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OTHER SYSTEMS NEWSLETTER

OSN 3 October 1990

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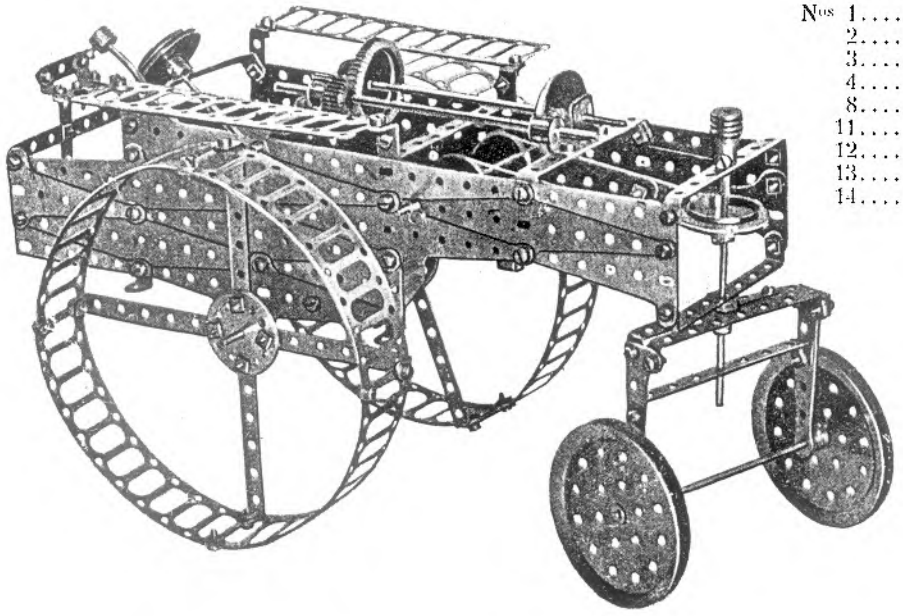
EDITORIAL In this issue I have given quite a lot of space to the contents of BRAL and CONSTRUCTION sets, both of which may appear on the UK and other markets this year. CONSTRUCTION has already had quite an airing in previous issues but interest from readers seemed to justify returning to it once more, to cover the sets not yet included in MCS. Both these and other articles have been reduced in area and often presented "sideways on" in order to save space, I hope that this doesn't prove too tiresome for readers.

In the next two issues I plan to increase the number of pages from 20 to 28, which should allow a resumption of items such as the Index of Literature and MCS Supplementary Information, both of which have again been crowded out this time. More pages and rising costs generally have meant increasing subscription rates, please see the back page for details if, as will be the case for most readers, you need to renew in order to receive OSN 4.

Again to get more into each page I have used a smaller typeface for this Editorial and in other parts of this issue - I would welcome comments on whether this is on balance desirable for the future. And that reminds me, some readers have asked about unattributed text in OSN, this is written by your Editor, blame no one else.

Finally advanced notice that Frank Beadle is planning to show his extensive collection of OS parts and sets at Skegex next year. The dates of the Exhibition have not yet been finalised but it is usually held early in July.



Pièces nécessaires

Nos 1.... 14	Nos 19... 2	Nos 30... 2
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Date of Manual unknown.

Modèle N° 4.616

TRACTEUR AGRICOLE

Modèles exécutés avec la Boîte CONSTRUCTOR N° 4

BRAL

Il Costruttore Meccanico

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.

Contents of Sets - 1980

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	30
2a	9 holes	2	4	6	8
3	7 holes	4	6	8	12
4	6 holes	2	4	4	8
5	5 holes	12	12	22	30
6	4 holes	--	--	4	4
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	--	--	--	2
8b	15 holes	--	--	--	2
9	11 holes	2	4	4	6
9a	9 holes	--	--	2	2
9b	7 holes	--	2	4	6
10	Fishplate	10	16	26	36
11	Double Bracket 1x1 holes	4	6	6	10
12	Angle Bracket 1x1 holes	18	26	36	42
12a	2x2 holes	--	4	6	10
12b	2x1 holes	--	--	--	4
13	Axle Rod 29 cm	1	1	5	6
13a	20 cm	--	--	1	2
14	16.5 cm	--	--	3	2
15	13 cm	?	4	4	5
15a	11.5 cm	?	3	?	5
16	9 cm	?	6	?	2
16a	7.5 cm	--	--	?	4
16b	6 cm	--	--	--	--
17	5 cm	?	4	5	8
18	3.8 cm	?	4	5	8
18b	2.5 cm	--	--	--	--
19h	Crank Handle, Long, 17 cm	1	1	1	1
19s	Short, 10.5 cm	1	1	1	1
19a	Spoked Wheel	--	--	--	--
19b	Pulley 75 mm	4	4	4	6
20a	Pulley 50 mm	--	6	4	6
20	Flanged Wheel 28 mm	--	--	4	8
20b	Flanged Wheel 19 mm	4	4	8	8
21	Rubber Ring for 22, 22a	4	4	4	4
21a	Rubber Tire for 20a	--	--	4	4
21b	Rubber Tire for 19b	--	--	--	--
21c	Rubber Tire for 22, 22a	4	4	4	4
20e	Pulley 38 mm	--	--	--	--
22	Pulley 25 mm	4	4	4	6
22a	Pulley w/o Boss 25 mm	4	4	4	4
23	Pulley w/o Boss 19 mm	1	?	4	6
23	Pulley with Boss 19 mm	--	--	--	--
24	Bush Wheel, 8 holes	1	1	2	4
25	Pinion 19 teeth	--	2	2	3
26	Pinion 25 teeth	--	1	2	3

P/N	Description	ICM 6	ICM 7	ICM 8	ICM 9
27	Gear Wheel 50 teeth	--	1	2	3
27a	57 teeth	--	1	2	3
27b	95 teeth	--	--	--	--
27c	133 teeth	--	--	--	--
28	Contrate 50 teeth	--	--	1	1
29	25 teeth	--	--	2	2
30	Bevel Gear 26 teeth	--	--	--	2
30a	50 teeth	--	--	--	1
30c	16 teeth	--	--	--	1
31	Gear, 6 mm face 40 teeth	--	--	--	2
31a	Ratchet Wheel	--	--	--	2
31b	Pawl with Boss	--	--	--	2
32	Worm	--	1	2	2
32a	Rack Segment	--	--	--	1
32b	Rack Strip 7 holes	--	--	--	1
33	Pawl, Right Hand	--	--	1	1
33a	Pawl, Left Hand	--	--	1	1
34a	Spanner	2	2	2	2
35	Spring Clip	?	?	?	48
37s	Bolt 5 mm	?	?	?	20
37	Bolt 7 mm	?	?	?	227
37b	Bolt 9 mm	?	8	10	9
37c	Bolt 12 mm	?	6	6	?
37d	Bolt 20 mm	?	6	6	6
37e	Pivot Bolt	--	--	--	4
37a	Nut, Square	?	?	?	280
39	Washer 9 mm	?	?	?	107
37f	Grub Screw 4 mm	?	?	?	50
41	Propeller	1	1	--	2
41a	Ship's Screw, 3 blades	--	--	1	1
42	Hoisting Chain 80 cm	1	1	1	2
43	Tension Spring 5 cm	--	1	1	2
44	Double Bracket 2x1 holes	--	2	2	2
45	Double Bent Strip	2	4	4	4
46	Double Angle Strip 3x1 holes	2	2	3	4
47	5x1 holes	8	10	10	12
47a	5x2 holes	--	1	--	2
47b	5x3 holes	--	--	--	1
48	6x3 holes	--	--	--	2
48a	7x1 holes	--	2	6	6
48b	9x1 holes	--	--	--	--
48c	11x1 holes	--	--	2	4
50a	Slide Piece	--	--	--	1
52	Flanged Plate 11x5 holes	1	1	3	4
53	7x5 holes	2	4	5	6
54	Flanged Sector Plate, 8 holes long	2	2	4	6
52a	Flat Plate 11x7 holes	--	--	--	2
53a	9x5 holes	--	--	--	--
54a	Flat Sector Plate, 8 holes long	--	--	--	--
55	Spring Cord 30 cm	--	--	--	1
55a	50 cm	--	1	1	1
55b	1 metre	--	--	--	--
57	Hook, Weighted, Small	1	1	1	1
57b	Hook, Weighted, Large	1	1	1	1
57a	Hook, Wire	--	--	--	--
59	Collar	4	8	10	18
61	Windmill Sail	4	4	4	4
65	Centre Fork	--	--	--	--
62	Crank	2	2	4	4
62b	Double Arm Crank	--	--	2	4
63	Coupling	--	1	6	6

P/N	Description	ICM 6	ICM 7	ICM 8	ICM 9
63c	Strip Coupling	--	--	--	--
72	Flat Plate 5x5 holes	2	4	6	6
77	Triangular Plate 2x2 holes	--	--	4	4
78	Threaded Rod 9 cm	--	--	--	2
79	12.5 cm	--	--	--	--
80	15 cm	--	--	--	--
80a	20 cm	--	--	--	--
90	Curved Strip, Slotted, 5 holes	--	4	6	6
90a	Curved Strip, Stepped, 5 holes	4	4	4	8
94	Sprocket Chain, 1 metre	--	--	1	2
93	Multi-Purpose Gear/Sprocket, 30 mm	1	1	1	1
93a	50 mm	1	1	1	1
95	Sprocket Wheel 19 mm	--	--	2	2
95a	25 mm	--	--	--	--
95b	38 mm	--	--	--	--
96	50 mm	--	--	2	2
96a	75 mm	--	--	--	--
97	Braced Girder 5 holes	--	1	2	2
98	7 holes	--	--	4	4
98a	11 holes	2	2	6	6
98b	19 holes	--	--	--	--
99	25 holes	2	2	4	4
102	Single Bent Strip	--	--	--	4
103	Flat Girder 5 holes	--	--	4	4
103a	6 holes	--	--	--	--
103b	7 holes	--	--	--	--
103c	11 holes	2	2	4	4
103d	19 holes	--	--	--	--
103e	25 holes	--	--	--	2
108	Corner Gusset 5x5 holes	--	--	4	4
108a	Flanged Bracket, LH 5x3 holes	--	--	--	2
108b	RH 5x3 holes	--	--	--	2
109	Face Plate 6 cm	--	1	2	6
115	Threaded Pin with 2 nuts	2	2	--	2
116	Fork Piece	--	1	1	2
116a	Fork Piece, Small	--	--	--	--
116b	End Bearing	--	1	1	2
124	Reversed Angle Bracket, 1x2x1 holes	--	--	--	--
125	Reversed Angle Bracket, 1x1x1 holes	2	4	4	8
126	Trunnion	2	2	4	4
126a	Flat Trunnion	2	2	4	4
127	Bell Crank w/o Boss, 3x3 holes	--	--	--	2
128	Bell Crank w/ Boss, 3x3 holes	--	--	--	1
130	Eccentric, Triple Throw	--	--	2	2
131	Dredger Bucket	--	--	6	10
134	Crankshaft	--	1	1	2
135	Handrail Support	--	--	--	4
138a	Ship's Funnel	--	1	1	1
140	Universal Coupling	1	3	3	3
154a	Corner Angle Bracket, RH	2	2	3	4
154b	LH	2	2	3	4
159	Circular Saw Blade	--	--	--	1
160	Channel Bearing	--	--	1	2
161	Girder Bracket	--	--	--	--
162	Boiler, Complete, 9 holes long	--	1	1	1
163	Sleeve Piece, 3 holes long	--	2	2	2
164	Chimney Adapter	--	4	4	4
214	Semi-Circular Plate, 5 holes wide	1	2	2	2
187a	Conical Disc 45 mm	--	4	4	4
187b	Conical Disc 65 mm	--	--	--	4

P/N	Description	ICM 6	ICM 7	ICM 8	ICM 9
188	Flexible Plate 5x3 holes	4	6	4	16
	5x3 holes, Plastic	--	--	4	--
188a	7x3 holes	1	3	2	6
188b	9x3 holes	--	--	--	--
189	11x3 holes	2	2	4	8
189a	19x3 holes	--	--	--	--
189b	25x3 holes	2	4	4	6
190	5x5 holes	4	4	--	8
	5x5 holes, Plastic	--	--	6	--
190a	7x5 holes	--	2	--	4
	7x5 holes, Plastic	--	--	4	--
191	9x5 holes	--	--	--	2
192	11x5 holes	2	2	4	6
192a	19x5 holes	--	--	--	--
192b	25x5 holes	--	--	2	4
116c	Fork Piece 2 holes long	--	1	1	1
215	Worm Support Bracket	--	--	--	--
57b	Pulley Block	--	--	--	--
	Clockwork Motor N.1.	--	--	--	1
	Screwdriver Large	1	1	1	2
	Screwdriver Small	--	1	1	2

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 amd Ship's Funnel are at least 1 mm thick. The entire system is very robust.

THE NEW ERECTOR? Tales abound of the relationship between ERECTOR and MECCANO in the United States, of how A.C.Gilbert was the first MECCANO agent there prior to his launching ERECTOR in 1913, of the lawsuits over patents, and finally of how Gilbert got control of the MECCANO name in the USA in 1928, before apparently Liverpool got wind of what was afoot. ERECTOR flourished in the 1930's using the MECCANO name in parallel with ERECTOR for a few years but then only for a range of lesser products. From the 1950's on though ERECTOR lost sales and recently it disappeared completely from the marketplace, having changed hands several times, and with the last sets being little more than plastic kits. But the name ERECTOR has entered the language in the USA just as MECCANO has in the UK, and now, according to a news item in the latest Infos magazine from Jean Estève Objets in Paris, to take advantage of this there is to be another twist to the story - ERECTOR is to live once more, Calais having agreed with Tyco Toys Inc, the current owners of the ERECTOR name, that it will be marketed again but the parts inside the boxes will be MECCANO parts. The report says that there will be immediate access to 55% of the American toy market through four of the major toy distributors, and that if expectations are realised it may be advantageous to make parts in Mexico. Well long live ERECTOR and vive MECCANO but why will the new concept succeed any better than GABRIEL ERECTOR did in the 1960's and 70's.Initially they had quite a good range of recently designed parts (for children that is, not the adult enthusiast), reasonably designed manual models, easy availability of extra parts by mail order, good power units, and slowly but surely they died commercially. But if you never try you never succeed so full marks to Calais (or Tyco) for some splendid lateral thinking.

