motor being included in the Set and there's no sign of one in the models. The counterweight of the fairground ride seems to consist of 8 thick, brass coloured solid discs of about 1½" diameter.

There are two other new sets for 1994. #1083 is a 'Unimog' theme set with 860 parts, and as well as the lorry opposite, 4 other models of the same basic type can be made, with two versions of each possible. I'm not quite sure what that means but the other lorry shown in the catalogue doesn't have the snowplough blades on the front. All the models have steering and some include a tipping mechanism. Again no mention of motorisation. The Tyres may be new, they fit onto the 2" Pulley.

#1060 is a 'Solar' add-on set for use with Outfits m50 upwards. It includes a new solar motor, 2 solar cells, and a propeller. The small model roundabout in the catalogue (centre right) is similar to the one that used to be shown for the obsolete #1008 Outfit, you may be able to just see the cells behind the model.

Also new are 4 packs of parts, 1067 to 1070. They contain respectively: • Axles, Collars, etc, • DAS and brackets. • 'mechanical' parts (pulleys, 2 pinions, pawls, etc), • pulleys, flanged discs, 4 large toothed Gear Rings (18 to 57 teeth), and 2 Tractor Tyres.

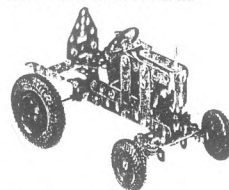
MÄRKLIN SETS IN 1991/92

Geoff Davison also sent copies from a '91/92 MÄRKLIN catalogue (in English and Italian) and this fits between the 90/91 range (OSN 5/83) and the 1993 additions (9/209). In 91/92 all the 90/91 sets were continued except the #1075 No.3

Nostalgia Outfit; likewise the 2 Motors and the Power Screw-driver. There were 4 new small sets, #1030, 1031, 1033 and 1077, see below. The pages Geoff sent made no mention of the packs of parts which had been available, or of individual extra parts. Other points of interest: • It won't be clear in the illustration but the rear mudguards of the Trac are made from special 3h Strips which are ready bent to shape. • The 1018 motor is said to be protected against electrical overload.

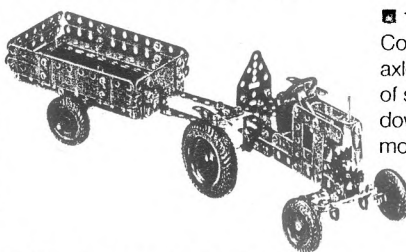
■ 1030 "Tractor" Gift Set.

Construction set for a tractor with working steering which is operated from the steering wheel. 167 parts. Length of the model 17,0 cm (6-11/16"). Models to supplement this one can be made with other Märklin Metall construction sets.

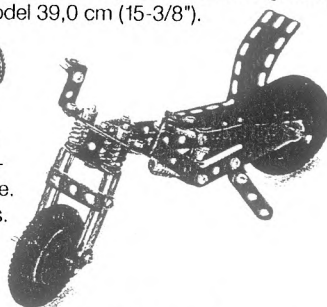


■ 1031 "Tractor with Trailer" Gift Set.

Construction set for a tractor with a single-axle trailer. Tractor is the same model as that of set 1030. Gate on trailer can be swung down for loading. 315 parts. Length of the model 39,0 cm (15-3/8").

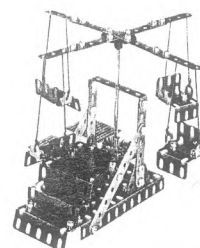
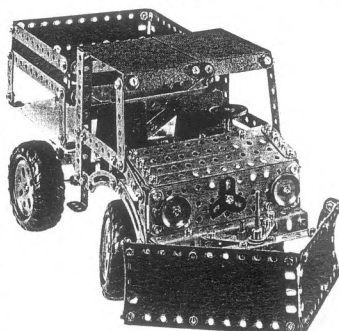
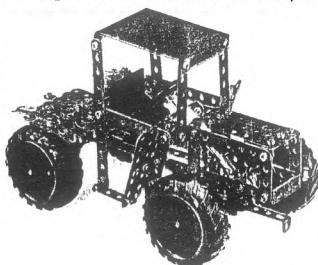


■ 1033 "Chopper" Gift Set. Construction set for a chopper motorcycle. Working steering and sprung suspension on the front axle. Simulated 2 cylinder V-type motor. 117 parts. Length of the model 27,0 cm (10-5/8").



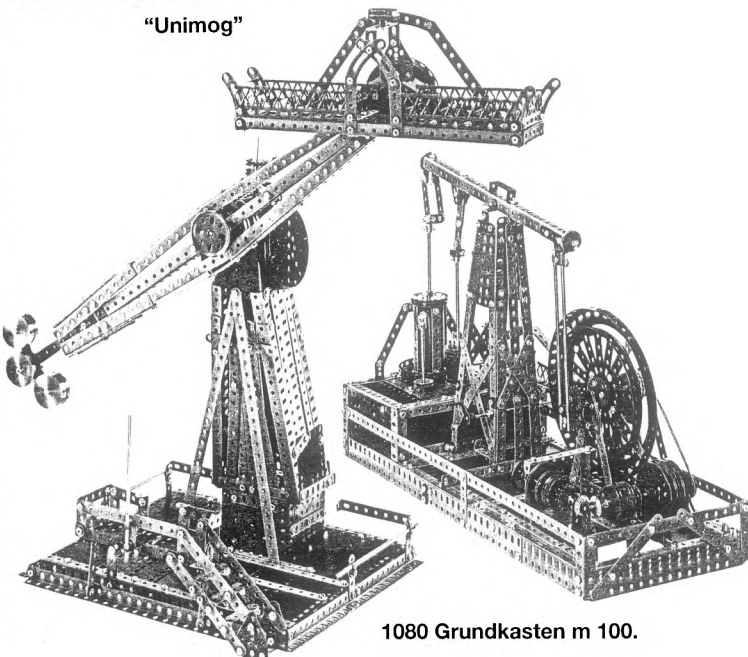
■ 1077 "Märklin Trac" Theme Set.

Construction set for a modern tractor. Scale about 1:16. New hollow tires with special profile. Working front axle with steering and independent suspension assures that all of the wheels are in contact with the ground even on rough terrain. 400 parts. Length of the model 27,5 cm (10-7/8").



1060 Ergänzungskasten "Solar"

1083 Themenkasten
"Unimog"



1080 Grundkasten m 100.

ITEMS FROM LETTERS

1. On TEMSI hole spacing (9/225), D. Courdoux says you can bolt 25-hole TEMSI and MECCANO parts together successfully but of course an Axle Rod won't go through all the holes. Also slight changes in gear meshing, good or bad, can be noticed when using TEMSI Plates. He adds that TEMSI parts are strong and of good quality, and that the red colour they use is specific to them.

2. Al Sternagle wrote that he had come across some MECHANIMALS parts (see 4/66): they are larger than might be expected, for example R-1 is about 7½" long and MB-4 is some 4½" wide. He has many more parts than were shown in OSN, no doubt from the other 'animals' in the series - one triangular piece has a base of nearly 12". Only some of the parts are aluminium, the bulk are of a good quality steel alloy and quite durable, especially the links and joints. The aluminium parts are stamped with their PNs. The thread is probably metric and is about the size of a U.S. No.4. If anyone has the complete building instructions for any of the MECHANIMALS please contact the Editor.

3. On the MIGNON Ansatzmutter (10/263), there was general agreement that it wasn't a locknut. Both Geoff Davison and Don Redmond suggested that 'Ansatz' in this context implied joining or an extension. It's possible that if the part is threaded right through it might be used to join two threaded rods, but why then reduce the size at one end? Or is it intend to be used inside a curved structure to avoid the flattening caused when a normal nut is tightened? Possible but a nut with a radiused end would probably be cheaper and more effective. My favourite suggestion is that it is used with a normal bolt to create a non-sloppy pivot joint for two Strips. The length of the 'extension' would then need to be slightly longer than twice the thickness of the Strips. It doesn't look that long in the illustration and the other thing is that with a 2.5mm bolt in the 3.1mm hole in the Strip, the wall thickness of the 'extension' would be little more than 10 thou. I looked in the Manual to try to see how the part was used: 3 of them are called up for one model and that's all, even though there are 10 supplied in the #3 Set. There are 3 pivoted joints in the model where the Ansatzmutter could be used but it isn't certain that it is. On the other hand I can't see anywhere else in the model where they would be needed for any purpose.

4. René Mikkers sent several items which are included elsewhere in this Issue and also mentioned that he can supply TEMSI and BRAL parts. The leaflet he sent showing the range of TEMSI parts is identical to that in 3/40. He also sent an illustrated List of BRAL parts together with prices. MCS shows most of the parts but additions are illustrated in 7/143, 8/192 and 9/227, though the latter aren't in fact in his List. Prices, in Dutch Guilders, seem reasonable, for example, 1.00 for a 25h Strip, 3.75 for a 49h Angle Girder. Details from R. Mikkers, Wezelstraat 23, 7559AP Hengelo, The Netherlands. Tel: 074-774327 (after 19.00).

5. Eric Sinton sent a clarification of his remarks in 10/267(8): STOKYS Chain can of course only be used with STOKYS Sprockets. He added that when he dismantled the model in question, a Rack and Pinion Locomotive, which had worked faultlessly for many hours with its STOKYS Sprocket engaging MÄRKLIN Large Toothed Rings straightened into rack form, excessive wear of the Sprocket's teeth was noticed, and their rather 'knobby' shape had changed to something nearer an involute pattern!

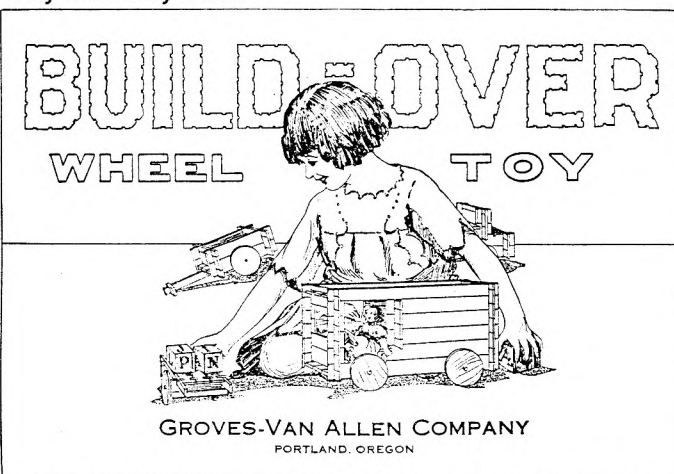
And on 9/227: BRAL Copriruota is a Wheelcover (Conical Disc in Meccanoese). The standard steel parts 3044,

45mm for the 50mm, and 3045, 66mm for the 75mm Pulley, have a narrow steel strip rivetted in the central hole. The ends of this strip are bent in such a way as to make it easy to clip the disc securely to the Wheel. The plastic version seems to have a stub axle (also in plastic?) which may indicate some use other than as an attachment to the 50mm Pulley.

