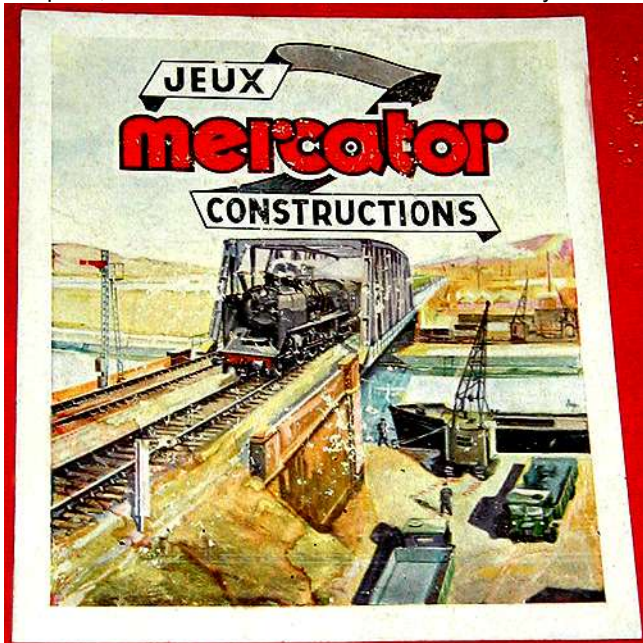


MERCATOR Mysteries Following on from the notes about KWIK BUILDER in 28/827, I must again thank Harry Marien, this time for allowing me access to his MERCATOR material. This has shown that as well as the system in MCS there was at least one other completely different version of this Belgian system. The material available falls into 3 parts and will be assumed to be representative of what will be called Types 1, 2, & 3. It is thought that Type 1 probably preceded Type 2, and Type 3 may, possibly, be associated with Type 2 in some way.

TYPE 1 The material here a No.5 set, probably fairly complete, and the lid label below is in the same style as the



manual cover in MCS, though with a different industrial scene. But the No.5's manual has an entirely different yellow cover, shown later.

The PARTS A list of the complete range of nearly 100 parts is included in the manual together with the Illustrated Parts, & both are shown on the facing page. There are some 40 parts more than in the MCS list and possibly the latter has been truncated. The sizes of the Poulies & Roues differ slightly between two. Notice also the 6-figure PNs in MCS, a possible indication that it is a later list. The illustration of the parts in the Manual is exactly the same as that given for MINIATOR in MCS, and it is explained in the Manual that it can be used for both systems. [MINIATOR is essentially a smaller version of MERCATOR but no parts are to hand.]

Below some notes on the parts, mostly about those in the No.5 set, and the quantities found in it are shown in curly brackets (it should have 363 parts). Dimensions not given are as in the Parts List.

• **The Basics** Holes are 4.9 to 5.0mm, with a few in Strips 5.1mm; their pitch is 13.0mm (but 12.7mm in MCS). Strip parts are 13.0-13.2mm wide and have fully rounded ends. Plates & A/Gs have square corners. The metal is .8 to .9mm thick in most parts, rather thin for the longer Strips. All holes are round except in the A/B. Unless otherwise stated Strips & A/Gs are dark green; Plates, Trunnions & Pulleys are medium red.

• 2,3,4,5,6,7,8,9,10,11,15h **Strips** {4 nickel,8,6,10,5,8,4,6,6,6,4}. **DAS:** 1h deep, 3,5,6h long {4,4,2 medium green}. **SAS:** 1*4h {#53, 1 medium green}.

• 3 & 5h **A/Gs**, 13.8*14.0mm typical {4,2, all medium green}.

• **Plates** 3*5, 3*9, 5*5, 5*9h {2,2,1,1}. **Flanged Plates**, with some slightly rounded corners: 3*3h & 3*7h {4,2 grey}.

• **Brackets.** A/B with 2 large-radius-ended slotted holes, 7.5 & 7.8mm long o/a {19 nickel}. **Double Bracket**, #40, only 13mm wide o/a {1 medium green}. **Double Bent Strip**, #65

Leading Particulars of MERCATOR:

Type 1, with Type 2 in square brackets.

Name MERCATOR

Country Belgium

Maker Mercator, 244 av. Van Volxem, Forest-Bruxelles. [?]

History To 1949. [possibly after 1949.]

Hole dia. 4.9 to 5.0mm, with a few 5.1mm in Strips [4.9 to 5.0mm.]