ARCHITECTURAL CONSTRUCTION SETS Malcolm Hanson recently held an exhibition at the Gloucester Folk Museum based on his extensive collection of this type of material and he produced a spiral bound loose-leaf book called BUILDING TOYS for visitors to buy. He has recently reprinted it and copies can be obtained by writing to Malcolm at 11 Willow Close, Long Ashton, Bristol BS18 9DT. England, Tel 0272 392321; it costs £2.50 including postage. The contents on 32 pages, A4 size, introduce, in seperate sections, sets with wooden, stone, card, metal, rubber and plastic components. There are many illustrations and I found it all most interesting, even though architectural sets are not one of my primary interests.

NEW FACTS - STOKYS In the STOKYS manual for Set 4 there is a Steam Roller with an elegant, tapered chimney but no indication of how it is to be made. In a Parts List for 1950 (No 10) sent by Harry Mariën, said Chimney is shown as a STOKYS part, as shown below - it was made of wood. It does not appear in the next Parts List available, No 32 of March 1973, and there are a few other deletions, for example, Rubber Rings for the 20mm and 35mm Pulleys. Quite a few parts had been added and full details will be given in a later account. One major change though is that in 1950 there were two Clockwork Motors, the current F1 (single speed, reversing) and an F2 with two speeds and reversing. It is not illustrated. In 1973 the F2 is not listed but there is an F0 which looks identical to the F1 but without the reverse lever. In the next list to hand (No 38, September 1979) the F1 alone is shown.

108 Kamin (Holz)
Cheminée en bois . . . . . .


108

FINDING the DIAMETRAL PITCH or MODULE of GEARS The Diametral Pitch (DP) of a gear is a measure of its tooth size, the larger the DP the smaller the tooth. It is defined as the Number of teeth/Pitch circle diameter (pcd) in inches. It is not easy to measure the pcd and one alternative, empirical formula which seems to work quite well for most purposes is (No of teeth + 2)/Outside diameter. As an example the O/D of a MECCANO 57 tooth gear that I have just measured is 1.553" so the DP=(57+2)/1.553= 38.0. With this size gear extreme accuracy in measuring the diameter is not essential, if for example it had been found to be 1.54" the DP would be 38.3, which is good enough for most OS requirements.

Module (mod) is the metric reciprocal of DP, so the Mod is pcd(mm)/No of teeth; or if the DP is known, Mod=25.4/DP, so for the 57 tooth gear the Module=25.4/38=0.67.

SMALL AD TRIX parts for sale, over 1500 plus 800 bolts and 200 nuts, weighs some 15kg. Includes 160 angle girders, 60 gears, 10ft chain, 50 tyres, 2xE electrical parts, 6 motors. Well over half the parts are rust free, cleaning the rest would destroy all/part of original finish. £150 plus carriage, or would split if no-one wants it all - Editor OSN.

GOOD IDEAS...

BUT NOT FROM BINNS ROAD!

ALMOST from the beginnings of Meccano in 1901, eager suggestions poured in to Frank Hornby's firm, for additions to the range of parts. For many years Meccano Ltd. seemed almost to fight a defensive and delaying action against most of these ideas. Some of them were outlandish, but many expressed felt needs. Many suggested parts would have performed functions, or allowed constructions, which could not readily be done with existing parts. Whether any of these frustrated ideas led directly or indirectly to the development of other constructions systems we don't know; but some other early systems did include parts either never in the Meccano range, or added only much later. American Model Builder, the great early imitator of Meccano (as well as A.C. Gilbert's Mysto Erector) had an obtuse angle bracket in its No.2 set, and an "engine crank" (crankshaft) and a pulley belt in No.4. The Meccano crankshaft came only in 1921. Meccano added an obtuse angle bracket and driving bands only in 1934, when the change to the blue/gold colour scheme also added a score of new parts. The best-known precedence of American Model Builder over Meccano was of course the use of tapped bosses (hubs) and setscrews, while Hornby was still using key-fixing of wheels and gears.

Meccano had many later imitators, and did reluctantly respond to some demands for new parts. Who copied whom is now hard to tell. But many other systems did, sooner or later, have useful parts for which Meccano had no equivalent, or performed certain functions or constructions more awkwardly. There can still be a "wish list" for new parts. Some of them already exist in other commercially produced systems, past or present. Some such parts are being produced by noncommercial sources, either for distribution to enthusiasts or for purely personal enjoyment.

The Meccano range has been widened by extending the sizes of existing groups of parts. Longer, larger, or intermediate sizes of strips, girders, plates and gears are the most common of these. These novelties can be very useful, but perform no new and different functions---convenience alone not being taken as a function. But many small constructions, and some functions, can be performed only awkwardly, or not without extreme ingenuity, by available Meccano parts. Examples have been shown in the Southern California Meccano and Erector Club Newsletter of the construction in Meccano of models originally designed in Erector or Märklin-Metall (or vice versa). In some cases Märklin parts have been co-opted into a Meccano model; or the construction must be basically altered. (The question of "purity"---does this co-opting "spoil" the model as an example of the chosen system?---will be ignored here.) Rather, the question can be posed: What might be useful, which is lacking in Meccano?

Small parts When a small construction must be built up from several or many parts, nuts and bolts tend to get in the way, and joints may be potential weak spots. Design of existing parts may prevent easy reproduction of some functions. The need for decimal and duodecimal divisions of a circle, as in counters and clocks, is a prime example---Meccano has neither in compact form. Limitations of available parts, particularly by hole patterns, are special cases of design. Compactness is highly desirable in mechanisms such as differentials and gearboxes (aside from the question of gear ratios) and may be limited by size of components, by their form (such as the space required for bosses) or by hole pitch (pattern, again).

Strips, girders and plates Only when necessary construction from several components, for example to produce a beam or some other member, is complicated by the intrusion of many nuts/bolts/washers in a small space, do the above factors indicate a need for new single components of existing groups of parts such as strips, girders and plates. Let us dispose of these at once. As to strips, Erector's AR and F to J strips, perforated at 1/4in. pitch, can be useful, where Meccano must rely on slotted strips. Meccano has only braced girders (now mostly obsolete and hard to get) as 2in.-wide (4 holes wide) parts, though "new" plates are being produced in 3- and 4-hole widths by special groups. But Arte-Meccanica (Italy) has #36, #40 and #43 flat plates 4 holes wide with slotted edges; Bildico (U.K.) a #6 flat girder plate 3x5 holes with slotted edges, and Lynx (U.K.) a similar 7-hole plate, while Mignon (Austria) has a similar design. Construction (East Germany) is notable for its slotted members of all varieties except flanged plates; its angle girders have long slots along one flange.

There are any number of designs of flanged plates, but many have peculiar hole patterns which must limit their usefulness. Other than slotted holes at the edges of the face and in the flanges, not much can improve the basic Meccano flanged plate. Buz (New Zealand) does have a #40 5x5-hole baseplate with four flanges which would probably be the msot often useful of the many existing forms. So did Gabriel Erector (U.S.A.) but like all that system's parts it was flimsy. The Castle Builder (Canada) #39 sector plate had holes along the edges of the face, blank in most other systems.

Brackets Märklin, and Ami/Lac (Italy) which borrowed from Märklin as well as from Meccano, and which are both Meccano-compatible, have #116 and #116a brackets with half-pitch hole spacing (Fig.1). Merkur (Czechoslovakia), of metric pitch and not Meccano-compatible, has a flat corner brace #37, four holes at half-pitch in each arm, a useful design (Fig.2). Lynx (U.K.) has a 5-hole bracket like a bell crank without boss, but with the ends turned up at a right angle, good in a tight corner (Fig.3). Condor (Italy) has a #45 flat bracket 3 holes long, widened at the middle into 3 holes at half-pitch (Fig.4); several systems have single-ended versions of the same device. Benco (Germany) has some nice bits: a #60 "cam triangle" 4 holes long on each side; a #69 double bent strip like a cross between Meccano #45 and #48, and a #71 double angle strip 2x3x2 holes (both of these last two now available as Meccano-compatible specialties from Bernard Maillot, Carbon-Blanc, France); and threaded rods, #62 with an eye at the middle, #63 a long eyebolt (all of these, Fig.5).

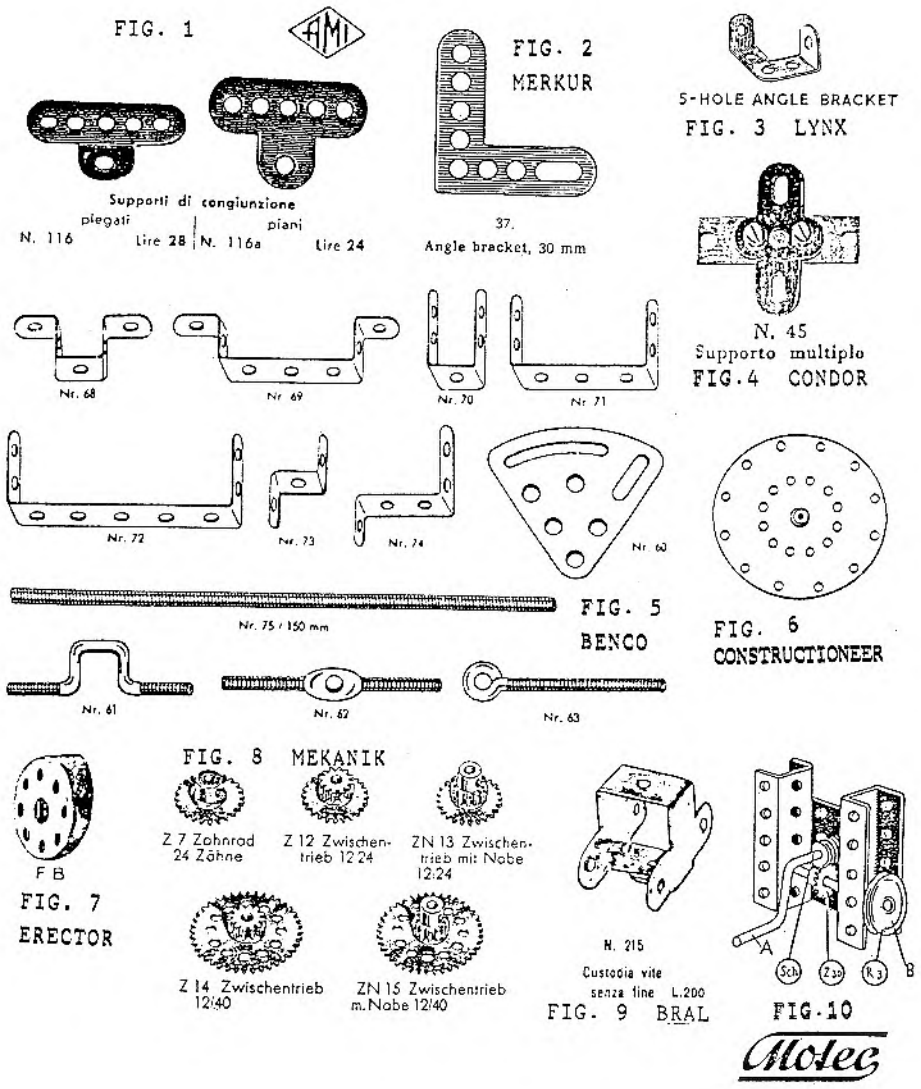
Discs and wheels Italy has several good systems, and Bral is currently available in Canada at least. Bral has #66 and #67 wheels with treads (what Meccano persists in calling "flanges") 6.5, 8 and 9.5cm in diameter, and Märklin several similar items in sizes smaller and larger than Meccano hub discs, of sturdier form, with more spokes and hence divisions of the circle. Constructioneer (U.S.A.) had a 12-hole-circle faceplate, #A142 "eccentric plate" (Fig.6), Miniator (Belgium) #102 and #107 12-hole faceplate and pulley versions. Finally Exacto (Argentina) has introduced #109a and #109b 10- and 12-hole faceplates, as well as #24d-e 5-hole bush wheels and discs. Gilbert Erector's FB cam, drum-shaped like a wheel with "flange" of varying width, could be used singly or in a facing pair to produce push-pull linear motion parallel to the axis of the cam (Fig.7).

Gears Aside from the variety of Meccano-compatible gears now available, and even separate complete systems such as Perfected Products (U.K.), compactness is most desirable in gear mechanisms. Mekanik (West Germany) has a series (#Z12 to Z17) of "Zwischentriebe" or intermediate gears which comprise a gear and pinion in one piece, saving a great deal of space (Fig. 8). Several systems have ingenious gear housings. Ami/Lac, Märklin, Bral and Edison (Czechoslovakia) list essentially the same rectangular housing for two shafts such as a worm and pinion (Fig. 9). Motec (Germany) had an ingenious one-piece gearbox frame #20 which accomodated as many as four shafts (Fig. 10). Erector had a #P50 large gear without boss (not Meccano-compatible), also a good idea for saving space in for instance a turntable drive, but the need for this has now decreased with several sizes of new gear rings providing open centers through the drive. One or two systems also seem to have had smaller gears without boss, but there is no indication of their stability on a shaft.

Finally, the independent ingenuity of Rod Rich (Water Orton, Birmingham, England) stands out. He produces his own nonstandard and replica Meccano-compatible parts to very high standards of workmanship and finish, with very useful pieces which have not appeared in any commercial system. For instance: An equilateral triangular plate, three holes to a side with a central triangular hole also at standard hole pitch from each corner. Two-by-three-hole triangles, both isosceles and right-angle, have not appeared in commercial systems, though many flat brackets and variants on the "trunnion/car truck" pattern have appeared commercially. Simplest of all: a 2x2-hole (1in.) square flat plate. Exacto (Argentina) produces a 1in. (2-hole) flat girder, but this is not perfectly square and symmetrical both ways. Very useful is Rich's "packing piece", half of a cube, half-an-inch square and a quarter-inch thick, bored through the center of the square faces and tapped through the centers of the rectangular faces. He also has a 3/8in. worm which meshes at 1/2in. centers with a 25-tooth Meccano pinion, and a bush wheel with attached spacer block for building differentials. His helical and bevel gears and bush wheels have six bores and six tapped holes, some in triangular rather than circular pattern. Home machnists, get busy.