6. Roger Baker confirmed my guess (10/247) that the output shaft of the MARBI motor can be repositioned in the corresponding holes on the opposite side of the motor. The drive is taken from the same large gear wheel which is, of course, centrally mounted.

7. Clive Weston wrote that a Mr Rod Moore, the curator of the Cumberland Toy and Model Museum, Cockermouth, Cumbria, Tel: 0900-827606, has several OS in his reserve stock, and that on a recent visit he was able to handle his large collection of ANCHOR blocks. The interesting feature of these sets was that the flat metal parts, apparently used to construct a framework with the stone blocks as infill, were joined by a rod method akin to that of DINKY BUILDER.

8. Kendrick Bisset sent details of a BUILD-OVER Set, but not the one with metal parts listed in my OS Database. Both were made in Portland Oregon, but by different companies, and the parts in this outfit are all wooden. Apart from Wheels and Axles, there are various notched Strips, about ¾" thick, which slot into one another at right angles. There were 3 sets and the #3 model on the cover of the Manual (below) is called a 'Police Patrol', despite the lady driver. The parts are plain, untreated wood and are not very accurately made.



9. From Don Redmond: 'I saw a RICHTER set recently which contained two styles of braced girders. One was rectangular as in 10/261; the other was curved (humped) at the top.' And on MERKUR ALFI (MCS X1.2): 'The legend "Vyrobce" etc. says: Manufacturer: Metal Enterprises, OPMH Broumov; I did not find 'stredisko' but it may be plant or unit. Does anyone know what OPMH stands for?'

In a later letter: 'In a toyshop in a town near Kingston [Ontario] I noticed a GIRDER AND PANEL set with the name Irwin Toys, of Toronto, the Canadian distributors of MECCANO, on the box. I didn't have the opportunity to open and examine the set, but the illustration much resembles other plastic architectural building sets.'

Don also mentioned an ERECTOR No.100 Set he has acquired, which probably dates from the 1950s. The box is 10½x9x¾" and the lid has the same design as that shown for EL NUEVO ING. ARGENTINO in MCS. There is no manual but a sheet pasted inside the lid shows 10 models. It has the code M3366 on it while the lid has M3409. The

BRAL No.9 SET MODELS In 8/191 it was noted that the contents of the No.7 Outfit seemed to have decreased compared with years ago, and that the models in the No.7 Manual were rather disappointing. Last year Eric Sinton kindly sent a copy of the models in a recent No.9 Manual (the parts have the new 4-figure PNs), and I have now, thanks to Gwen Higginson, been able to compare them with those in an earlier Manual dating from the late 1960s perhaps, (details below).

There are about the same number of No.9 models in each but there the comparison ends. Of the 15 models in the recent manual, 1 was an earlier No.5 model, 7 earlier No.6 models, 2 earlier No.7 models, and 1, the Tortoise (see 7/142) was from the earlier No.9. That leaves 4 others and they aren't in the same class as most of the old models, although one, the Tractor featured on the current Parts Leaflet, does have proper steering.

So no doubt the contents of the current largest BRAL Outfit has been much reduced, but just when the change(s) occurred isn't clear. Perhaps it was when the sets were renumbered for 1992 and the No.9 became #2243, but the No.7 in OSN 8 appears to have been bought before that.

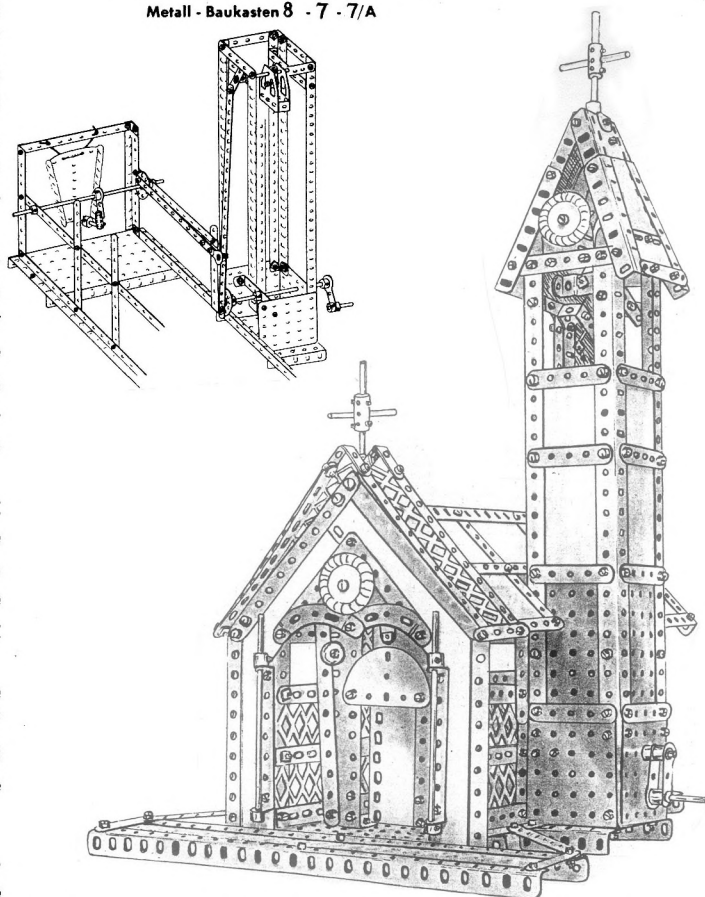
The 'old' manual is rather quirky with erratic page numbering, and there are #9 models in it although it has '8' on its cover. But it contains a good selection of models and many of them are quite original. Three that took my eye are reproduced here, somewhat reduced in size.

SUMMARY OF MANUAL. •Name: IL COSTUTTORE BRAL 8 •Details of maker: Roberto Braglia, Milano. •Dates/Ref Nos: none. •Page size: 244x165mm deep. •No. of pages: 132 (1-112+97-104+121-132)+ covers. •Language: Italian, German, French (most model names Italian only); also English intro. •Printing: cover & pp 97-104+121-132 in colour. Other models B&W line drawings with some shading. Cover red with white letters. •No Parts List or Set Contents. •Sets covered: 2-9. •No. of models for each set: 6,12,13,16,28,24,17,18. •Name, Model No. (mostly none), Page No. of first & last model of each set: 2: SEGGIOLINO CON LEGGIO,41,9 (stool with music stand); SCHERMITARE, 40, 11 (fencer). 3: TRAPANO,66,12 (drill press); PEZZI OCCORRENTI,77,17 (mail bag hanger). 4: MACCHINA A VAPORE,18 (steam engine); SEGA A NASTRO,24 (band saw). 5:MAGLIO A DOPPIO EFFETTO,25 (double-action trip hammer); MITRAGLIATRICE 'BREDA',34 ('Breda' machine gun). 6: TRAM ELETTRICO, 35 (single-deck tram); GIASTRA,54 (merry-go-round). 7: BILANCIA AUTOMATICA,55 (automatic scale); GRU PER EDILIZIA,78

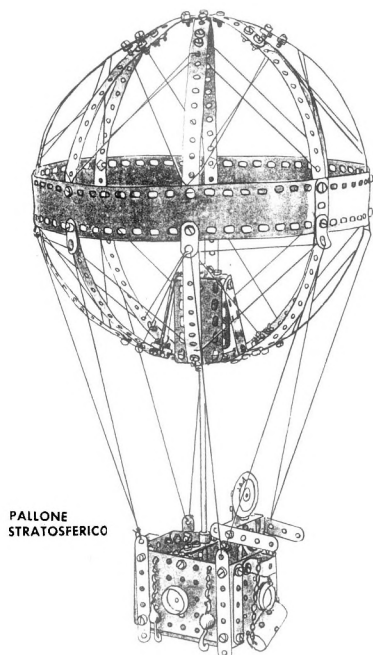
SI COSTRUISCONO CON LA SCATOLA N. 8 OPPURE 7 E 7/A

On construit avec la boîte N. 8 ou 7 et 7/A

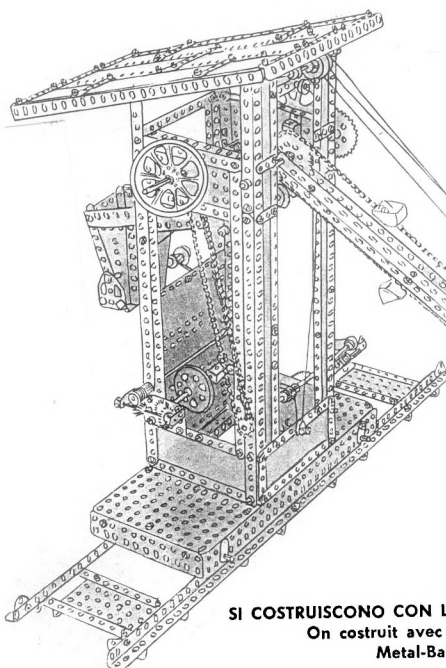
Metall - Baukasten 8 - 7 - 7/A



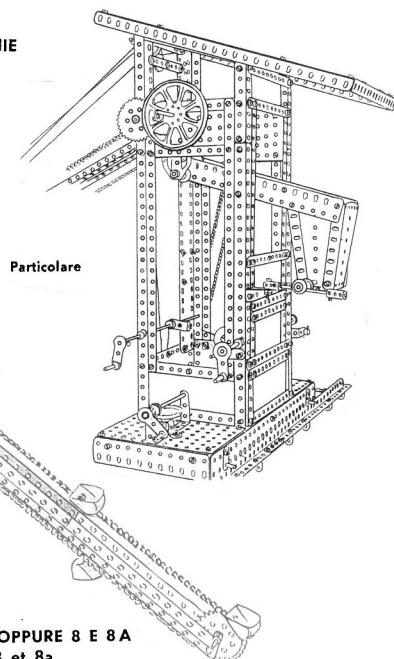
(builder's crane). 8: CARRO ARMATO,79 (tank); GRU A PONTO,95 (travelling gantry crane). 9:GRANDE PIEGATRICE A MOTORE,96 (? press or bending machine); CARRO ARMATO, 130 (tank). •Other notes: 3 extra unnamed #8 motor driven models are on pp101-103, and 2 using ELETTRO BRAL on p131. Also 'BRAL' made from Strips on p8.