Hole pitch 13.0mm. [12.7mm.]

Sets Nos.1-8 with linking sets (ads for 3bis, 5bis, 7bis known). [Sets 4 & 6 known; they may be add-on sets. Also possibly Type 3 Sets 1-6 & A in another series (2-5 probably add-on sets)]

Material/Finish Steel. Dark green, medium red, a few parts grey. Some small parts brass, nickel or medium green. [Steel. Lightish red & green with nickel Brackets.]

Bosses Brass s/t M4, 10.0, 10.5, or 11.0 Ø. 5.0-5.1mm bore, 11mm deep. Rectangular section peening with 4 indents. The 18mm Pulley boss is tapped M3, or similar. [No bosses yet seen.]

Fixings M4 N&B. Nuts: hex, either machined brass or brassed steel, pressed; both 8.0mm A/F & 2.6mm thick. Bolts: either brass CH, 7.0mm Ø, 6.7mm u/h; or brassed steel, tapered CH 6.7mm Ø, 8.0mm u/h. [RH Bolts, and hex Nuts about 8mm A/F. No other details available.]

Axles Brass 4.9-5.0 Ø, & nicked steel, 4.9mm Ø. [Steel 4.5mm Ø.]

DP 25.4 (Mod. 1). [No Gears known.]

Motors none.

{1 medium green}. 7h **Trunnions & Flat Trunnions** {4,4}.

• **6h Bush Wheels**, #100, with .6mm thick disc, & the larger diameter #101; both with 11.0mm Ø bosses {2,2}.

• **Flanged Wheel**, #114, machined brass with integral 10.0mm boss. The tread is 16.8mm Ø & 3.7mm wide and the end face is recessed concavely between the bore and the outer diameter {4}.

• **Pulleys.** #105, **34mm Ø**, 6½mm wide, with 11.0mm boss. #106, **53½mm Ø**, 8mm wide, 10.5mm boss. **18mm Ø**, #111, 4.9mm wide, machined brass with integral 10.0mm boss tapped substandard size (M3 is very tight), {4,4,6,1}. **29.5mm Ø Loose**, #109, 5½mm wide over rim & centre belling, with 4 holes, about 2½mm, in face, and fitted with black **Rubber Rings**, 39mm o.d. & 6mm wide. It is very similar to the KWIK BUILDER part in 28/827. {6}.

• **Misc. Double Arm Crank**, #185, 10.5mm boss {2 medium red}. **Collar**, #180, brass, 10.5mm Ø & 9.9mm wide {3}.

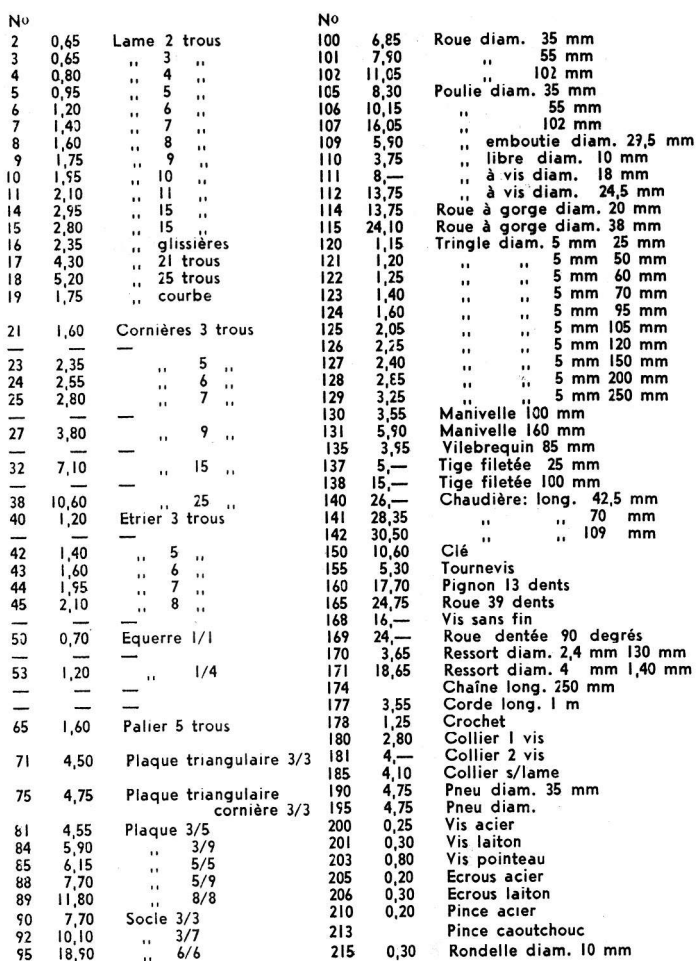
Axle Stops, #213, not illustrated, red rubber gone hard, 7¼mm o.d. & 4mm wide {8}. **Washer**, #215 {6 nicked steel}. **Spanner**, #150, nicked, 108mm long o/a, cranked 7mm at the straight end.