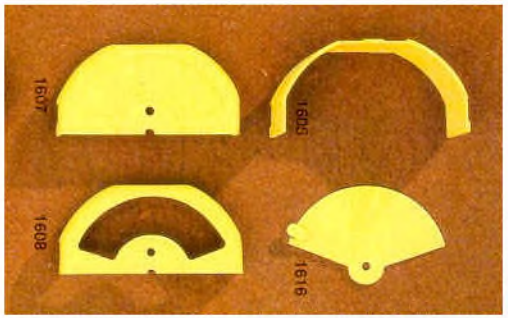
Why have these useful little bits never been gathered into the Meccano system, or any other one construction system? Are there real reasons why they should not be used---other than to preserve the "purity" of a model entered in a contest? It is worth noting that the winner of a recent contest for the best new proposed Meccano part was a simple little bit: a one-inch angle girder, with three holes (i.e. at half-pitch) in one flange and a single long slot in the other---with numerous illustrations of possible uses.

Donald A. Redmond



Stückliste					
1001	Flachstab 2-Loch	4	1502	Schraube M 4×8	8
1002	Flachstab 3-Loch	14	1503	Schraube M 4×16	5
1003	Flachstab 4-Loch	2	1511	Mutter M 4	150
1004	Flachstab 5-Loch	4	1552	Schraubendreher 6 mm	1
1006	Flachstab 7-Loch	17	1553	Schraubenschlüssel	2
1008	Flachstab 11-Loch, Langloch	2	1554	Schraubenhalter	1
1052	Winkelstab 15-Loch	2	1561	Stoßstange	2
1102	Platte 3×3 Loch	1	1562	Kotflügel	4
1111	Platte abgew. 5×5 Loch	1	1563	Tank	2
1112	Platte abgew. 11×5 Loch	2	1564	Frontverkleidung	1
1122	Trapezplatte 5×3 Loch	4	1565	Frontscheibe	1
1151	Scheibe ∅ 10 mm	4	1566	Mittelsegment flach	2
1153	Scheibe ∅ 30 mm	3	1568	Rückwand	2
1252	Winkel 1×1 Langloch	2	1569	Tür	2
1253	Winkel 2×1 Loch	4	1570	Sitzelement	4
1271	Lagerbock	1	1572	Lenkrad	1
1304	Radfelge	4	1605	Zylindersegment	8
1353	Welle 95 mm	2	1607	Zylinderrückwand	3
1371	Gewindestift 29 mm	2	1608	Zylinderrückwand offen	1
1372	Gewindestift 44 mm	1	1616	Drehverschluß	1
1402	Elastikstellring	9			
1413	Sperrklinke	2			
1414	Aufschraubband	4			
1423	Reifen	4			
1501	Schraube M 4×6	120			

C09

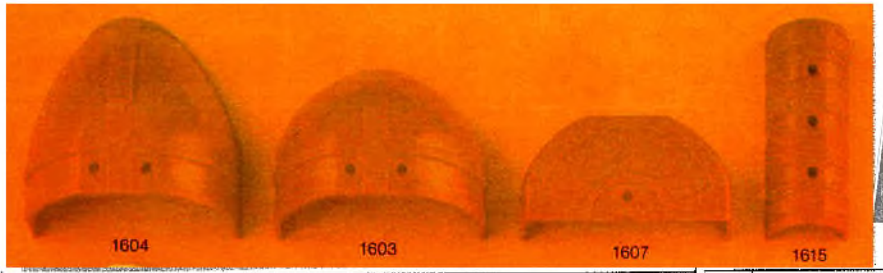


CONSTRUCTION C09,C12,C15,C20 SET CONTENTS.
Only new parts are illustrated, the others can be found under the standard sets and C07 in MCS. Some Editions of MCS also contain C20. Illustrations of some of the models that can be made from these sets are shown overleaf.

Stückliste					
1001	Flachstab 2 Loch	1	1413	Sperrklinke	2
1002	Flachstab 3 Loch	6	1414	Aufschraubband	2
1004	Flachstab 5 Loch	7	1423	Reifen	5
1006	Flachstab 7 Loch	2	1441	Schnur 1 m	1
1007	Flachstab 9 Loch	2	1501	Schraube M 4×6	60
1008	Flachstab 11 Loch, Langl.	1	1502	Schraube M 4×8	6
1009	Flachstab 15 Loch	2	1503	Schraube M 4×16	4
1111	Platte 5×5 Loch zweiseitig abgewinkelt	2	1511	Mutter M 4	76
1112	Platte 11×5 Loch, zweiseitig abgewinkelt	2	1551	Schraubendreher 4 mm	1
1122	Trapezplatte 5×3 Loch	4	1552	Schraubendreher 6 mm	1
1151	Scheibe ∅ 10 mm	2	1553	Schraubenschlüssel	2
1252	Winkel 1×1 Loch, Langl.	10	1554	Schraubenhalter	1
1253	Winkel 2×1 Loch	2	1561	Stoßstange	1
1271	Lagerbock	2	1562	Kotflügel	4
1304	Radfelge	5	1563	Tank	2
1351	Achse + Welle 35 mm	1	1566	Mittelsegment, flach	3
1353	Achse + Welle 95 mm	2	1567	Mittelsegment, hoch	2
1361	Achse + Welle 95 mm mit Gewindeenden	1	1568	Rückwand	4
1362	Achse + Welle 120 mm mit Gewindeenden	3	1570	Sitzelement	8
1372	Gewindestift 44 mm	1	1571	Ladeklappe	1
1381	Gewindestift M 4×4 mit Querschlitz	2	1572	Lenkrad	1
1401	Stellring	4	1573	Frontteil	1
1402	Elastikstellring	6	1574	Stoßfänger	1
1411	Kurbel	1			
1412	Lasthaken	1			

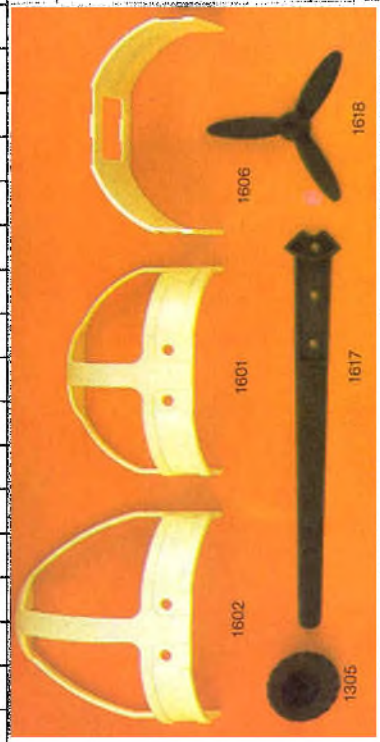
C10

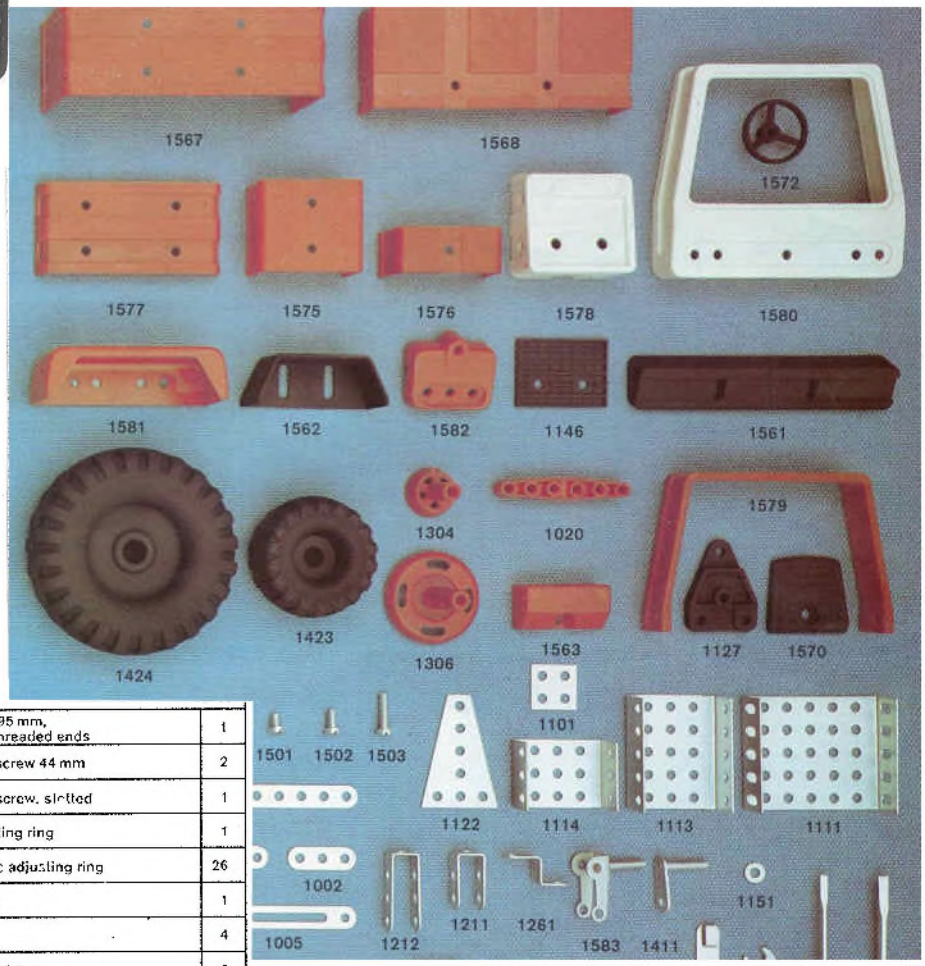
C20
C12



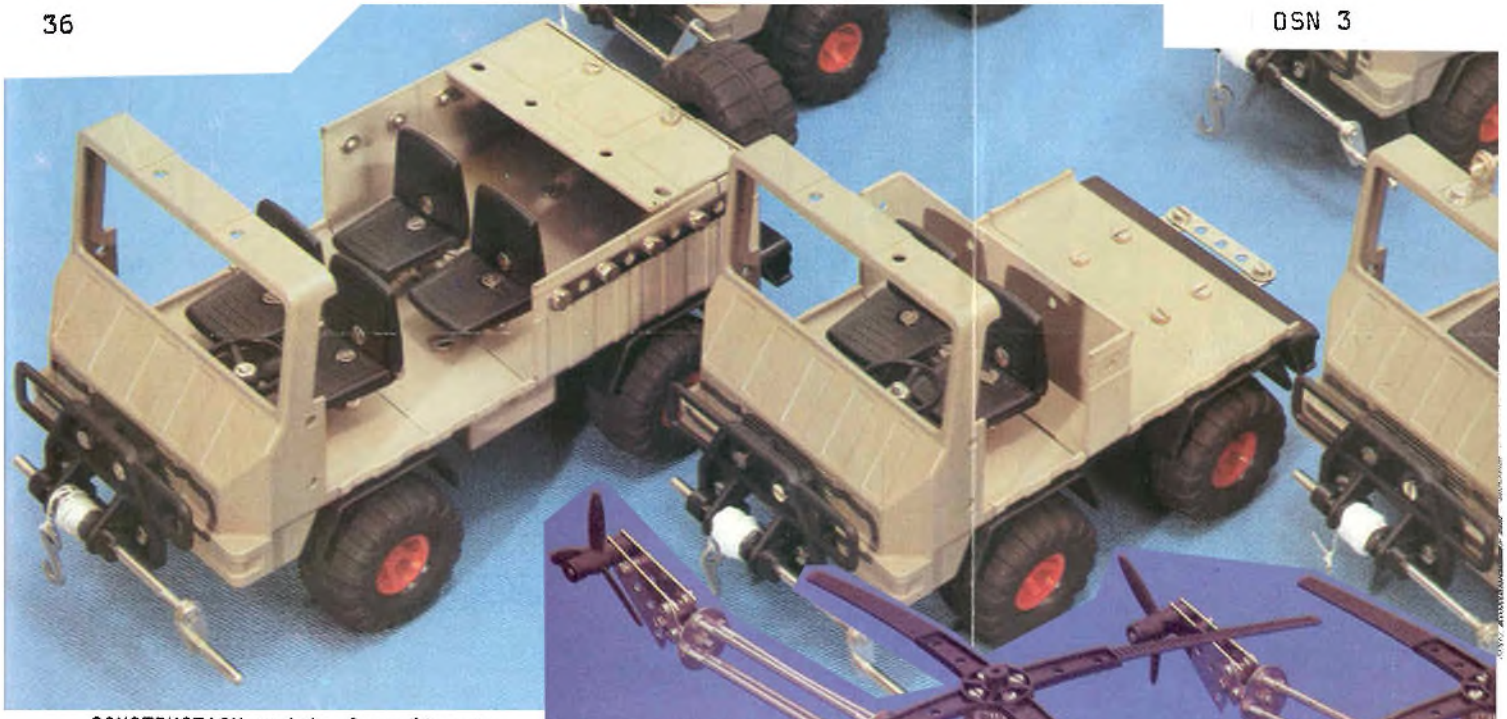
1001	Flachstab 2-Loch	2	1502	Schraube M 4×8	8
1002	Flachstab 3-Loch	8	1503	Schraube M 4×16	10
1003	Flachstab 4-Loch	1	1511	Mutter M 4	85
1004	Flachstab 5-Loch	2	1552	Schraubendreher 6 mm	1
1005	Flachstab 6-Loch, Langloch	3	1553	Schraubenschlüssel	2
1006	Flachstab 7-Loch	8	1554	Schraubenhalter	1
1051	Winkelstab 10-Loch	2	1570	Sitzelement	8
1052	Winkelstab 15-Loch	4	1601	Kanzel 60	1
1053	Winkelstab 20-Loch	4			
1102	Platte 3×3 Loch	1			
1122	Trapezplatte 5×3 Loch	2			
1153	Scheibe ∅ 30 mm	10			
1203	Bügel 5×1 Loch	3			
1211	Bügel 1×2 Loch	1			
1252	Winkel 1×1 Loch, Langloch	12			
1253	Winkel 2×1 Loch	7			
1261	Z-Winkel	6			
1271	Lagerbock	3			
1281	Flachwinkel	1			
1305	Rad ∅ 28	4			
1351	Achse 35 mm	8			
1362	Welle 120 mm mit Gewindeenden	4			
1372	Gewindestift 44 mm	7			
1402	Elastikstellring	30			
1501	Schraube M 4×6	56			