PALLONE STRATOSFERICO



DRAGA A SECCHIE



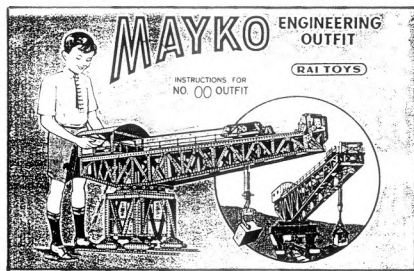
Particolare

SI COSTRUISCONO CON LA SCATOLA N. 9 OPPURE 8 E 8 A
On construit avec la boîte N. 9 ou 8 et 8a
Metall-Baukasten 9 - 8 - 8a

on the Tractor give the impression of having a different shape of tyre to the ones in the Set.

MEPAR is highlighted on the cover and may be the name of the maker; under it is an address, UI Sobieskiego 54, 42-201 Czesochowa.

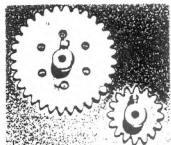
MAYKO This was an Indian system made by Rai Toys and the manual cover for the 00 set (below) is very similar to the one used by Meccano in 1934-36 & 1945-47. The only real difference is that the boy standing at the back of the Giant Block-Setting Crane has no jumper and a different



face & hair style. Probably MAYKO was one of the systems that appeared in the mid-1950s when MECCANO was no longer available in India. A set label shows the Floating Crane which was a No.2 MECCANO manual model from 1937 to 1961.

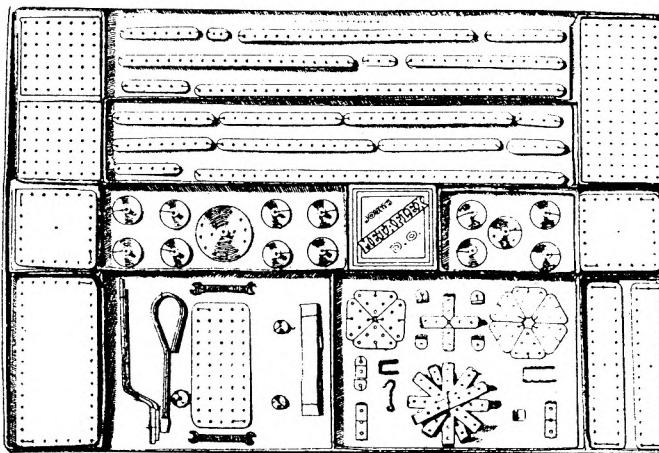
MECCANICO Sets sold under this name were made by Roberto Braglia and the front cover of a No.3 manual shows a model containing characteristic BRAL parts, with alongside other BRAL parts including the Gears opposite, (BRAL parts 93 & 93a).

Meccanico



As shown in MCS, BRAL sets and manuals were also called IL CONSTRUTTORE MECCANICO, and another name used was IL CONSTRUTTORE BRAL. The Gears shown were introduced at some time after WW2 and before 1970, probably well before, and a boy is shown on the manual wearing a baseball hat.

MÉTAFLEX A French system from the 1950s with unpainted aluminium parts, made by a company called "D.O.". There were 4 sets plus conversion outfits, and the No.1 is shown below.



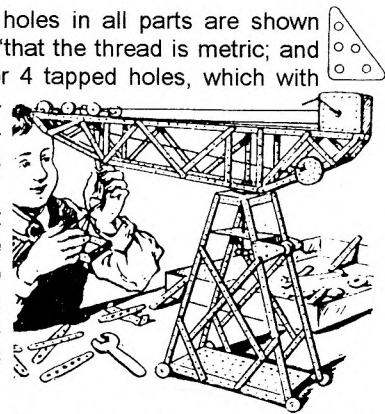
The hole spacing is 10mm and the hole diameter looks to be about 3mm. Most of the 46 parts can be identified in the Set with the notes below as a guide.

- At the top are Strips with 2,3,4,5,6,7,9,11,14,21, & 33h. Also listed is a 15h. At the sides are 7*7 & 7*15h Flanged Plates, each with 2 flanges, on the 7 & 15h sides respectively.
- In the centre bay: 7*7h Flexible Plates; Pulley & Flanged Wheels which scale at about 22mm Ø; a 6h Bush Wheel, and one of about 50mm Ø with rings of 6 & 12 holes.
- At the bottom: 7*15, 5*11 & 3*15h Flex Plates; Screw-driver, Spanners, & Crank Handles with the handles sleeved; small Pulleys with & without boss; DAS 3,5,7h wide with 1h lugs; Angle Brackets, and Double Brackets 1,2, & 3h deep; a Double Bent Strip and a Wire Hook; 3*3h Corner Brackets and Triangular Plates.

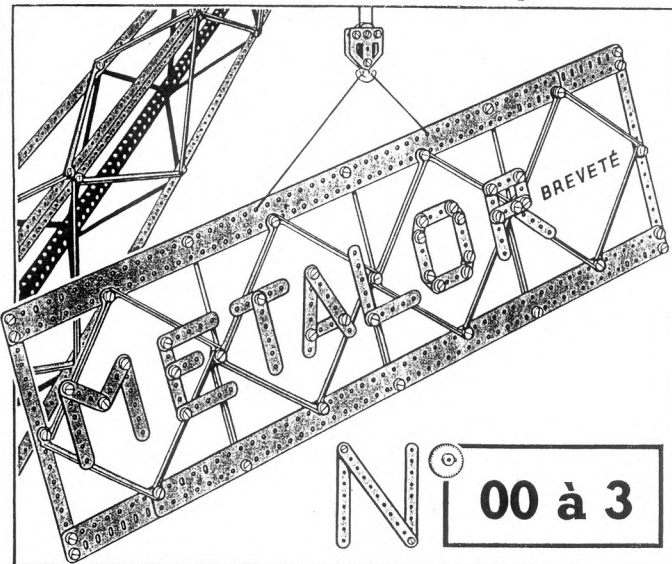
An Illustrated Parts List also shows 4 Axles, 30,40,50 & 95mm long; a hex Nut, a Bolt with a thin cheesehead, a Grub Screw; a Collar and the different pattern Corner

Bracket (opposite). All holes in all parts are shown round. An ad mentions 'that the thread is metric; and that the Collar has 2 or 4 tapped holes, which with the Threaded Rods included in the Sets, allow articulated joints and linkages.'

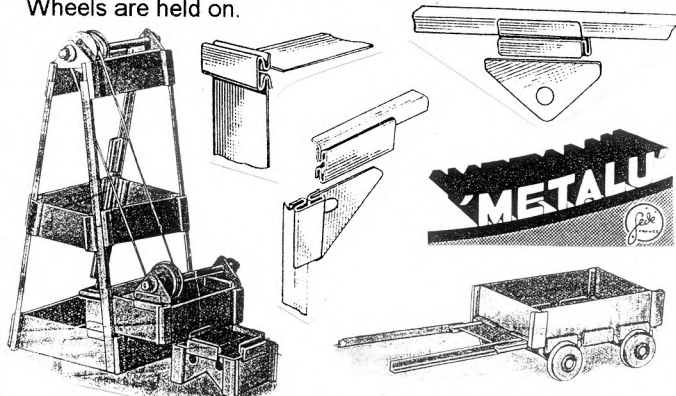
No indication of set contents is available but the No.1 looks to have a good selection of parts. The Crane opposite is shown in the ad.



MÉTALOR There are photocopies of a few parts from this 1950s Belgian system in MCS, and the hole pitch and diameter are given as 12.0 & 3.5mm. The odd thing is the flanges with slotted holes in the 3 A/Gs shown - a 5h A/G has every other hole slotted, an 11h one has all slotted holes, and a 15h has only holes 1,3 & 5 slotted. The other parts shown are 5 & 11h Strips, and a hex Nut and cheese-headed Bolt. Part of a manual cover for Sets 00-3 is shown below & a few parts can be seen on it: a Gear, Flat Trunnion, and Double Hook; Strips with 2,3,4,5,6,9,11 & 17 (or 15) holes; Flat Girders with all the holes in one row slotted, and 50h long ones with only holes 1,3 & 5 so shown; and the bracing Stays which look as if they are a very narrow angle with eyes formed at the ends of one flange.



MÉTALU There is only a small ad in MCS and the name is spelt wrongly, see 15/427. Now more details are available from several pages of a manual. Models are made from unperforated Plates and narrow A/Gs, which are joined by pushing them into 'K' section Clips. The diagrams and model below explain all. Axles run in Flat Trunnions pushed into the Clips, but it isn't clear how the Flanged Wheels are held on.



No indication of the size of the parts is given. The maker was Gédé, the firm that made one version of EFEL; MCS gives the date as

Corrections • Jeannot Buteux has pointed out that for the second time (!) I got the name of MAYKO wrong, see MAKKO/MAYCO in 15/427. But I did get it right in 16/447. • In the 3rd para of 'A Russian Baby' (16/435), the '5*10h Flanged Plate' should read '5*11h Flanged Plate'. • At the top of the 2nd column of 15/420 the 'red or blue' colour of the painted ZICK-ZACK parts should read 'green or blue'.

ITEMS FROM LETTERS

1. From Don Redmond: • John's Photo & Hobby, 2188 Danforth Ave., Toronto, Ontario, M4C 1K3, tel/fax: 416-421-1850/7441, stocks **TEMSI** sets and parts. • Parts which may be **CASTLE BUILDER** have a hole pitch of 12.77mm±. • In a large lot of **AMERICAN MODEL BUILDER** parts there were two types of N&B: the normal ones, plus 3mm thick, 3/8" square Nuts, and Bolts with 7mm Ø heads, both brass. And AMB Sprocket Chain has 13 links in 4". • The lower **STERLING** Screwdriver in 16/430 looks like the bought-in commercial item that is found with post-WW1 White sewing machines, and in other sets as well, including AMERICAN MODEL BUILDER. • A **BRAL 400** Set has deceptive packaging: it is in a carton 18*14*2" but the indentations for the parts are contained within 12 3/4*9*1 1/2", so 34% of the volume of the carton. [I hadn't any record of a BRAL 400 Set and Don has now sent me more details. It's a small outfit from the current 'BRES' period, but before 1994, and it's based on 4 1" Pulleys/Tyres and a 5*11h Flanged Plate. I'll include more about it in a later Issue.]