1602	Kanzel 80	1
1603	Bugsegment 60	1
1604	Bugsegment 80	1
1606	Zylindersegment mit Fenster	2
1607	Zylinderrückwand	2
1615	Zylindersegment ∅ 34	4
1617	Rotorblatt	4
1618	Propeller	1

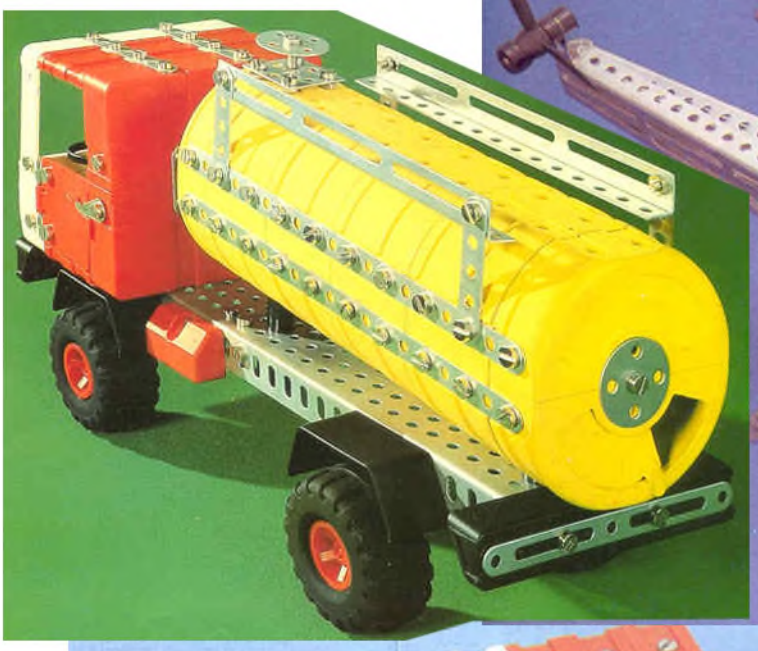


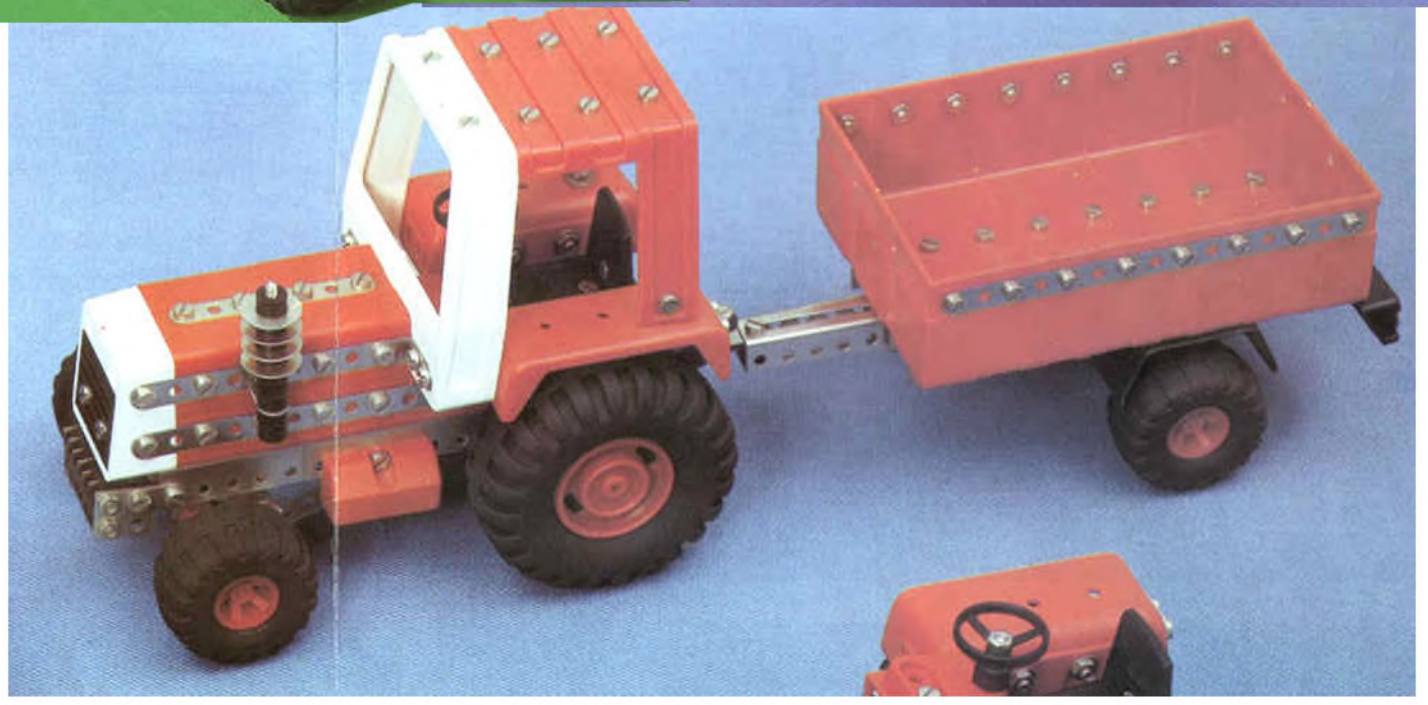


1001	flat bar, 2 holes	5	1361	shaft 95 mm, with threaded ends	1
1002	flat bar, 3 holes	12	1372	grub screw 44 mm	2
1003	flat bar, 4 holes	–	1381	grub screw, slotted	1
1004	flat bar, 5 holes	–	1401	adjusting ring	1
1005	flat bar, 6 holes, oblong	1	1402	elastic adjusting ring	26
1006	flat bar, 7 holes	6	1411	crank	1
1007	flat bar, 9 holes	8	1423	tyre	4
1008	flat bar, 11 holes, oblong	1	1424	tyre ∅ 90 mm	2
1009	flat bar, 15 holes	4	1501	bolt M 4×6	110
1020	connecting member, 6 holes	2	1502	bolt M 4×8	10
1051	angle bar, 10 holes	2	1503	bolt M 4×16	17
1052	angle bar, 15 holes	2	1511	nut M 4	152
1101	plate, 2×2 holes	7	1561	bumper	1
1111	plate, 5×5 holes, bent on 2 sides	3	1562	mudguard	2
1113	plate, 5×3 holes, bent on 2 sides	3	1563	fuel tank	2
1114	plate, 3×3 holes, bent on 2 sides	1	1567	central section, high	3
1122	trapezoidal plate, 5×3 holes	2	1568	rear panel	2
1127	trapezoidal plate, 3×4 holes	2	1570	seat	2
1146	cover panel, 30×40	1	1572	steering wheel	1
1151	washer ∅ 10 mm	2	1575	central section 3	6
1152	washer ∅ 20 mm	4	1576	central section 4	2
1211	bracket, 1×2 holes	1	1577	central section 5	1
1212	bracket, 1×3 holes	1	1578	radiator unit	1
1251	angle, 1×1 hole	2	1579	roll bar	1
1252	angle, 1×1 hole, oblong	2	1580	front part 2	1
1253	angle, 2×1 hole	4	1581	mudguard 80	2
1261	Z-angle	1	1582	instrument panel	1
1271	bearing block	2	1583	axle stub	2
1304	wheel rim	4	1551	screw driver 4 mm	1
1306	rim ∅ 42 mm	2	1552	screw driver 6 mm	1
1353	shaft 95 mm	2	1553	spanner	2
1360	shaft 65 mm, with threaded ends	1	1554	screw holder	1



CONSTRUCTION models from (top to bottom) C10, C20, C09 and C12 sets.





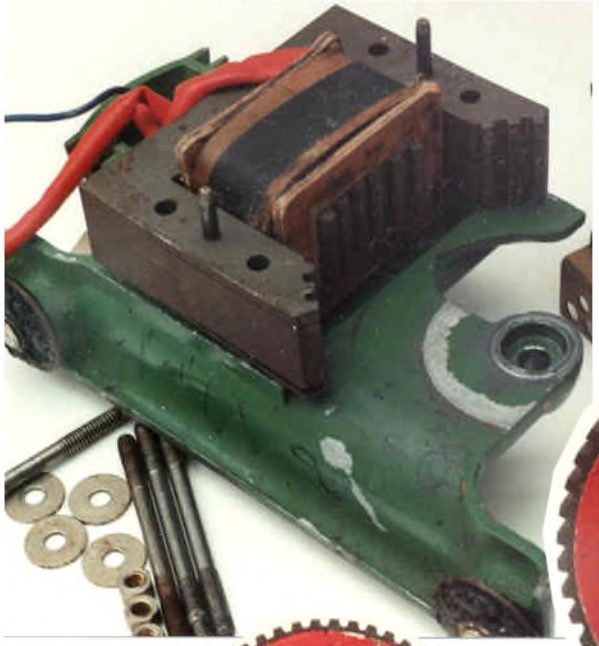
NEW FACTS - TRIX MOTORS In the last issue I said that I hoped to give details of the TRIX sets in the leaflets supplied by Frans Boerdijk and Harry Mariën. Since then the Dutch material has formed the basis of an article in CQ7, with excellent reproductions of many of the illustrations. The Belgian leaflet covers much the same ground so for the moment no further details will be given although later it will be worth listing in full all the sets which were available.

On motors though more new information is now to hand. First Harry Mariën has supplied details of what is perhaps the earliest TRIX motor. The illustration below is from a photograph of an actual motor owned by Harry and the title is from an advertising leaflet which includes a similar view of the motor but with a lead coming from it terminating in a 2-pin plug. The leaflet is in French and what follows is a rough translation of what it says

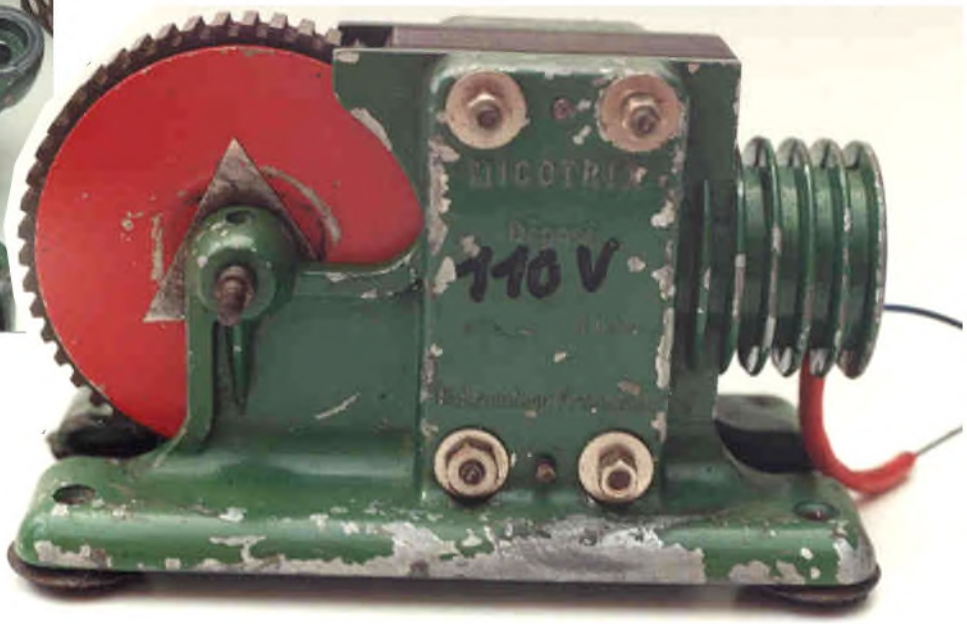
Works on 110 volt alternating current
Made in France
Tough - thanks to its slow speed (120 rpm on 50 c/s) and its construction, it is practically indestructable
Economical - low consumption (0.01 per hour) - moderate purchase price - zero maintenance, however make sure that the bearings are suitably oiled
Silent - because of the absence of reduction gearing, armature, brushes, etc.
Interference suppression - even for radios placed next to it
Reversible - it will run in either direction
Regular - its speed is absolutely constant
Safe - it can remain stationary while plugged in without risk of either overheating or damage
Powerful
Starting - after having plugged in, start the flywheel (large toothed wheel) turning slowly
Made by TRIX, 2 Rue Beranger, Paris 3. TUR 52-84

The second illustration shows the coil inside the light alloy casing and in the original photograph it can be seen that the core of the coil is shaped to follow the diameter of the rotor and consists of six seperate elements divided horizontally. The large wheel is not of course a gear wheel but carries 50 poles thus giving the stated speed. The body of the motor is painted green and cast into it are the words "MICOTRIX", "Depose", " ≈ 110v", and "Fabrication Francaise" (the large 110 V that may be visible in the photocopy is black ink or the like); the rotor is red. Unfortuneately I forgot to obtain any dimensions of the motor but from memory the lengthways pitch of the mounting holes is between 3 and 4" - perhaps Harry will be kind enough to send details.

There are one or two minor variations of TRIX electric motors and details will be given in the next issue, together with an illustration of a TRIX clockwork motor.



Moteur électrique
MICO-TRIX
FABRICATION "TRIX", 2, RUE BÉRANGER - PARIS-3e



NEW SYSTEM Thanks to Peter McCall for sending a photocopy of the single sheet instruction Leaflet, some of which is reproduced opposite at reduced scale, and other details. The set was bought last year in Russia and the hole spacing is 10mm; the flat plates are a very dull red and the strips etc have an irridescent metallic finish. Four models are described, the two here, another crane and a second digger.