2. From Jeannot Buteux: • From 15/413, there is also a Danish **EIFFEL** which is compatible with MECCANO and the parts are marked EIFFEL. [Could this be the EIFFEL mentioned in 16/458?] • The French **ASSEMBLO** patent (see 15/420) was No.720276 and was granted on 3 Dec. 1931. • **FALCO** [1] (15/426) was a MECCANO-type system with very colourful parts. • On **RODOPI** (see 16/458), it is confirmed that Bratsighovo is in Bulgaria.

Some new names: • **ARMA**, Czechoslovakian from 1955. • **CONSTRUCTAM**, French, perhaps from the 1950s. • **E.B.S.**, new theme sets from The Czech Republic introduced in 1996, with large, heavy, steel parts, nickel plated. • **LA CONSTRUCTION MÉTALLIQUE**, a French architectural system with 60 different Flanged

Plates as the main parts, each of which was available chromed, or painted in 10 different colours. • French **MA TOUR CONSTRUIT**, from the 1930s, with light steel parts. • French **TECHNIC**, 1939, with nickel plated steel parts but wooden Wheels.

3. In some French **TRIX** literature that Jean Estève kindly lent me the **BTB PENDULE ÉLECTRIQUE** (see 15/427) is included in a 1935 catalogue, price fr.59, and isn't among the new lines for that year, but it isn't in a list and brochure from 1938.

4. On **PREMIER** (16/457), David Fellows wrote that his brother received a set at Xmas 1955, and he remembers the Flanged Plates which were of a heavier gauge than contemporary MECCANO, and were finished in mid-blue semi-gloss enamel, similar to the current French colour.

5. From Keith Cameron on the **STABIL** article in OSN 14. 'Those Inventor's Outfits are extraordinarily advanced for their day, including the very early attempt to introduce heavy axles. But like so many innovations, these STABIL items have passed into oblivion almost unnoticed, perhaps due to failure to correct imperfections in the original design. I still think that the single metal teeth assembled in a metal strip around a hub was a brilliant idea - surely something should have come from it.'

6. From Kendrick Bisset. The **STRUCTO** Bridge (16/459) was the result of a marketing agreement between Structo, of Freeport, Illinois, and American Flyer of Chicago (before Gilbert bought the firm), which was formalized in 1922. AF advertised Structo non-constructional vehicles (trucks, autos) with AF trains, and acted as Structo's distributor. The 'constructional' Bridge is shown as an accessory in a (reproduction) 1918/19 AF catalog, and this would have been before Structo ceased producing their standard constructional outfits (see 15/424).

7. From Josep Bernal on a point about the production of **MECCANO** in Spain by Exin around 1970. Their last address (now closed) was Exin-Lines Bros. S.A., Roger de Flor 86, Barcelona 13. Later production was transferred to Mexico using the same machinery. The thread used for both the Spanish and Mexican parts was M4.

EXTRA MCS SHEETS The Sheets listed here are available at 15p per Sheet plus postage. That makes £7.95 for all 53 Sheets.

MCS Amendments, List No.5 [1]

ANCHOR: X1.2,5a,5b [2]

ARTS ET MÉTIERS Série 3: X1.1,2,3/4/6 [2]

BERGLAND: X1.1,2/5 [1]

BURGER: X1.1,2 [1]

CONSTRUCTION JEEP [2]: X1.2/5,2a/5a,4 [2]

DITMAR: X1.1,2/5 [1]

DORANDO: X1.1 [1]

FANTASIE "R": X1.1,2 [1]

FERROX: X1.2/5 [1]

FIX: X1.1,2,4/5 [2]

FRYDAGH: X1.1,2/5 [1]

GLOBUS Der Kleine Ingenieur: X1.1,2/5 [1]

GLOBUS LEICHTBAU: X1.1,2 [1]

KONSTRUX: X1.1,2,5 [2]

MAC et NICK: X1.3/4a-3c/4d,5-a [3]

MAFELL: X1.1,5 [1]

MÄRKLIN: X1.2,3,4/6,4a/7c [2]

MECHANIC: X1.1,2,5 [2]

MECHANISKAIS KONSTRUKTORS 'SKOLENS':

X1.1,2,5,3/4,3a/4a/6-3c/4c/6b/4d [4]

METEOR (M): X1.1,2,3/6,5 [2]

MINIATUR: X1.1,2,3/4/6,5 [2]

M K A: X1.1,2/5 [1]

MÖWE: X1.1,5/7 [1]

MWK: X1.1,5 [1]

PHANTASIE: X1.2/4,5 [1]

PLASTICON: X1.2 [1]

SACHSENMEISTER: X1.1 [1]

SPEDICON: X1.1,2/3,4,5 [2]

STEEL TEC: X2.2a/5b,4a-c,5a [3]

TRIANGLE: X1.1,5 [1]

TRI-SECTOR: X1.1,7-7b [2]

TUBA: X1.7 [1]

ZICK-ZACK: X1.1,2,5 [2]

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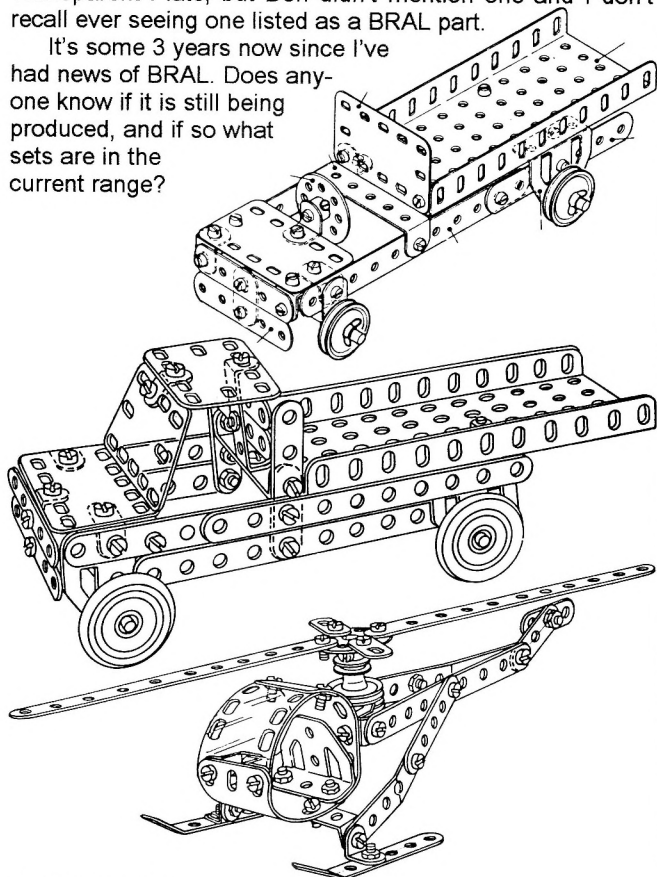
The BRAL 400 Set Don Redmond mentioned in passing that he had such an outfit, and since I'd never heard of it he kindly sent some details. It's a small set in a large box, which he bought in about 1994, secondhand but in very good condition. It carries the BRES logo, and the company changed to that name between the mid 1980s and 1991, but I'm not sure exactly when.

The box measures 18*14½*2" and has an end-flap opening. 6 models are shown on the top in full colour against a printed red background, while on the bottom are all the parts in the set, and an Articulated Wagon. The parts are housed in a grey plastic insert & the main ones are 2,8,2,4 of 3,5,7,11h Strips, 2x 2½" & 1x 1½" DAS, 2x 5h Curved Strips (M90a), a 5*11h Flanged Plate, 2 each of Trunnions, Flat Trunnions, & Reversed Angle Brackets, 8 Angle & 4 Flat Brackets, 2x ½" & 1x 1" Double Brackets, a Bush Wheel, 4x 1" Pulleys with Boss, and Tyres for them, 2x ½" Pulleys, 2 each of 90mm & 38mm Axles, 3 3*5h Flexible Plates, a small Loaded Hook, 30 Spring Clips, about 30 N&B (5 & 7mm u/h), a Screwdriver & Spanner, and a sheet of stickers (brand names, etc).

Based on a known No.3 Set from the mid-1980s, these contents, with a few minor exceptions (and apart from those 30 Spring Clips), are what might be expected from a No.2 of that period. So was there a whole '100' series of sets in perhaps the late 80s? Any further information would be welcome. As with the No.3, the Strips and Brackets in the 400 are nickel, but the Flanged Plate in it is light blue instead of green.

With the Set was the huge 25*19" poster mentioned in 7/142 (showing the parts with 4-figure PNs), and a Model Leaflet accordion-folded in 4 to 11*7¾". It bears no Set No. and shows line drawings of 29 models. Nearly all are quite reasonable small models, with a good sprinkling of Buggies & Helicopters, though some require sharp bends in Strips and the Flexible Plates. Over half don't use the Flanged Plate and Tyres, and so may have been designed for a smaller outfit. The models compare very favourably with the mostly very simple and unattractive ones in the No.3 manual of the mid-1980s Set. The Lorry below is one model that has been carried across, and for comparison, the one under it is its neighbour in the Leaflet. Several of the models, such as the new Lorry & the Helicopter below, need a 3*5h Transparent Plate, but Don didn't mention one and I don't recall ever seeing one listed as a BRAL part.

It's some 3 years now since I've had news of BRAL. Does anyone know if it is still being produced, and if so what sets are in the current range?



ELETTRO BRAL The electrical sets produced by Roberto Braglia under this name came to mind recently when Richard Symonds kindly sent photos of a set he had found, which looks complete, & a photocopy of the manual. The latter appears to be the one from which the MCS pages were taken, and, apart from the cover, is identical to one I have. Also used in this note are illustrations of the sets in ad leaflets, & on the backs of manuals.

No start or end dates are known for the Sets but they were certainly available in 1964, and were still on the back covers of manuals in the mid-1980s. The main parts were a 5*7h Perforated Insulating Plate, a simple 4.5v permanent magnet 3-pole Motor; a Bell Unit; a Rhumkorff Apparatus (a shocking coil?); a Horseshoe Magnet; & a Transformer. All devices came fully assembled but the Motor could be taken to pieces. Smaller parts included various Lampholders & Reflectors; Toggle, Pushbutton & Changeover Switches, Plugs & Sockets; Coils of Connecting Wire; and standard & smaller diameter N&B. Tools were a standard Spanner, a Screwdriver with plastic handle, Scissors, Pliers, & a Hammer.

A mid-1970s ad shows the main parts in the Sets. The No.1 has the Bell & the Plate. The Motor is in the No.2 but there's no Plate. No.3 looks much like the No.2 except that the Motor isn't assembled. The Plate is restored to the No.4, the Motor is fully assembled, and there's a Transformer. Additionally in the No.5 are the Rhumkorff kit, the Horseshoe Magnet, & the Hammer. The No.1 has 2 Bulb Holders, Reflectors, & Switches, with more and a greater variety of such parts in the larger outfits.

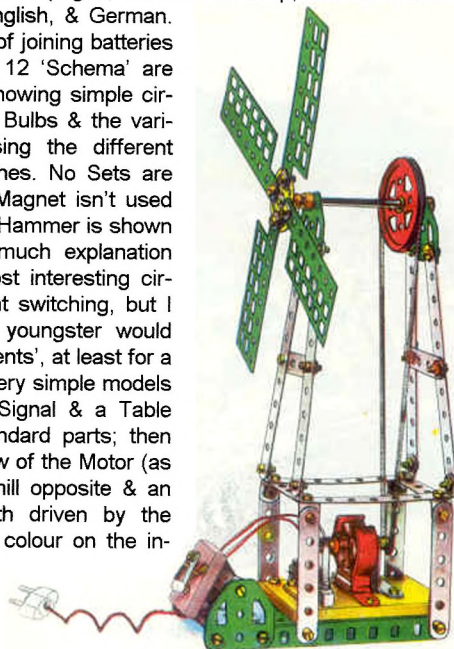
Most of the illustrations show the parts attached to a backing board but in a later one, & in Richard's Set, they are in a moulded plastic tray. There's no Set No. on his box but it corresponds to the No.5 above except that it has no Transformer (though if the parts were rearranged there might be space for one), and, as well as a 5*7h Plate, there's a 7*11h one. A similar looking Plate is shown in an ad for a BRAL semi-constructural Telephone Kit.

On the parts, Richard's Plates are plastic mouldings with ¼" Flanges on all sides, & no centre hole. Earlier Plates look as if they may be the same. In Richard's Set, and the earliest Nos.4 & 5, there are some fancy Bulb Holders with radial fluting, about 2" Ø.

Apart from white/cream Plugs, Sockets & some Switches, most parts are red, or in some earlier sets, an electric blue. Exceptions are black Transformers, the 5*7h Base which is usually yellow, & Reflectors which are sometimes red, blue, green, and yellow in the same set.

The sets with strung parts are in blue boxes with the label showing a boy in front of a large yellow space telescope, and a red control console. In an ad the set with the formed tray has a yellow lid with again a boy in front of a (white) telescope, and there may be a console but that part of the lid isn't visible. Richard's lid is brown with swirls of light blue lines around the name, and 5 small circular insets showing most of the main items wired up to Switches, etc., and bolted to 7*11h Plates.

My manual has the boy, yellow telescope, & console on the cover, while Richard's & the MCS one have the Motor on its red base, bolted to a thick yellow 7*11h Plate, and, above, a yellow tray with a compass in it, supported by a DAS. These last 3 parts aren't in the sets, nor are they mentioned anywhere else in the Manual. The latter has 16 pages, 157*219mm deep, and the text is in Italian, French, English, & German. After an explanation of joining batteries in series & parallel, 12 'Schema' are given on 7 pages, showing simple circuits connecting the Bulbs & the various main parts, using the different Connectors & Switches. No Sets are referred to and the Magnet isn't used at all. No use for the Hammer is shown either. There's not much explanation and perhaps the most interesting circuit is for 2-way light switching, but I can imagine that a youngster would enjoy these 'experiments', at least for a while. Next come 2 very simple models of a Railroad Light Signal & a Table Lamp that need standard parts; then after an exploded view of the Motor (as in MCS), the Windmill opposite & an Aeroplane Ride, both driven by the Motor, are shown in colour on the inside back cover.



Correction The transliterated name BOENNAYA in 25/717 & 718 should read VOENNAYA (my thanks to Don Redmond). This set in question is no doubt similar to the one mentioned in 24/714, though some details are not identical.

ITEMS FROM LETTERS

1. From Thomas Morzinck. • On the **ANKER Metal Parts** (25/730) The set with the 1897 parts offered by Richter in that year cost (a very expensive) 60 Marks. One year later it was deleted. Tobias Mey mentioned in his book *Zum Bauspiel*, that the Keller brothers - former employees in Richter's factory - sold their own Bridge Set from 1897 using preformed metal parts. In their advertising literature the Keller brothers called Richter's 1895 Bridge Set 'a screwed idea'. ('eine verschraubte Idee' in German). [The Keller Set may be even earlier. A UK patent No.5781 in the names of Georg & Paul Keller is dated 1890, and the parts in it (owned by David Hobson) correspond to those believed to be from a Set which was awarded a prize at a London exhibition in 1891, and also to those in a photo of a Bridge made from the 1897 Set above. The main elements are Straight & Curved T-section Girders, joined by Flat Strips which push into the double wall web of the Girders to represent uprights & bracing. A George Wetzel sales list sent by Don Redmond has an illustration of a Keller Bridge Set called **DIAMOND BRIDGE BUILDER**, with 4 children ('one Chinese, one American Indian, one white, & one Ethiopian') looking at a Church made from blocks, and a Bridge with block piers and a span of the metal parts.]

• Tobias mentioned that the early **DUX** parts (c1938) look like the Julius Weiss parts from 1892.

2. From Don Redmond. • More on **NECOBO**. The parts mentioned in 24/714 were from a lot which are probably a large part of an early No.4 Set, plus some later parts, and some which may or may not be NECOBO. The manual with them covers Set 0-4 and its parts list goes up to only PN 99, so is earlier than either of the MCS lists, and fits between the 1st & 2nd manuals described in 4/57. The 11 & 25h Strips have large-radius ends but there are also 11h, and 3 & 5h, with half-round ends. There are 2 sets of 1" Pulleys: 3 have red painted steel discs and very fine (small, round) peening on the brass boss; the other 4 have aluminium discs and steel boss with very deep conical peening. The aluminium Pulleys had a set of fat white soft Rubber Rings of 5mm circular form, 35mm o.d. The red ones had black rubber Tyres with a tread of 5 circumferential raised lines & radial raised bars on one sidewall. There was also one Tyre about 7mm thick, 38mm o.d., with NECOBO in raised lettering on one side. The aluminium Pulleys are suspect since there were also red Loose Pulleys. All the Gears are Mod.1 and the 60t is the early unperforated type. The Flanged & Triangular Plates, and the Face Plate are red. The Flexible Plates are aluminium painted dark blue. Under a red & ivory daub of enamel the Windows (#126) seem to have been painted silver. Strips, A/Gs, & Railings are dark green, darker than the early MECCANO dark shade. The red is quite light, between Meccano's light & medium. The parts have a surprising range of thickness. 25h Strips are 1.38mm; 11h Strips 1.0mm; Railings .84mm; 5*4h Triangular Plates 1.18mm; Windows .81mm; but Trunnions are only .67mm. Two types of Collar were found, both tapped 5/32" BSW. One is 10mm Ø, 7mm thick, double-tapped, and the other 8.5mm Ø, 6.5mm thick, & single-tapped. Two later parts are the Cone Pulley, #176, machined from brass with a concave rear (boss) face, and the Eccentric, #180, which has a brass arm/loop held between two red steel discs by a brass boss and a matching brass stub, both peened with a very deep, conical bottomed recess. [A small lot of later Strips, Girders, & Trunnions (up to PN 195C but none more than 9h long) are also the very dark green - the Girders are about .8mm thick, the Strips 1.05mm, and the Trunnions

.85mm.]

In a later letter Don pointed out that the Hook #90 hasn't been seen, and isn't illustrated in any parts list, but in the manual models is shown as the wire type right. Also it seems likely that the Faceplate #83 with the 2 rings of 8 holes (see 24/714) is an early part because the 6cm Disc, #82 (a Faceplate without a boss), appears thus in several of the manual models. Later, as shown in 4/59, both had the pattern with radial slots.

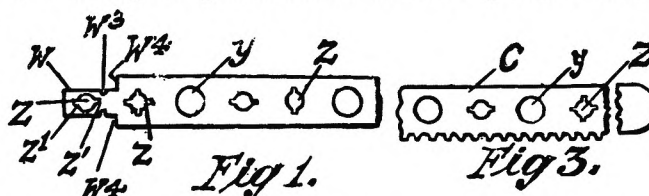
• On **STEEL ENGINEERING** (see 23/666), the wings of the formed Collar, X37, are near circular in shape, as opposed to the ERECTOR rectangle.

• In response to a question to Don about **WISDOM** (to include also CONSTRUCT-O-STEEL & CONSTRUCTION MODELS), he wrote that there are two patterns of slotted holes in Trunnions & 5*11h Flanged Plates. Most have rounded ends but some have large-radius 'BRAL' ends. The length o/a is 6.4mm for both. All the slots in known examples of the other sizes of Flanged Plates have rounded ends. Note that the Flat Trunnion is not made from the same blank as the Trunnion, and has no slotted holes. On colours, the 5*11h Flanged Plate is known in light, medium, & dark* blue, and medium, & dark* red; the Trunnion in medium, & dark* blue, and in two shades of dark red*. The asterisks denote a lacquered finish, with a metallic look.

3. From Tim Edwards. On Chinese **MECHANIX** (see 24/710), there is also a 001 Set with 68 parts, price £3.50. [A 002 Set with 108 parts has also now been seen.]