CONSTRUCTO (From Keith Cameron)

Sets labelled 'CONSTRUCTO' (no set number) were on sale in Canada through Radio Shack stores during the early 1980's. The boxes measure 14"x11"x1-1/2" and show (in full colour) two boys with a model breakdown lorry and a small crane. The sets contain an erratic assortment of parts as will be seen below. Hole spacing is about 10mm or 11/28 inch. This produces the interesting result that you can tell the number of holes of a part by its length (and vice-versa), for a part that is 'x' holes in length will also be 'x' cms in length. Strips are 1cm wide. Rods are either .148" or .125", see below. There is a small manual with line drawings of models. These are simple, but cannot be built because of insufficient parts. However, several parts are included that are not required by the manual models. The strips are heavily enamelled red, the trunnions and most of the pulleys are green, gears and wheel discs are yellow, the double braced girders are very light blue, brackets etc are heavy gauge metal, nickel plated. The plates are various colours. The trunnions have slots like Argentine parts. This system, I'm told, resembles, or is identical to Merkur. The complete contents of the set were as follows:

1 25cm 25 hole strip
2 15cm 15 hole strips
1 3cm 3 hole strip
6 5cm 5 hole curved strips
5 6cm slotted strips
3 15cm 15 hole angle girders
2 10cm 10 hole angle girders
2 3cm x 3cm right angle strips
4 angle brackets
3 fishplates
1 double bracket
2 double bent strips
1 5cm x 1cm DA strip
1 3cm x 5mm DA strip
1 14mm loose pulley, brass
5 23mm pulleys with boss
3 38mm pulleys with boss
1 60mm pulley with boss
2 85mm pulleys with boss
4 box spanners (!!)
1 small screwdriver
8 1cm pinions (!!)
1 3cm gear
2 3cm contrates
5 large old style pawls (!!)
1 small pawl
1 collar
1 coupling

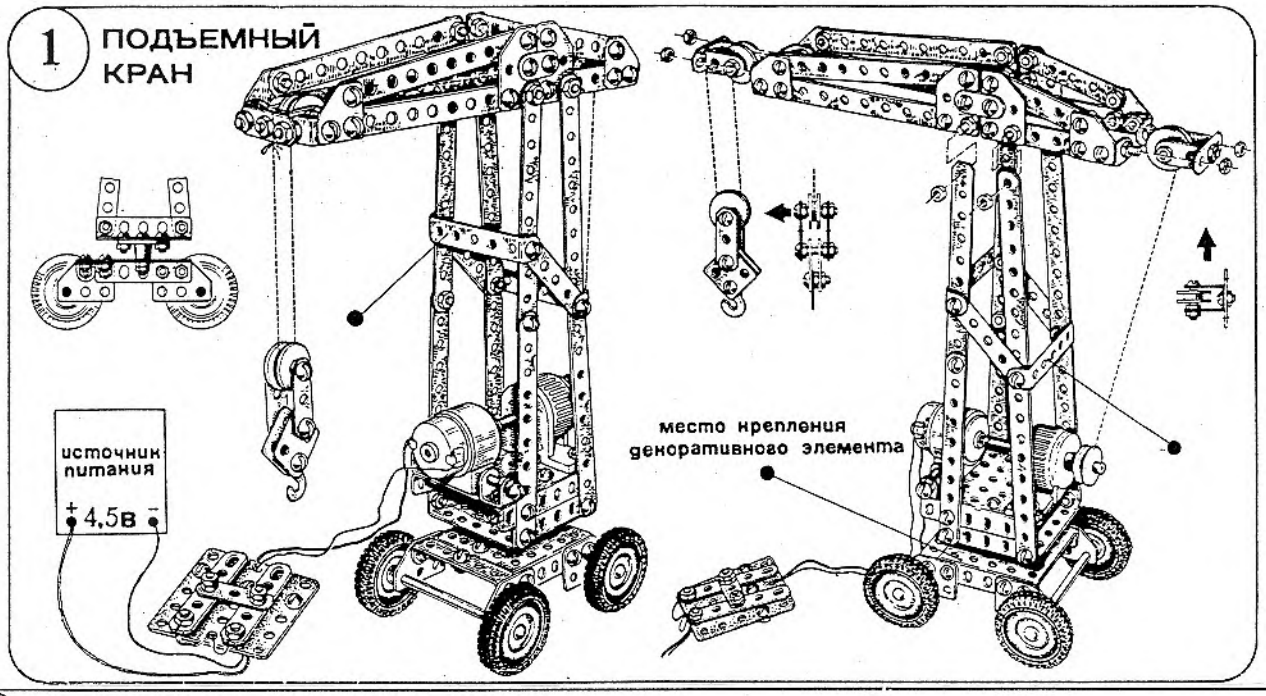
2 27cm rods (.148")
1 9cm crank handle (.148")
2 127mm rods (.125")
1 white plastic steering wheel
2 2cm lengths of fine spring
14 cheesehead bolts
10 hexagonal nuts
1 hook shaped like an anchor, black
1 5cm x 5cm flanged plate, light blue
3 10cm x 5cm plates, yellow metal
4 10cm x 5cm plates, red plastic
4 5cm x 7cm plates, red plastic
2 5cm x 7cm plates, blue plastic
2 5cm x 5cm plates, blue metal
2 2cm x 3cm plates, red metal
2 45mm x 3cm triangular plates
4 15cm Flat girders, red metal
1 9cm flat girder, green plastic
3 5cm flat girders, yellow plastic
2 trunnions, green metal
2 flat trunnions, plastic
2 small hanks of string
1 mini-motor and mounting plate
3 plastic gears, force-fit on motor shaft
4 thick rubber washers

5 10cm braced girders, very light blue
4 3cm wheel discs, yellow metal

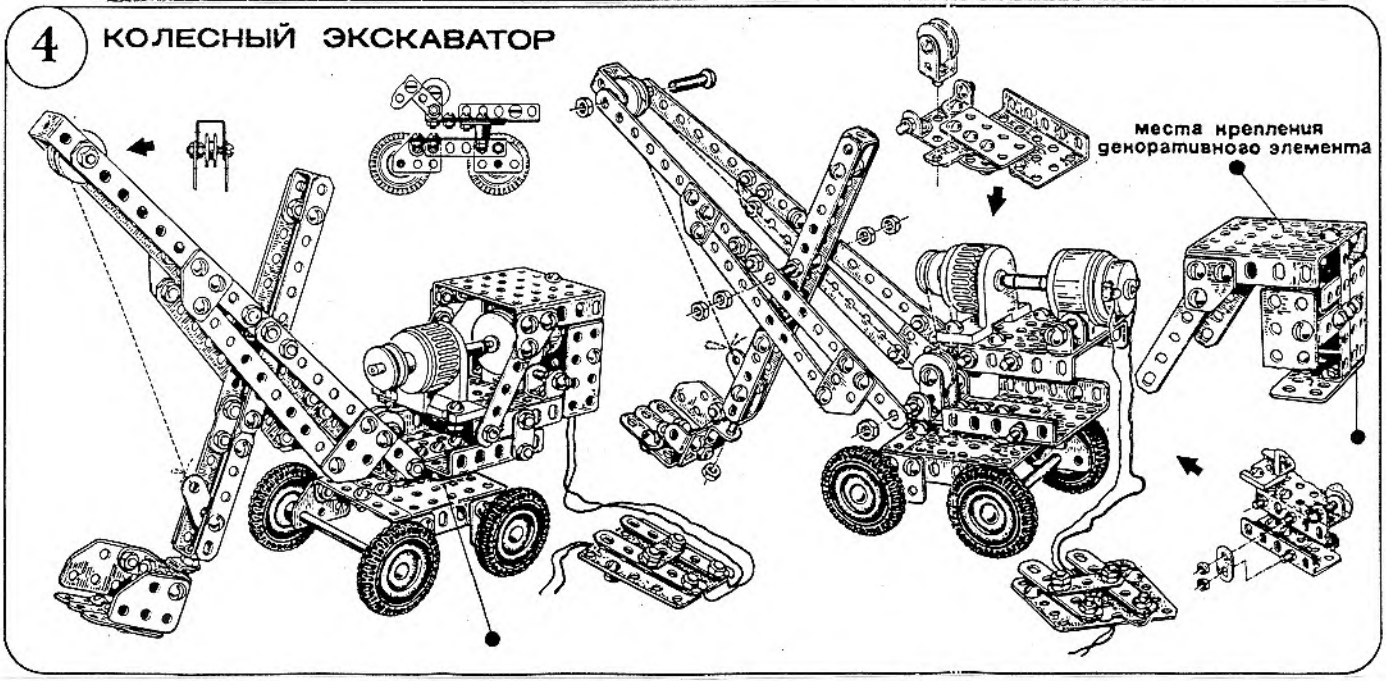
This seems like a lot, but trying to build a model faces you with problems: not enough nuts and bolts, only two very long rods, (shame to cut them), and only one flanged plate for models, many of which require two. And there are far too many advanced parts (flat, braced and angle girders, several sizes of pulley, oodles of small pinions and pawls).

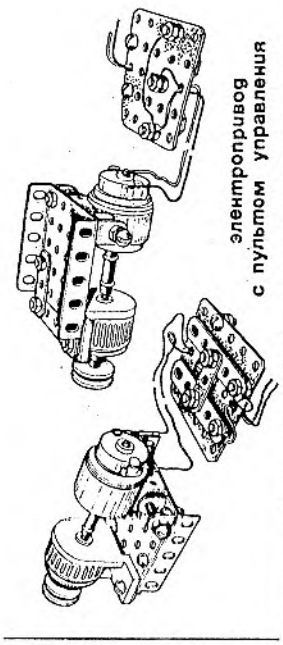
[These from their descriptions are recognisable as MERKUR parts except the .125 dia rods, was there a reason for including them? Not that reason seems to have been uppermost in the mind of whoever put this set together, the contents above are notable different to those given in MCS -Ed]

1 ПОДЪЕМНЫЙ КРАН

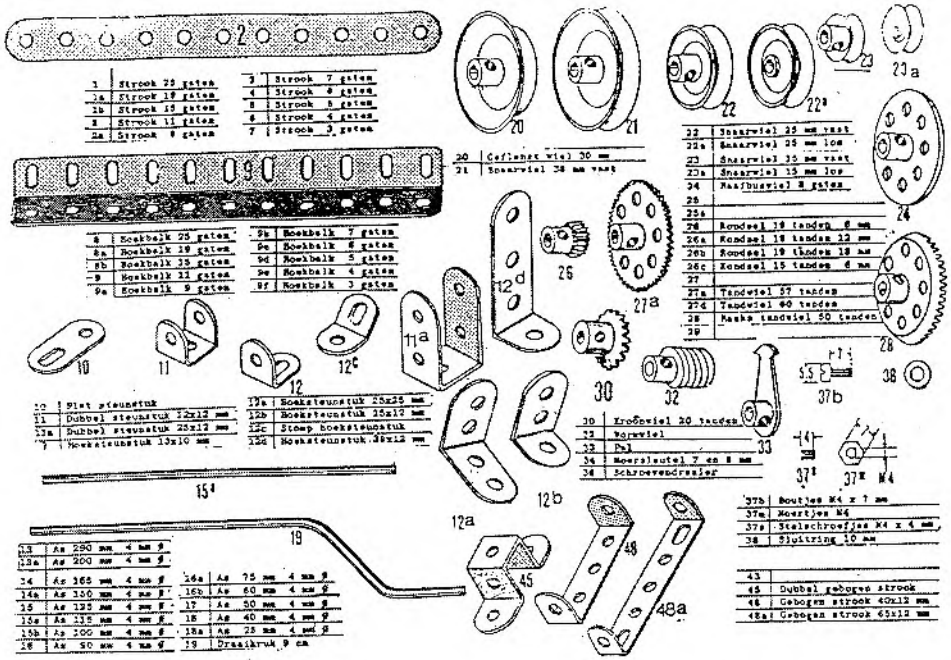


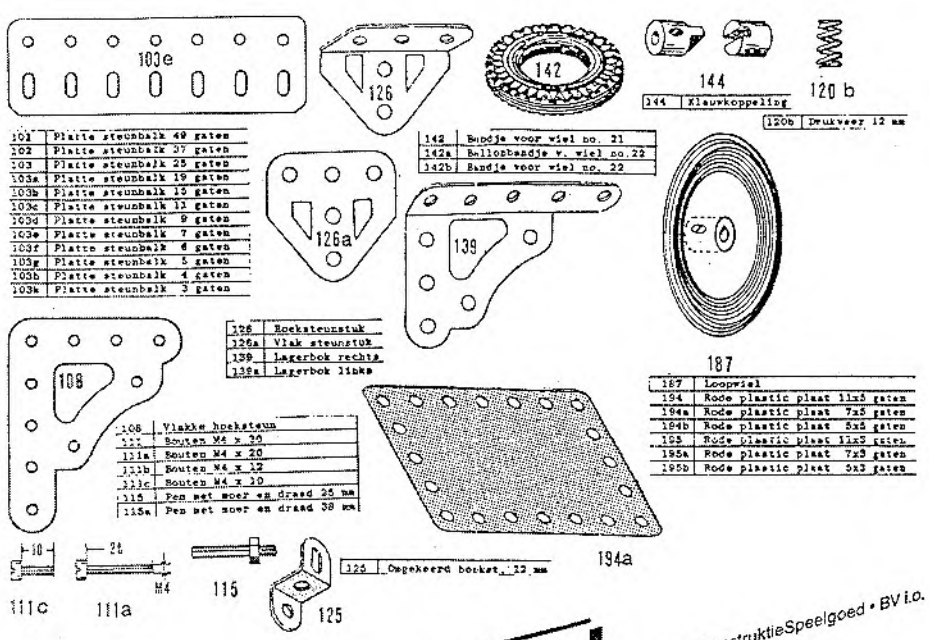
4 КОЛЕСНЫЙ ЭКСКАВАТОР

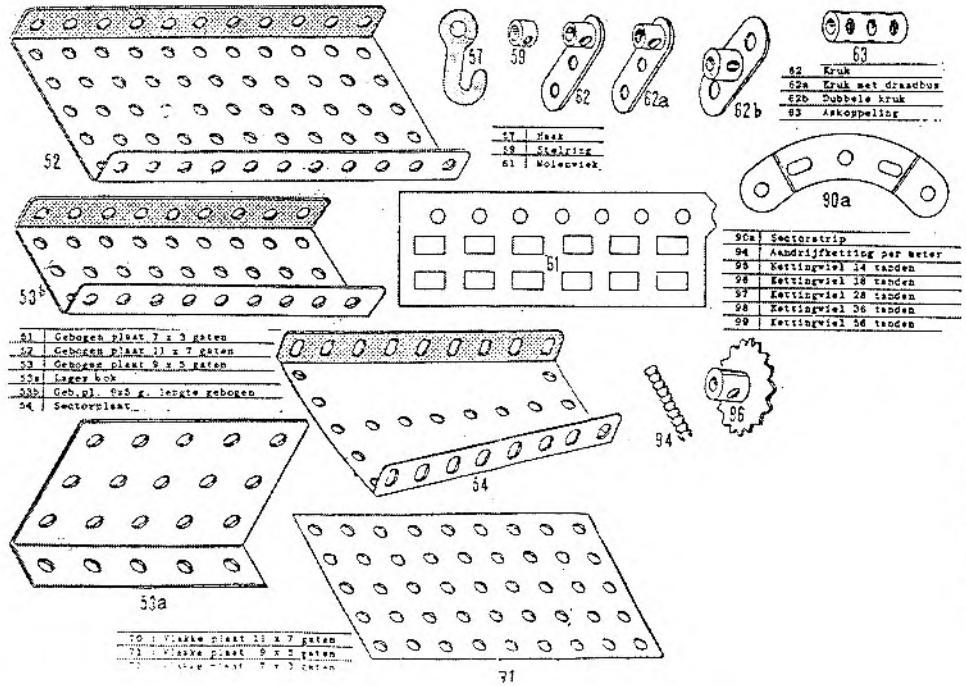




комплектность набора			модель 1	2	3	4
	4	Блок	4	4	4	4
	1	Планшайба	1	1	1	1
	12	Планка с 2 отв.	3	10	12	11
	7	Планка с 3 отв.	6	7	2	2
	9	Планка с 5 отв.	9	8	7	7
	12	Планка с 10 отв.	12	6	6	8
	4	Косынка I	4	2	4	4
	2	Пластина 20×20	2	2	–	–
	8	Косынка II	8	8	6	8
	5	Пластина 30×20	–	5	3	3
	5	Пластина 40×20	–	–	5	5
	2	Пластина 50×20	–	2	1	1
	6	Уголок	4	4	5	6
	4	Скоба малая	2	4	2	2
	4	Скоба большая	2	1	4	4
	3	Скоба	3	1	1	3
	4	Панель	3	3	4	4
	1	Крюк	1	1	–	–
	2	Ось	2	2	2	2
	2	Муфта	1	1	1	1
	4	Шкив	4	3	4	3
	4	Шина	4	4	4	4
	1	Пластина гибкая	1	1	1	1
	4	Пластина гибкая	4	3	3	4
		Нить				
		Провод				
	1	Электродвигатель	1	1	1	1
	1	Редуктор	1	1	1	1
	2	Ключ гаечный				
	1	Отвертка				
крепежные детали						
	86	Винт М4×7	72	75	74	82
	10	Винт М4×18	7	5	8	8
	115	Гайка М4	104—102		103—113	