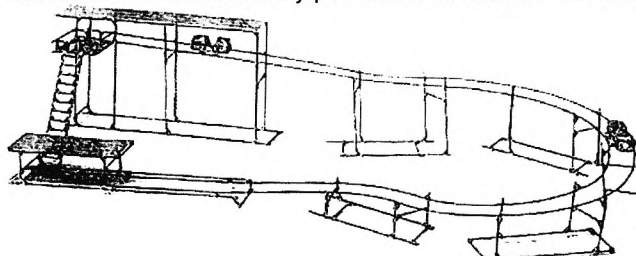
4. Josep Bernal wrote that **BRAL** is no longer being made. [The BRAL web site, www.bralsystem.com has just a home page with 'stiamo ritornando' on it - we will return? Let's hope so.]

5. From Jack Little. • On the **Day patent** (22/637), Jack sent a copy of the original Australian patent (No.6000/22, accepted 27th Nov. 1922), with added changes to the figures arising from an Application for Amendment on 5th August, 1924. The text is similar to the UK version but not identical and the original figures differ too in detail. Fig.1 below shows



a different pattern of holes for example, and the Strip in Fig.3 has a serrated edge & rounded end. The purpose of these features isn't explained. The changes made to the figures in 1924 took the form of overwriting some with a large cross and writing Cancelled & 18/11/24 alongside. 3 of the 4 cancellations are of the parts shown in Figs.8, 9, & the righthand end of Fig.4, in OSN 22. The parts in question are made in the same way as the EZY-BILT Clips (22/636) but whether that had a bearing on the matter isn't known. The fourth change was to delete the slitted end of the Fig.2 Strip, though similar ends with a slit with centre hole remain unaltered.

• Also from Jack, the cutting below from the Nov. 1947 *Sportsgoods, Toy & Canvas "Retailer"*, which confirms that CLIRO (described elsewhere in this Issue) was sold in Australia. It is: unfortunately p31 hasn't been found and so it

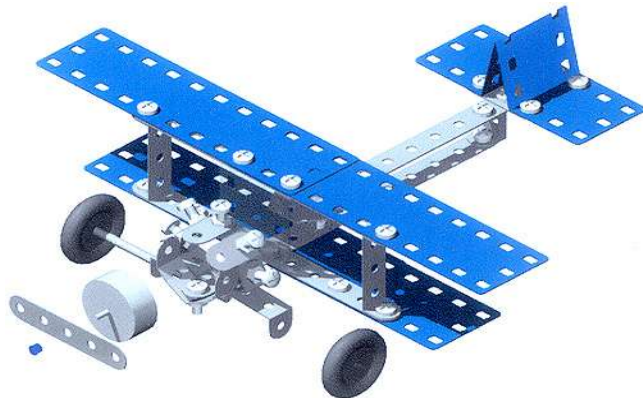


A Scenic Railway made from the Schofield Model Building Set. Further details of this set appear on Page 31.

BRAL Bounces Back As promised on the old Bral web site (see 26/778) BRAL has returned, and a series of 7 small sets packed in canisters can be seen on a new web site, www.bral.biz. Jim Osborne saw some on sale when he was in France last June, and alerted me to them. The sets can be bought from the web site at prices ranging from €16-32. Also step-by-step instructions can be downloaded for all the models, and for a few more which aren't on sale.

The Sets are:

- #10011 'double 1.1 scooter – gru'. 110 parts to make either (I suppose, or should it be 'and') a Scooter or a Crane.
- #10012 'double 1.2 camion – rescue'. 130 parts for a Breakdown Truck or Elevated Platform Vehicle. The canister is shown left.
- #10021 'motor 2.1 elicottero'. 120 parts & Electric Motor for a Helicopter.
- #10022 'motor 2.2 mulino'. 120 parts & Electric Motor for a Windmill.
- #10031 'solar 3.1 aereo'. 110 parts, Solar Cell, & Motor for the Biplane below. The Motor seems to just push into the



front of the model. The Solar Cell is connected to the Motor by wires, & is not built into the model. As shown it is a little bigger than the tailplane. Not as neat as the CONSTRUCTION model mentioned in 16/442, with the Cell as part of the wing.

- #10032 'solar 3.2 giostra'. 120 parts, Solar Cell, & Motor for a Chair-O-Planes roundabout. The Motor output shaft drives the centre spindle directly.

- #10041 '4.1 light spazzaneve'. 170 parts for the Snow Plough right. It looks a more interesting model but the instructions for it wouldn't download. I wonder what 'light' in the title signifies.



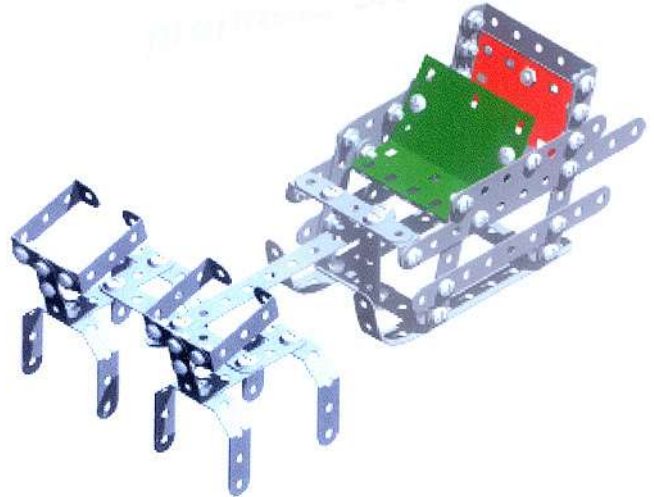
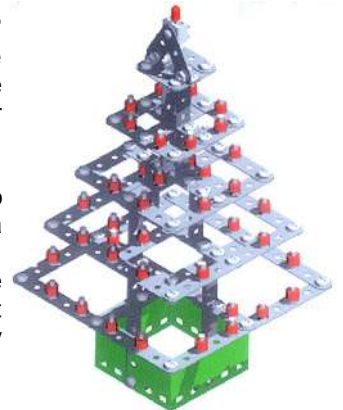
Packaging The canisters vary in height from set to set, and their colour for the different types of set varies too.

The side panels & lids are green for the 'double' & 'light' sets, blue for the 'motor' sets, & yellow for the 'solar' outfits.

The models for which only the instructions are offered are:

- 'Albero di Natale & Slitta' from 'double 1.3'. That is the Xmas Tree right, and the Sleigh pulled by two reindeer below. Rather nice models; for the Xmas trade perhaps.
- 'Go Kart & elicottero', two simple models, each from a 'Bral Box'.

All the models are shown made from bright Strips, and Plates variously blue, green, yellow, & red.



BRAL: S1

OSN 29/857

Snippet: New System – LE PETIT CONSTRUCTEUR

All that is known of this system is the photo right of what seems to be the box lid. The words top left are 'KIT DE MONTAGE COMPLET'. Comparing the model with the BRAL Biplane above shows the parts' parentage very clearly – notice for instance the slotted holes in the Flexible Plates, and the way the fin is made by folding a 7h long Plate sharply across its centre holes, with bends at each end to provide mounting flanges.

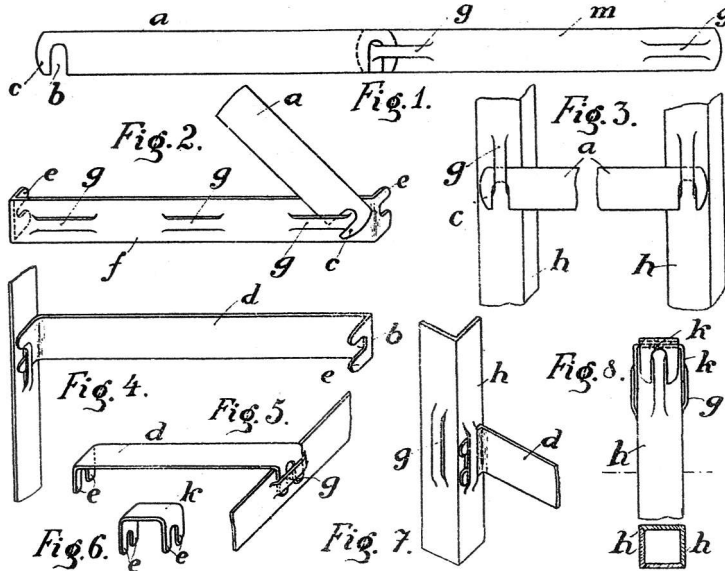
So perhaps LE PETIT CONSTRUCTEUR was (or is) made by Bral for the French market, or perhaps a French company used BRAL parts. The Set appeared on Ebay in December 2002, so before OSN 26 in April 2002 when according to their web site, Bral was not marketing sets. Does anyone know of any other outfits with the LE PETIT CONSTRUCTEUR name?



LE PETIT CONSTRUCTEUR: S1

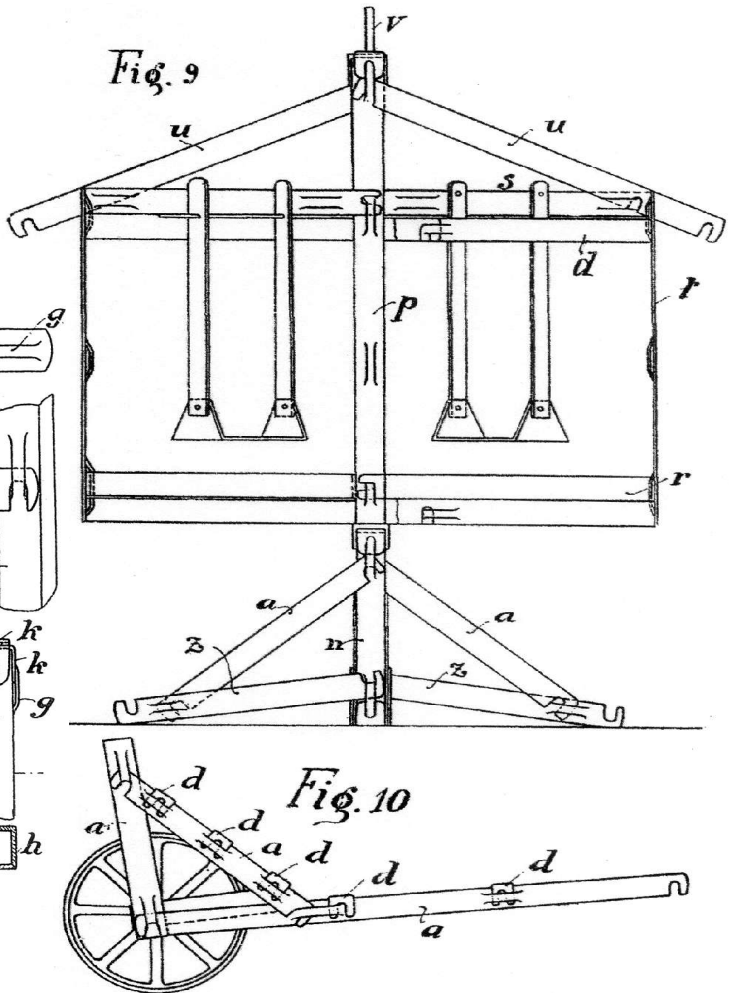
OSN 29/857

Czech INVENTOR Following the brief note about this early system in 33/973 David Hobson kindly sent the relevant UK patent. It is No.150719, application date Sept.1, 1920, and the original Czech version dates from Sept. 9, 1919. A French patent is also known, dated 30 August, 1920. The UK patent is in the name of Jaroslav Vand of Policenad, Metuji, on his own behalf, and as assignee of Antonin Konig of Ledhuj, near Policenad. Vanc! it will be recalled was the founder of the company which made INVENTOR, and later MERKUR, and the factory is still at Policenad.



Above & right are most of the illustrations in the patent. Fig.1 shows the basic principle with part 'a' having a slot, called a hook, at each end, and part 'm' with a pressed through 'eye' at each end. Both parts can have a series of eyes along their its length. As can be seen 'a' & 'm' are joined by pushing a hook into an eye, at an angle if so desired, as in Fig.2, or at 90° as in Fig.3. Figs.4, 5, & 7 show how a DAS with hooked ends can be used (the eye is specified as being just long enough to take the width of a strip). Fig.8 shows a square tube made by joining 2 angles 'h' with a double bracket (Fig.6) at each end.

The base of the roundabout in Fig.9 has a square tube 'n' supported by struts 'a' & 'z', and supporting a vertical rod 'v' (the double bracket must have a hole in its base). The rotating part again has a central square tube 'p' and it supports 2 rings



'r' & 's' made of suitably curved strips. They are spaced vertically by strips 't' and joined to the tube by DAS 'd' & strips 'u'. The swings are then, it is said, hooked into the ring 's' by wires.

The framework of the 'wheelbarrow' in Fig.10 is straightforward but how the wheel is mounted isn't explained.

Going back to the photo in OSN 33, what were taken to be slots would be the eyes, and hooks can be seen at the ends of the appropriate parts in the illustrated parts on the lid, and on some of the parts in the box.

OSN 34/1015

INVENTOR: S2

SNIPPET: A LAVAZZA Promotional Outfit from BRAL Lavazza is a well-known brand of coffee in Italy. Right the top & underside of the box, and below the parts in it. The latter, apart from any Tools that were included, look to be complete, with 2 spare N&B (I suppose the tip of the Trunnion pushes into the end of the formed Plate to stop it turning). The parts match the illustrations except that the Flexible Plate is black. The wheels are Pulleys and they presumably push onto the Axles. The metal parts look to have the usual Bral nickel finish except for the BZP N&B. The Nuts are hexagonal rather than the square type seen in other BRAL sets, so perhaps the Set is a fairly recent introduction.



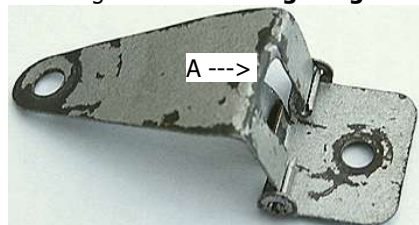
is called 'triccio' and the model is a small Tricycle made of 4 Strips, a Trunnion, and the same black Pulleys as wheels.

OSN 34/1015

BRAL: S2

from its smell is rubber rather than plastic.

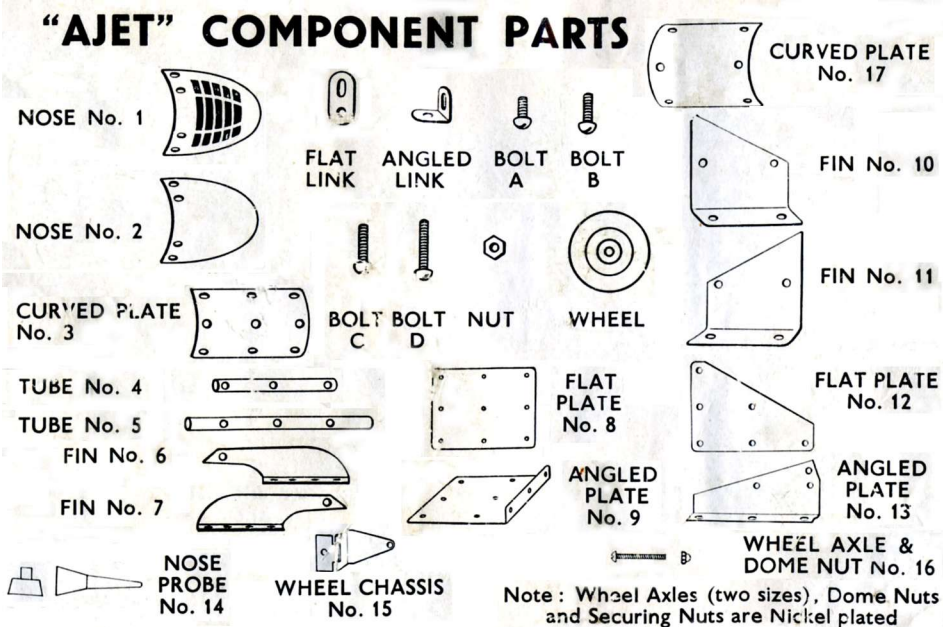
The **new parts** are #12-16. **Plates #12 & 13** are silver. The **Nose Probe #14** is red plastic and the 'spike' pushes onto the spigot on the base. The method of attaching the base to the nose isn't shown in the Manual - in the parts to hand the shanks of two bolts embedded in the base pass into the front holes of the Nose parts and are held there by Nuts. Overall the Probe is about 6cm long. The hinged **Undercarriage Leg #15**



above has a tongue pressed through from 'A' and it engages with the right-angled tab on the inner edge of the mounting plate to hold the leg in the up & down positions. The mounting plate is $\frac{3}{4} \times \frac{5}{8}$ ", and the leg is about 35mm long o/a. (The larger U/C Leg mentioned in OSN 14 may have been the SUPERSONIC version, an example of which is now to hand. It is generally similar but has no method of positive locking, it relies on the hinge being very stiff. It is painted green, the mounting plate is $1 \times \frac{1}{2}$ ", and the leg is 38mm long.) The **#16 Axle & Dome Nut** have not been seen but the thread is 4BA. The **Curved Plate #17** is not new, it is the nickel DD Rocket part #03. The **Screwdriver** may be similar to the wire type shown for SUPERSONIC in 14/367.

Some of the parts mentioned in OSN 14 are not in the

"AJET" COMPONENT PARTS



present lots, and are not needed for the Manual models. They are the DD Rocket Nose #01, the DD Rocket Fins #10 & 11, and the Small Rectangular and Triangular Plates. If these were indeed AJET parts they would presumably be in another set - it will be recalled that the OSN 14 box lid had 'Junior' on it. There is no mention of a set name in the present manual. A pointer to the possible existence of an AJET Rocket Nose is the mention is OSN 14 of the half hole in the front of the part, so that there would be a full hole in the pair forming the nose and this would allow a suitable Probe to be attached. In one model seen the Probe is a slightly modified version of the #14 Spike. It has a small bore beyond the bottom of the spigot recess into which a Bolt is screwed from the inside of the nose.

AJET: S2

OSN 37/1106

Snippet: MECCANICO(?) ITALIANO In recent years the Italian firm Bral, later Bres, has sold sets under the name BRAL, but earlier MECCANICO was often used, usually preceded by IL COSTRUTTORE, often in quite small letters. Manuals generally had the name that was on the lid but sometimes IL COSTRUTTORE BRAL was used on manuals with 'MECCANICO' outfits.

No lid is shown for the set opposite but the name of the manual (shown slightly enlarged in the top right corner) looks like MECCANICO ITALIANO although the 'IC' has to be taken on trust. So is this another BRAL alias or a different system?

As far as can be seen most of the parts could be BRAL including the light blue Conical Discs & what may be a brass look Chimney Adapter in the bottom left corner of the top tray - the BRAL part is about half the depth of its MECCANO counterpart. The silver Plate in the bottom tray is most likely a BRAL Aero Centre Wing, and the 2 silver Wheels near it could again be Aero parts. The black Tyre on the red Pulley could be BRAL but I'm not sure about the white Rubber Ring near it - Bral listed such a Ring but I've never seen it, nor any white rubber BRAL part. The most un-BRAL-like parts are in the bottom tray: the green Trunnion in the bottom left corner doesn't have the



characteristic BRAL flat top, and the red 5*7h Flexible Plate doesn't have the slotted holes of the BRAL Plate. But these parts could of course easily be 'foreigners'.

Can any reader throw more light on MECCANICO ITALIANO?

MECCANICO ITALIANO: S1

OSN 37/1106

6. **BRAL Gears Outfits** The cover of a manual to hand, left, has the Bral logo in the top left corner & *Scatola ingranaggi* (= Gear Set) top right. It is 215*152mm, with 16 pages plus covers, all blank except C1. After an introduction 13 gear meshing examples are shown, followed



by 9 mechanisms (Fig.14 to Fig.22 on pp7-15). They include Reversing using Bevels, a 3-Speed Gearbox, & a Pinion/Contrate Differential. p16 has ads for 3 Motors (Tipo P clockwork, 9*7*4cm with 5*7h sideplates; Tipo Ma 20, 20v, 9*6*3.5cm, also with 5*7h sideplates; & Tipo MM/CC, 4.5v cylindrical, 7*4*4.5cm) and a Tipo A 15w Transformer with 6-12-20v outputs. There is no indication of set contents and no reference to any particular sets. Some of the larger models though would need more Gears than are in a set seen on Ebay and described next.