Temsi • KonstruktieSpeelgoed • BV i.o.
Beltelstraat 30
7556 NC Hengelo (O)
Tel. 074-914470
Telefax 074-433645

TEMSI Now under new management TEMSI has added some new parts and the illustrated parts list from Brian Rowe, shown here (reduced scale) is believed to be from 1989. Compared with the range of parts shown in MCS there are over 30 additions with new sizes of strips and plates, more gears and useful miscellaneous parts. 37 and 49 hole Flat Girders are new but there are no corresponding Angle Girders. Generally the new parts are similar to MECCANO (and the numbering system is nearer to MECCANO too), but some are of original design, viz the 3x1 hole Bracket 12d, the Flanged Plates 53a and 53b, and the Flat Plate 72. Apologies if you need a magnifying glass to read the list, the bottom three titles on the first sheet may not come out and are (in English) 70, 71, 72; Flat Plates 11x7, 9x5, 7x3 holes respectively. No information is available on whether there have been any changes to the TEMSI sets.

OTHER SYSTEMS IN INDIA Ashok Banerjee has sent two letters as follows

"After the exit of MECCANO from India in the mid-fifties, there was a complete vacuum. Then a number of local manufacturers came up with metal construction systems, but these were very rudimentary and rather short lived. However in the early sixties a system was introduced called PLANO, which was more or less a clone of MECCANO, and the quality and finish were quite good. The specifications were the same as MECCANO. In due course it went up to Set No 14, and had quite a decent assortment of steel and brass parts. I collected a few sets in those days (I was a child then) and still have some parts in my collection. These are fully compatible with MECCANO. There were a few oddball parts too, for example a 1½" Strip with one elongated hole. I heard later that the company folded up due to embezzlement of funds by some employees. It is no longer in existance, probably. If you are interested, perhaps I can try to find out more about PLANO. It will take a bit of time, since it will entail a visit to Delhi (where the factory was located) and Calcutta (where business was brisk), and both these cities are quite far from Ahmedabad."

"Yes, you are right, the information in MCS on PLANO at least is not entirely correct. If my memory serves me right, it came onto the market around 1961 - up until then shops were selling off residual MECCANO stocks, although as a scarcity item it had become expensive. In 1964 my father bought me a No 9 PLANO set - the biggest available at that time. I still have the loose parts (though not the box and manual - I was only 12 years old then and had little sense of preservation!). I can tell this much about parts in sets up to No 10:

Strips: 1½", 2½", 5½", 12½"
Girders: None
Angle Brackets, Fishplates, Trunnions and Flat Trunnions.
Flanged Plate: 5½"x2½"
Crank Handle with Grip, Crankshaft and Axle Rods
Bush Wheels and Wheel Discs: 8 hole
Double Angle Strips: 2½"x½" and 1½"x½"
Cord, Screwdriver and Spanner
1/8" BSW Bolts, domehead/cheesehead, hexagonal nuts, washers
Pulley: 1" brass with boss
Wheel: MECCANO type tinplate
Faceplate: 2½"
Flexible Plates: 5½"x1½" and Triagular 2½"x1½"

I'll give you more information in subsequent letters when I get the opportunity to do more research.

I had not heard of MILANO before, shame on me. But there have been several short lived systems, all based on MECCANO, such as MAXHINA, MICMAC (up to Set No 6) - all now extinct. Six months back a new MCS was put on the market, named METAL CONSTRUCTION OUTFIT - only one set so far with a small assortment of parts, including 4"x2½" Flanged Plates, Strips and a few moulded plastic parts like wheels. It is expensive, retailing at R 165 (£5.85), and certainly not worth the price.Colours are mainly red and silver. If you want more details, let me know."

QUERIES

1. From Gaston Marette: the thread size of British TRIX is 4BA; that of German and French TRIX is 3.5mm diameter, 32 threads per inch (this thread was known in Belgium as Belgian Thread No 19 and is no longer used except in repairing old machinery).

2. From Ashok Banerjee: I think "Made in China" always refers to Taiwan, since I have always found that products of mainland China bear the inscription "Made in the People's republic of China".

3. From Don Redmond: the ERECTOR GU Eccentric Loop is made of 5/32" (0.156") dia. steel. (Info. from Louis Boselli, Cornwall-on Hudson, NY)

4. From Gaston Marette: the Florin is the official unit of currency in the Netherlands. It is called "gulden" in Dutch but noted f in its country and NLG in the international market (just like "pounds sterling" is noted £ and GBP respectively).

5. From Don Redmond: can anyone tell me what system had axle rods with a flat on one side. [In a later letter Don answers his own query saying that GABRIEL ERECTOR has a full length flat on its rods. I have included this as it may be of interest to others - are such axles unique to GABRIEL ERECTOR, I wonder - Ed]

6. José Bernal Moreno asks if anything is known of a system made by BASSETT-LOWKE based on rods and other parts.

ITEMS FROM LETTERS

1. Brian Rowe notes that the last CONSTRUCTION Helicopter set that he bought is marked "Set No 20" instead of the C 20 of earlier ones. He may still be able to buy this set and CO 1 locally and for anyone interested his address is 23 Courtenay Park, Newton Abbot. Devon. TQ12 2HB, Tel 52188. He has also received from a friend in Holland some Gear Packs which include the large Bevel in black plastic, and metal, nickel plated Worms. They are packed in plastic bags with an orange card stapled on bearing the legend "Construction B-317 Kd Nr 297780 Hergestellt in der DDR". He says that these may be from old stock because of the metal Worms. Also Brian can supply some TEMSI parts and hopes to have supplies of the new, longer green Girders shortly. TEMSI Axle Rods come in a range of lengths and fit CONSTRUCTION bosses.

2. Gaston Marette says that MARKLIN chain is a very good substitute for TRIX chain. [This arose because I advertised for TRIX chain in OSN 2, I actually wanted it to run on CONSTRUCTION gear wheels, engaging every second tooth, because CONSTRUCTION lacks sprockets and chain. After experimenting I found that the MARKLIN chain seemed if anything a better fit on TRIX gears than the original, but that whereas the TRIX would run on CONSTRUCTION gears the MARKLIN, with only a very slightly different pitch, would not - Ed]

3. Jeannot Buteux sent some interesting notes on how the group CONSTRUCTORAMA record details of OS in France. One tip from him for illustrating flat parts is to rub over with pencil, thin (airmail) paper placed on top of them. He sent some examples where it can actually be seen where the paint is chipped off. My attemps haven't been quite so successful so far but it is obviously a good way for showing suitable Mystery Parts, etc.

4. From Ashok Banerjee: "With regards to the MARKLIN Solar Set, your readers may be interested to know that the Solar Panel and Motor are available separately as Item No 14260."

5. J.L.Figureau writes that he owns a TRIX Moto Sable (see OSN 2) which he found with other TRIX items in a shop in the 1950's, so it may have been made postwar. [I have a leaflet in French from a TRIX 1a set which shows the Moto Sable and, judging by the poor quality of the paper used, could well be postwar - Ed] He also mentions that he bought a MERKUR set at a very reasonable price in Bilbao, Spain (from JADO-JARDIN, Colon de Larreatequi 37, Plaza de Jado, Bilbao 9. Tel 424 2565.

6. From Don Redmond

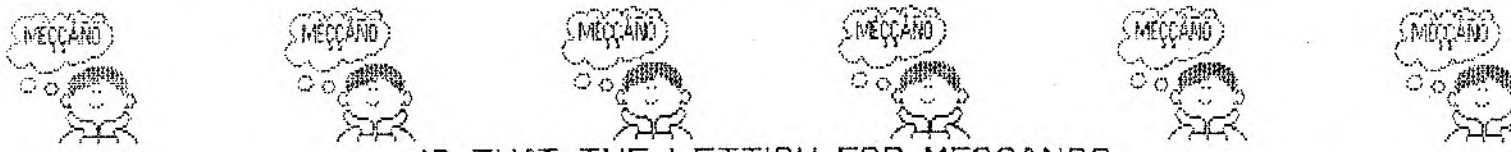
Dear Meccanisti:

(After seeing that this is the plural noun the Gruppo Amatori Modellismo Meccanico use for the amateurs of construction systems, I think it solves the feminist gripe about "Meccanomen", and is vaguely reminiscent of other borrowings such as "cognoscenti".)

Page 15 of OSN 2 has Keith's note about ELEKTRISKAIS KONSTRUKTORS. MCS already lists a related system, which was in error listed as "ONbITOB" and which I have already written to Frank should be listed as "ELEKTROMEHĀNISKAIS KONSTRUKTORS/yelektromekhanicheskii Konstruktor". I said erroneously that it was from Yugoslavia, not the USSR; but comparing the parts list with Mario Pei, The World's Chief Languages, it is evident from the alphabet that it is in Lettish (from Latvia) and Russian---not Serbian/Croatian. I suspected Lettish from Keith's word for "screwdriver", as the -is ending is very frequent in Lettish. So the system Keith reports is almost certainly also Lettish/Russian and as we know from recent news reports there is a strong (immigrant) Russian minority in Latvia. The key clues in the Lettish alphabet are cedillas under ķ, ļ, ņ, ŗ, and long marks over four vowels ā, ē, ī, ū, and inverted circumflex over c, s,z. Evidently from the fact Keith's set was on the market in Poland (which was what made me suspect Yugoslavia), it has been a Latvian export.

Other notes from OSN 2: Mystery Parts: I had already written to Tony that I have a sample of #1. In my box of what-is-its I've found Construct-o-Craft, D-180 (note: pitch of this appears to be 14mm not 12.7; anyone verify?) etc. D-180 and Delta-X appear to be identical.

DISTLER: I have a Distler clockwork motor key 33x42mm, nicely nickeled, cast, with a different glob logo, having DISTLER in caps curved (concave upward) across the equator (rubbing in margin).



IS THAT THE LETTISH FOR MECCANO?

I enjoyed the issue and you have included some interesting and unusual items. Distler Giant reminds me of the system invented some years ago by Meccanoman Chuck Johnson and described in the MM under his name 'Gigano'. I have sat on the floor in his living room in North Bay, Ontario, and helped make up a model using it. It is beautifully crafted of wood and metal to be six times normal size. So bearings are specially machined. Chuck originally made it to be a means of helping his daughter get over muscular dystrophy and it proved most successful. It is too bad that there is no equivalent system available. Perhaps the large size Lego would fill the bill in some cases but I have not seen its use promoted in any of the coverages of programs for the handicapped.

If it would be of any help, I can send samples of all parts of Constructo together with the manual. As I understand it, the set I received was one of very many being marketed in Canada, and most of them had a similar random assortment of parts. Larry McEwen bought a vast number of the sets but soon sold them again when he discovered their deficiencies. Norman LaCroix would doubtless have the most information on the subject.

Don Redmond's interesting letter of May 2 gets into deep water on the origin of my Elektriskais Konstruktors <Skolnieks> 3 set. He may have a point about the language being Lettish, because in the instructions there are lots of long marks over some vowels and an occasional s has a circumflex. There are also a few cedillas. Would you like a photocopy of the manual?

Konkoly in his advert on page 20 flatly states that his Elektomechanskais Konstructorset is of Soviet origin. It may be his error, or maybe the name is different, because my box definitely bears the name Konstruktos with the final 's'. Are these products of one and the same system? My set is purely electrical and has no mechanical aspect.

Would it be in line with the intent of OSN to have a 'Heretics Corner' where there would be suggestions for OS parts that can be useful to the Meccanoman? These come under several heads, (a) parts obsolete in Meccano but still available in OS. (e.g. digger buckets); (b) parts never in the Meccano system but of practical value and for which there is no Meccano equivalent (e.g. Stokys gears, AMI.LAC cone pieces); (c) parts similar to but of higher quality than current Meccano parts (e.g. Temsi chain, many Argentine parts). Such an item would be anathema to the purist, but then presumably the purist doesn't read OSN (or does he?)

What do you think of the term, 'Meccanisti,' as used in Don's letter? I presume the singular form is 'meccaniste.' My only reservation is that the term may be too vague to apply only to a Meccano enthusiast, having a broader range (according to Don's quote of the definition from the GAMM) thus making it applicable to amateurs in <u>all</u> construction systems. It would make an interesting discussion, but I fear the Anglophiles among us might consider it too foreign-sounding.

Enclosed is a picture of a model I built some years ago, a 'Flip-Flap' taken from the American Model Builder manual. Note use of the early AMB rack strip with the long slot. The rack is on a narrower section of this U-shaped piece. Although ingenious, this use is not really very sound mechanically, because it puts considerable strain on the pinion. A far simpler (and therefore better) method is to substitute a crank-operated mechanism as in the almost identical Meccano model. Note also the AMB "Eccentric Wheel".

[The two letters "r" in manuscript are my additions, I think they may have been left out in typing.A desciption of the CONSTRUCTO set referred to is on Page 38. Unfortunately there is no room for the picture of the AMB Flip-Flap but there is a line drawing of it in MCS which shows the parts in question. Shouldn't Heretics Corner in OSN concern itself with using MECCANO parts with Other Systems? Joking apart this seems a good idea and an article on these lines which arrived independantly is included in this issue. What do other readers think? - Ed]

8. And a later letter from Don Redmond

New System: Elektriskais Konstruktors (Skolnieks) 3. Further to my letter of 2 May: "Skolnieks" is Latvian for "pupil, schoolboy" and presumably refers to the set size (3). It can also mean "alumnus" but this seems unlikely here. While Keith Cameron writes to me that this set contains no mechanical parts, it seems most probable to me that it is related to "Elektromehaniskais Konstruktors" which does have mechanical parts. Unfortunately no information is in the account of either set, about the manufacturer.

Which reminds me that in MCS the system erroneously listed as "YMAEU" should be listed as "Yun'ii Umelets"--as I had written to Frank Beadle--but since my letter to him I have found (in a larger Russian dictionary than mine) that the name means "Young Craftsman".

By now you will have Clyde Suttle's SoCalMecErector Newsletter (April 1990) with a page on "Instruct-o-Scale". I suspect this may be what is in MCS as "Instruct-o-Steel (?)" And he shows a "Mystery Part" on p.10.

BRAL is being imported directly from Italy into Canada by Merryland Toys Ltd. who have several shops in Toronto and Ottawa. One mailing address is 15 Bloor St. W., Toronto M4W 1A3; telephone (416) 968-9010. They had sets up to 9, at about one-third the price of Meccano; about $500 Can. (£250) for No.9; but no accessory or conversion sets.

About badly-punched parts: I have a 5x11-hole plate, 2 flanges long sides, 62x140mm, unpainted steel 0.035in. thick; 4.1mm holes at 13.1mm pitch. One flange is 13.5mm, the other is 14.5mm! None of the holes are in uniform straight lines in either direction; they bear all the earmarks of being hand-drilled! Theoretically it could be a home-made item but I doubt it. I have some matching (more or less) nickeled strips 6, 7 and 11 holes, steel 0.040in., holes 4.1mm on 13.1mm pitch, these too being punched off-center and straggly.

[On the subject of names in Cyrillic script there seem three alternatives, first to try to approximate to the original using English characters, which often means a quite unpronoucable word, WKOnbHNK is my favourite. Secondly to use the recommended English letter(s) for each Cyrillic character, which usually allows one to have a try at saying the word, so WKOnbHNK becomes SHKOPNIK or maybe SHKOLNIK because the original letters are stylised and it is not always easy to know one from another. Also there isn't universal agreement about how to change from Cyrillic to English and my dictionary, quite reputable but not perhaps in the Mario Pei class, doesn't favour the apostrophe that Don has put in YUN'II, and from another source I could have ended up with UNYI, so there is some scope there for a little confusion. The third way is to translate the Russian, or whatever, word(s) into English and Don's "YOUNG CRAFTSMAN" does seem to me much more user friendly than YUN'II UMELETS. I was going to try to Anglicize the name of the new system on Page 31 but perhaps readers would like to offer their own suggestions.

On the Cameron and Konkoly sets I presume that "elektriskais" and "elektromehaniskais" just mean electrical set and electromechanical set or something like that, generic terms which don't really identify a system. "Konstruktor(s)" might even be in the same category, possibly implying something that needs to be constructed, it seems to be used on many Russian sets and manuals. The "s" on the end may be significant (e.g. a grammatical termination) but it might be a typing error I suppose. So unless I've missed the point it isn't obvious to me that the sets are related - if the Konkoly one is the MCS ONbITOB then the description of some of its parts do fit some of SHOLNIEKS, but not all of them and the parts in common are those one might expect to find in a simple electrical set. But I would like a copy of your manual please Keith and I will report on whatever emerges.

As I typed that last SHOLNIEKS I noticed that it looks rather like one of my versions of WKOnbHNK, that is SHKOLNIK, give or take an "S". Help, what does it all mean please -Ed]

MATADOR Although models made from wooden blocks will perhaps be rare in OSN I was intrigued by a MATADOR manual kindly supplied by José Bernal Moreno. MATADOR was, and I believe still is, made in Austria and the pieces are held together by special wooden dowels. There is no date on the manual but a reproduction of the front cover of a house magazine contained in it bears the date March 1927. As can be seen on the page opposite some of the models contain moving parts and there are even electrical parts with working electric motors shown in the manual, as well as the Morse Telegraph illustrated.

SMALL ADS

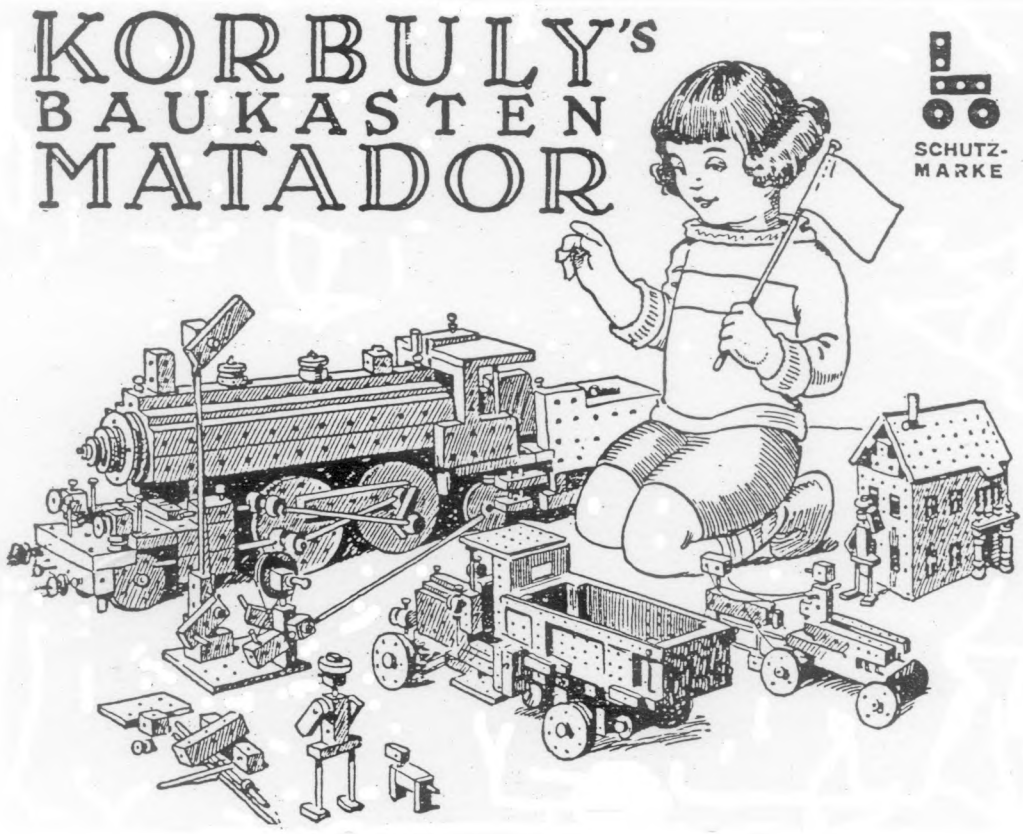
WANTED. Pre-war Bayko in at least good condition. R.Widner, 251 St. Clair Ave. East, Toronto. Canada. M4T 1P1.

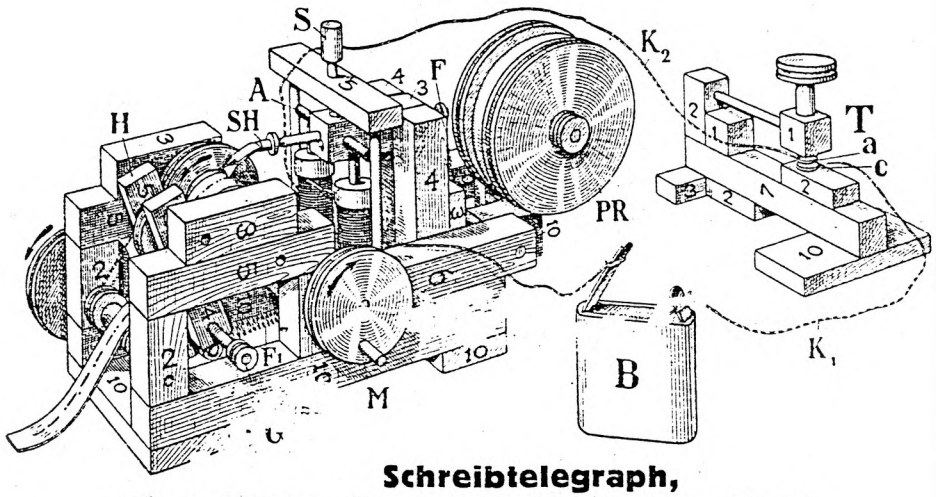
METAL CONSTRUCTIONAL SYSTEMS - BOOKS 1,2,3,4 now available from Frank Beadle, 33 Yoredale Avenue, Darlington, Co. Durham DL3 9AN. England. Each volume has 220 double faced A4 pages and a 5th Book will be ready later this year - in all nearly 400 systems are described from all over the world.

CHINESE Wooden Construction Set No 3. Push together pieces with axles. Box 10"x6"x1" in good condition (selotape on corners), about two-thirds full of parts in good condition. No manual, one model shown on box lid. £3 plus postage - Editor OSN.

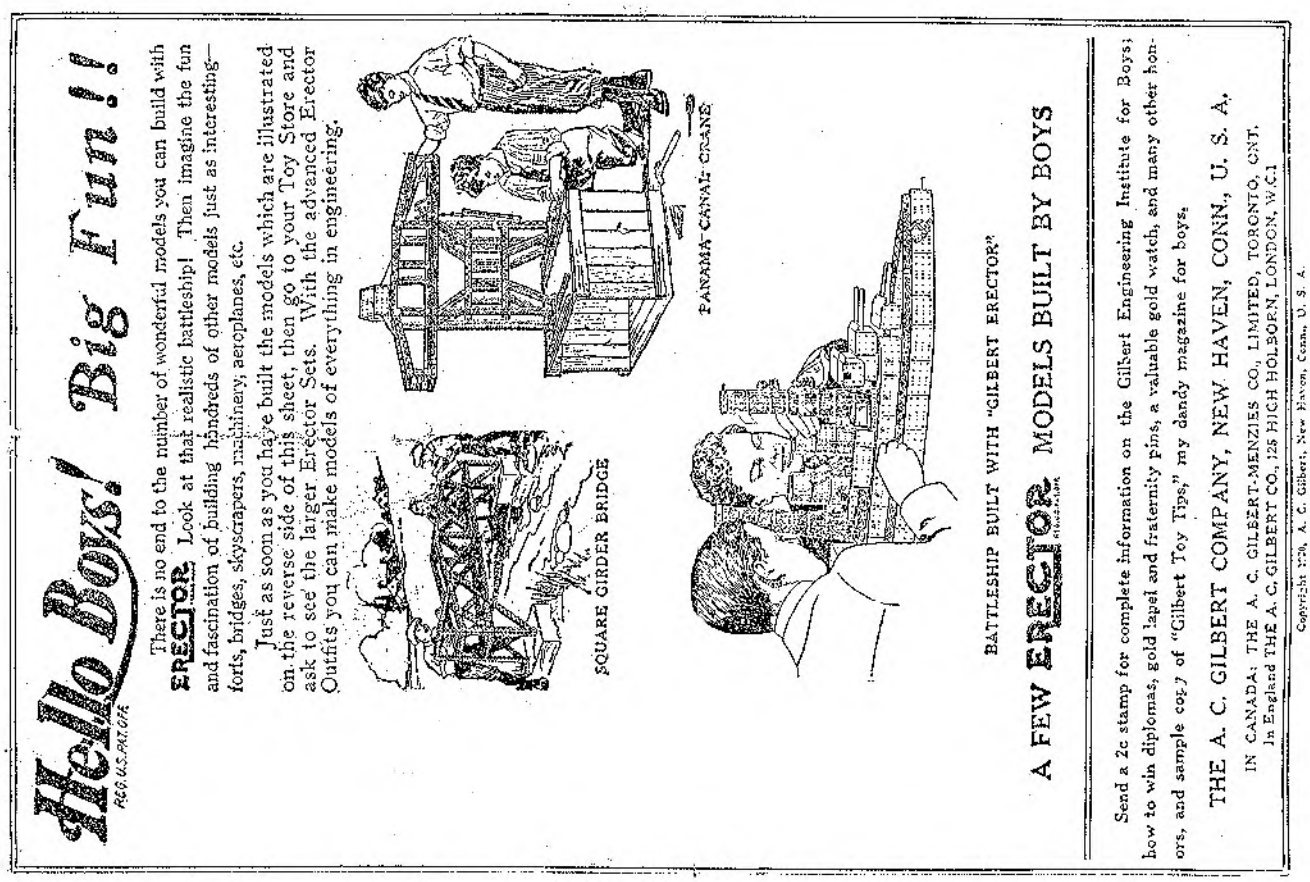
TINKERTOY. Made in Canada. Cylindrical box in good condition with 10 models illustrated on it. Most parts wood but some plastic, generally in very good condition. 110 of original 127 parts plus remnants of plastic Windmill Sails. £5 plus postage - Editor OSN.

WANTED. Minibrix sets and parts. Especially Tudor Minibrix sets, standard sets 4, 5 and 6, Imperial Combination Set, Coronation Set and accessary sets of any kind. Malcolm Hanson, 11 Willow Close, Long Ashton, Bristol, BS18 9DT. 0272 392321.