The Ebay outfit has a lid label identical to the Manual cover. Its box, 12¾*9¾", is red and the parts in the outfit can mostly be recognised in the photo of the open box below. But



in case of doubt the 16t Bevel is below the centre of the Rack Strip, the parts either side of the 48t Bevel are ½" Pulleys, the blue part bottom right is a Circular Saw, & along the bottom are: Sprocket Chain, a chemically blackened, MÄRKLIN-style Worm Housing, and, mounted on an Axle, a Strip Coupling, a Coupling, a Universal, & a Worm. One point of interest, the faces of the 57T Gear & 48t Bevel are not pierced like their MECCANO equivalents. The Ebay photos of this Set included the manual cover & 4 inside pages, and all were identical to those of the Manual described above.

Looking through the **Bral material** in my file there are only 3 references to Gear Sets. Two are in identical undated catalogues, one sent to me by Bral in the early 1970s, and the other which had 1968 in pencil on the cover. Two sets are shown in it, one of which looks identical to the Ebay outfit and is called No.2. The No.1 is smaller with the same style of packaging and contains 2 each 19 & 25t Pinions, a 50 & a 57t Gear, a 50 & 2x 25t Contrates, 2x 30t Bevels, a Worm, a large & 2 small Sprockets, and Sprocket Chain. The third reference was in a manual, possibly from the 1960s, with the same illustrations of the No.1 & No.2 sets. There is no mention of the sets in later manuals although the Bral electrical sets continued to be advertised in them for some years.

There was thought at least one change to the Gear Sets — another Ebay offering shows both sizes of sets, with the lids and contents as before, but with the parts in light blue formed plastic trays.

BRAL: S3

[39/1166]

7. **EZI-BILT Notes** Jack Little wrote that a manual, complete except for its cover, & thought to be from the 'Melbourne' period (see 22/636-7), has been found. It is 9¾*7½", covers Sets 1-3, & prices are given in its parts list. The Colton, Palmer & Preston Ltd (CPPL) 1-3 version of the 1-5 manual described in 19/544 was almost certainly based on this manual.

Said manual was found with a No.4 set which is believed to date from when production was restarted in 1944 (see 22/638). Its date is known from the '660' stamped on the base of the box, the serial number of the permit, dated 24th November, which allowed the resumption. The applicant was actually a Mrs B. Bishop, presumably a CPPL officer, and it was not unusual for such permits to be granted to a representative of a company, without the name of the company being given.

At 19¾*10½", the box's base, right, is very nearly the same size as the '1941' No.4 (see 22/637) but its wooden sides and partition are nailed to a painted steel plate; its sliding lid is painted steel too with the top covered to within ½" of its edges by a paper label similar to the '1941' one but extended outboard of its centre and 4 line wide surround.



The parts in the box were from several periods but several of the 1" Pulleys were made from a different pressing to later ones and are thought to be from an early Melbourne set.

EZY-BILT: S7

[39/1166]

8. **Another address for S.J.MILLER** The Executive Erector Set produced by S.J.Miller was described in 24/692. Most of the parts in it were gold plated and a selection of such parts were recently offered on Ebay by a seller from Boulder, Colorado, the town in the address on the front on the Set's manual. Your editor succumbed to temptation and when the parts arrived they were in a cardboard box printed with '1 dozen Royalty Games' on its ends, & 'S. J. Miller Co. Inc., 1707 Surf Ave., P.O.Box 130, Brooklyn, N.Y. 11224' on one side.

ERECTOR [4a]: S2

[39/1166]

9. **Snippet. More on METALLBAUKASTEN [6]** Another Nr.301/302 (see 38/1153) set was offered on Ebay. It was in the same wooden box but the lid, identical looking to the one in OSN 38, was said to be cardboard. Part of the manual cover, below, was shown. The parts were aluminium and those that could be seen were 2,4,5,6,8h Strips with fully rounded ends; A/Bs with 2 round holes; a 5*6h Perforated Plate and a longer one, probably 6*9h, both with square corners; a 5h Ø Disc; and Hexagonal Nuts about MÄRKLIN size. No



Wheels, wooden or otherwise were present.

METALLBAUKASTEN [6]: S2

[39/1166]

10. **TECNIKIT** A loose-leaf manual with models for Sets 0-3 was described in 10/250, & now another has been found with the same outer wrapper (with No.0 models on the back covers, as before) but inside a loose double-sided sheet for Set 4, & one for Set 5. This is the first real evidence of a Set 5. Each of the loose sheets has 4 models, from 4.1 AMERICAN LOADING BAY to 4.4 WINDMILL, and from 5.1 DRAWBRIDGE to 5.4 FLOUR HOIST. All are presented in the same style as before with the Parts Required given for each.

The parts needed for the No.4 models are within the Inventory in MCS. Extra parts for the No.5's are 2 each of 8 & 12h A/Gs, 1x 1" Bossed Pulley, & 2 each of #U7 1*7*1h DAS, & #F9/5, 5*9h Plate. Those last 2 parts were not in the No.4.

TECNIKIT: S2

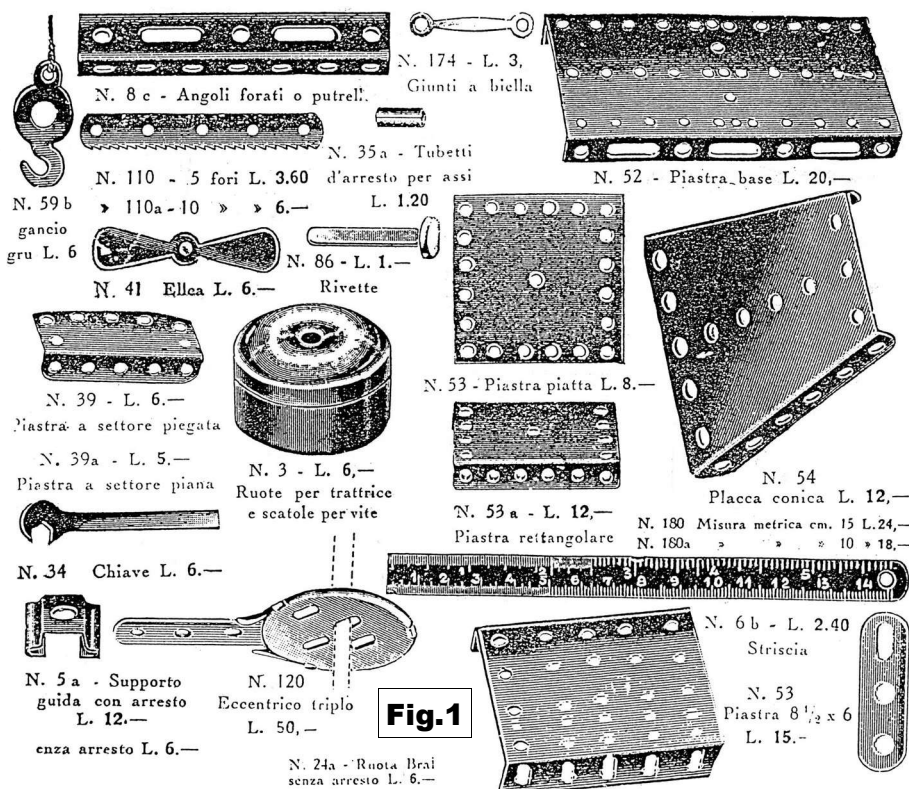
[39/1166]

Snippets. Early BRAL It is said that BRAL dates from the 1930s or even earlier, but little is known of it before the 1960s. However 2 small sets, said to be from the 1950s, were offered on Ebay earlier this year and a few of the parts in them are clearly not from the 1960s era. They brought to mind some MCS pages added to the BRAL entry by Frank Beadle. They are from an IL CONSTRUTTORE MECCANICO (one of the names used for BRAL sets) manual and though the majority of the parts look like 1960s BRAL and have BRAL PNs, a number are quite unusual, & include some that can be seen in the Ebay sets.

First the MCS pages: a manual cover; the Set Contents for Sets 000 to 4; a sketch of a No.4 outfit and a list of its contents; 2 models for Set 4; and the Illustrated Parts (on 4 sides with the parts in no particular order). The are some inconsistencies between the pages and they may not all be from the same manual. What follows is largely based on the Illustrated Parts – the other pages look a little more like the later BRAL.

As might be expected the range of parts is smaller than in the 1960s with for example, no Tyres, no Flexible Plates, fewer Perforated Plates, fewer Pulleys, Gears & Sprockets, only one Flat Girder, and none of the MÄRKLIN-inspired parts. Also some parts in unusual lengths: 10, 13, & 20h Strips but no 15 & 19h; and a 17h A/G & Braced Girder but, again, no 15 or 19h.

The unusual parts are shown in Fig.1 and some notes on them follow, working down from the top. Some PNs are used more than once • **#8c** is in addition to the normal A/Gs. • No indication is given of the length of the Link **#174**. • The Flanged Plate **#52** is 10h long, but has a centre hole. • **#110 & 110a** look like Saw Blades but could I suppose be Rack Strips. • No material is specified for the Axle Stop **#35a**. • Compared with the later Propeller, **#41** has wider blades and no boss. • The top edge



of the handed Plates **#39 & 39a** is possibly curved. • **#3** is described as a Tractor Wheel and box for N&B – it costs the same as the 1" Loose Pulley. • Plate **#53** looks like PRIMUS and **#53a** is a flanged version. • As shown the Flanged Sector Plate **#54** is only 6 holes long. • The Slide Piece shown is perhaps **#5**, **#5a** as described has a boss. • The Eccentric **#120** looks like the MÄRKLIN part but no way of locking the Rod is shown. • **#53** under the ruler looks to be made from a different plate to the earlier **#53** and its dimensions are near to a 5*7h Flanged Plate. • **#6b** is in addition to a normal 3h Strip. • Finally the Wheel Disc **#24a** (in the centre at the bottom) isn't illustrated but follows **#24**, an 8h Bush Wheel. I wonder why its name includes 'Bral' (Bral Wheel without set screw), the only part to do so.

The unusual parts in the first Ebay set, said to be a No.1, Fig.2, are the **#53a** Flanged Plate, the Wheel Discs, and the Span'driver. This shows that at least some of the unusual parts in MCS did exist. The second, Fig.3, said to be a No.2, has a different Flanged Plate, unlike the MCS **#52** in its piercing, but again 10 holes long. This set also has the 4 Wheel Discs but now boasts a separate Spanner & Screwdriver. A Bush Wheel can also be seen.



Fig.2



BRAL: S4



Fig.3

The contents of these sets bear no resemblance to those of any of the IL CONSTRUTTORE MECCANICO sets. So were they earlier or later?