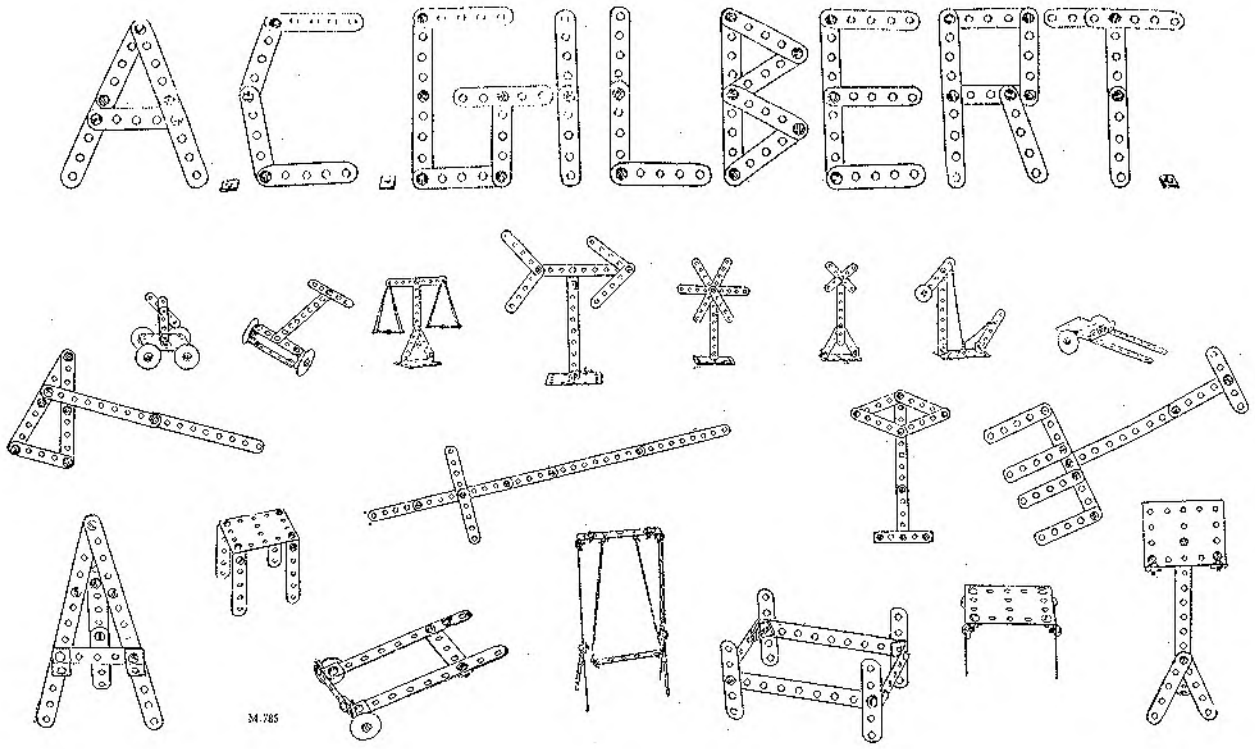




Schreibtelegraph,
gebaut mit Matador Nr. 4 und der Elektro-Ergänzung Nr. 165.



(The original measured 10.6" by 7")



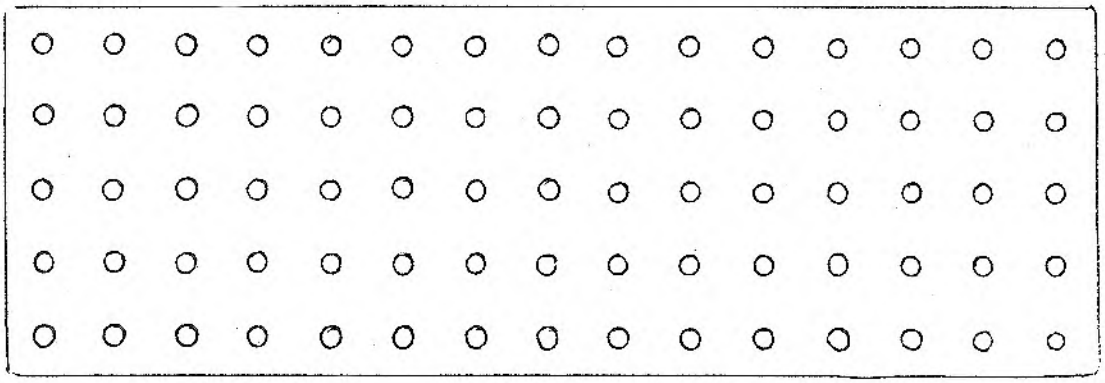
CONSTRUCTION Mr T W Comins has written that he understands from the UK importer that sets C10, C12, C17, C20 and Super Set 4 will be on sale later this year. No information is yet to hand on the make up of C17 and Super Set 4.

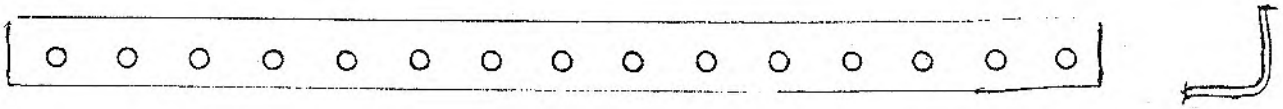
MYSTERY PARTS Mystery Part No 1, the 5x4 hole Plate, is an ERECTOR part, it can be seen in some of the models shown on a leaflet which turned up recently in England. Since it may be of wider interest both sides of it are reproduced opposite, at reduced scale - in case it doesn't show clearly the words at the bottom include "Copyright 1920". It would be interesting to know which set the leaflet went with because it does not seem to have included any of the standard, inch wide ERECTOR Girders of the day, only MECCANO type Strips. The question now is, did this part ever have an ERECTOR Part No.

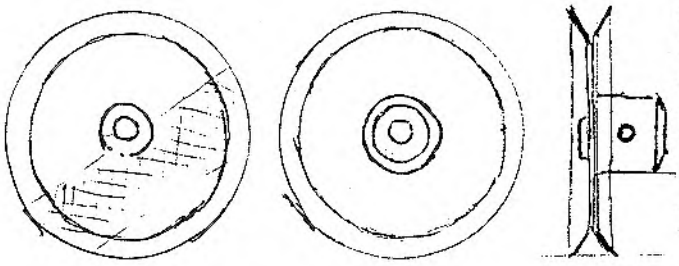
Mystery Part No 2 Jeannot Buteux writes that these parts might come from a Belgian system LE PETIT ARTISAN DE LA MECANIQUE.

Mystery Part No 4 From Don Redmond: I would particularly like to pin down some green Angle Girders I have: 25 holes at 13.0mm pitch,square ends, hole size 4.1mm, the other flange with 8mm slots. I have matching 25-hole Strips with rounded ends, not quite semicircular.

Mystery Parts No 5 Gary Higgins from New Zealand has sent details of the following which may be from the same set. The Plate is of a gauge similar to MECCANO or TRIX strips and the actual diameter of the holes is 3.5mm. The Angle Girder has round holes in both faces, its apex is noticeably rounded and it bears traces of dark red paint. The Pulley is painted light green and has cross hatched lines stamped into the metal on the upper face. The boss is of brass with a bore of about 3mm; it is double tapped but with a diameter of around 2mm. There was no set screw with the part.



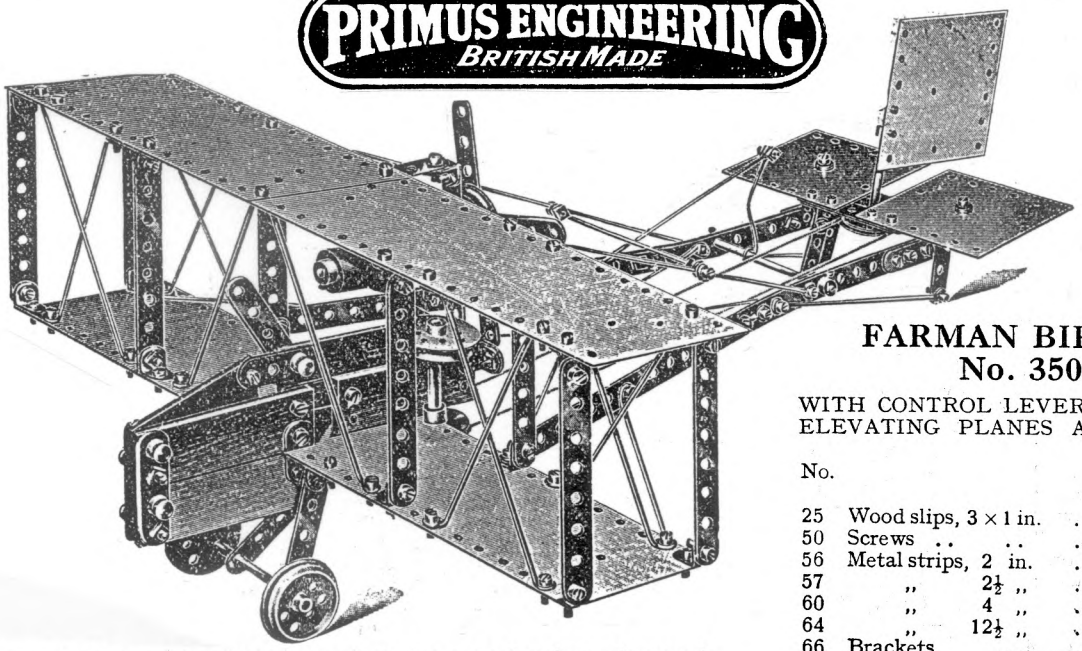




[Gary didn't send the pitch of the holes and measuring his photocopied originals gives 9.57mm lengthways and 9.67 across. I say this because photocopiers do not always give exactly the stated size, by sometimes several percent, and the variation is not always the same along and across the paper. In this case could the true spacing be 3/8" (9.53mm) I wonder - Ed]

Mystery Part No 6 Again from Gary Higgins, the Strip below is nickel plated and about the thickness of a MECCANO strip. [This part looks like ERECTOR Part No P35 from the earlier days of the 1914-24 period, any other thoughts? - Ed]

Mystery Part No 7 A Plate, donated by Brian Wagstaff, it is made of light alloy, unpainted with 11x7 holes except that the centre 5 holes of the central, lengthways line of (nominally) 11 holes are unpunched and on this area is stamped POLIVIT ($\frac{1}{2}$" high letters) and REGISTERED. PATENT 15962-08 in small characters. The thickness is .031" and the holes are .190" dia at $\frac{1}{2}$" pitch. The overall size of the plate is 3.82"x5.97" so the width of metal outside the outer holes is more than would be expected from the hole spacing. Does the name POLIVIT mean anything to anybody?



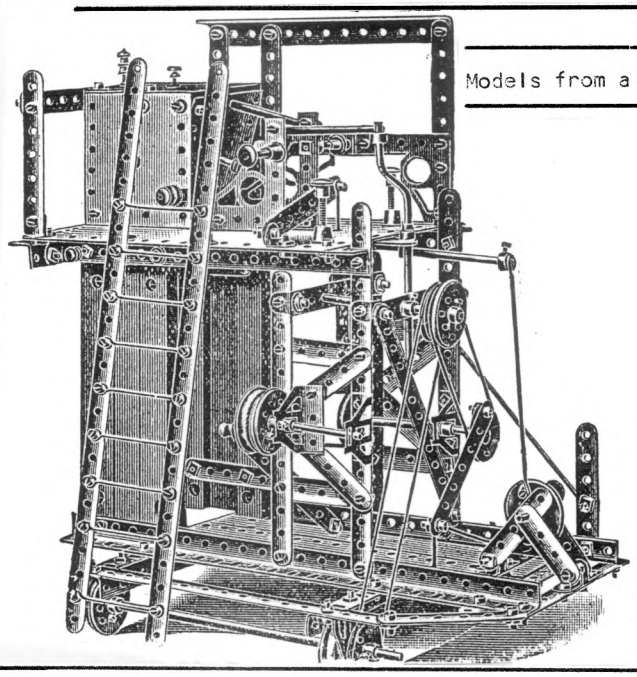
The planes are made with 8 × 3 in. metal plates, overlapping and screwed together. Signal post rods are used for the stays and as connecting rods for steering. Cord is used as illustration for operating the rudder

FARMAN BIPLANE
No. 350.

WITH CONTROL LEVERS OPERATING ELEVATING PLANES AND RUDDER.

No.		With No. 5 Outfit.	Additional Parts.
25	Wood slips, 3 × 1 in. ..	6	—
50	Screws	112	—
56	Metal strips, 2 in. ..	16	1
57	,, 2½ ,, ..	4	—
60	,, 4 ,, ..	3	7
64	,, 12½ ,, ..	2	—
66	Brackets	34	—
67	Metal plates, 8 × 3 in. ..	4	—
68	,, 3 × 3 ,, ..	3	—
75	Flanged wheels ..	4	—
76	Grooved wheels ..	3	—
77	Axle rods, 3½ in. ..	4	—
78	,, 2¾ ,, ..	2	—
82	Collars	13	—
84	Washers	20	—
92	Knob screws	4	1
96	Signal post rods ..	4	18

Models from a Manual c.WW1.



GAS REGENERATOR
No. 269.

4	Side rails ..	1	4	Plates, 3 × 3 ..	68
2	Truck sides ..	17	8	Trunnions ..	74
144	Screws ..	50	8	Wheels.. ..	75
2	Angle bars, 6½ in.	53	4	,, ...	76
4	,, 8 ,,	54	4	Axles, 3½ in. ..	77
2	,, 12 ,,	55	3	,, 2¾ ,, ..	78
9	Strips, 2 in. ..	56	1	,, 1½ ,, ..	79
6	,, 2½ ,, ..	57	16	Collars ..	82
6	,, 3 ,, ..	58	1	Handle ..	83
7	,, 3½ ,, ..	59	13	Washers ..	84
3	,, 4 ,, ..	60	4	Buffers ..	85
4	,, 5½ ,, ..	61	3	Lamps ..	87
3	,, 6½ ,, ..	62	3	Knob screws ..	92
3	,, 8 ,, ..	63	2	Rods	96
2	,, 12½ ,, ..	64	6	Wood screws ..	97
4	Architraves ..	65		Extra parts :	
31	Brackets ..	66	4	Collars ..	82
4	Plates, 8 × 3 ..	67	2	Axles, 8 in. ..	166

Does anyone know what a Gas Regenerator does, or did, and what the mechanical movements of the model represent?

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