• **Axles.** Brass: 27,70,80,105mm long. (80mm is not listed.) Nicked steel: 60mm. {2,2,2,2,2} **Crank Handles.** Brass, 107 & 165mm long o/a, with handles offset 27mm {1,1}.

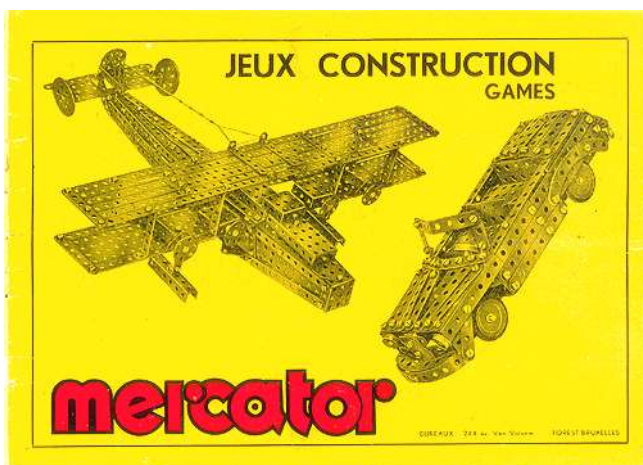
• **N&B.** Both brass & steel are listed (#200-2, 205-6); see Panel for details. {Brass: 39,45; Brassed steel: 38,38.} #203 is a steel **Grub Screw**, 4mm long.

• **Parts not in the Set.** The **Formed Strip** #14 is circular (in the photo it is on the right, around the Spring Cord #170 & 171). Don Redmond mentioned having a **Boiler**, 34mm Ø & 8h long, it would be #142. #172 & 173 (under the N&B) are not listed but look like short lengths of Spring Cord.

The SETS The manual has photos of Sets 1-8, and linking outfits 3bis, 5bis, & 7bis. Presumably there was a full range of linking sets, but no others are mentioned. The No.8 is housed in a 4-drawer wooden cabinet with just the name

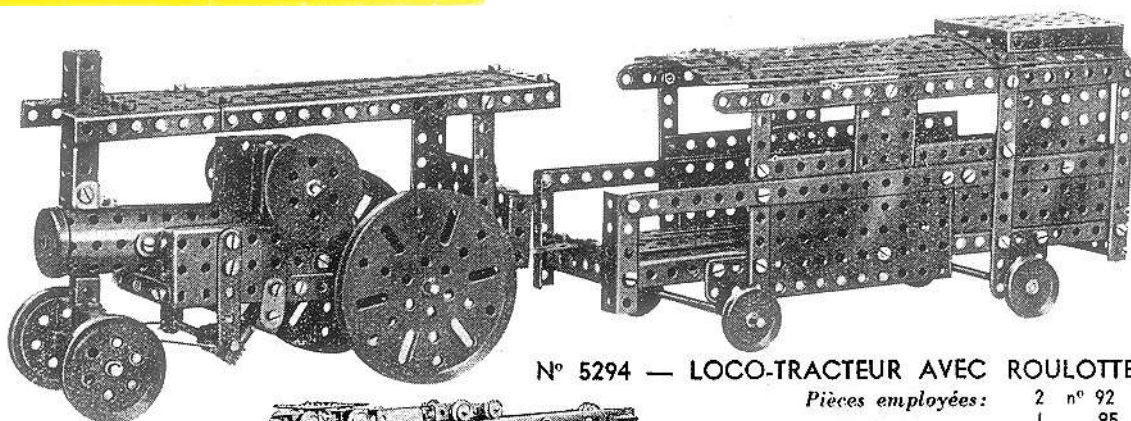


The cover, featuring 2 of the manual models is shown overleaf. Inside is a good selection of models for all the sets



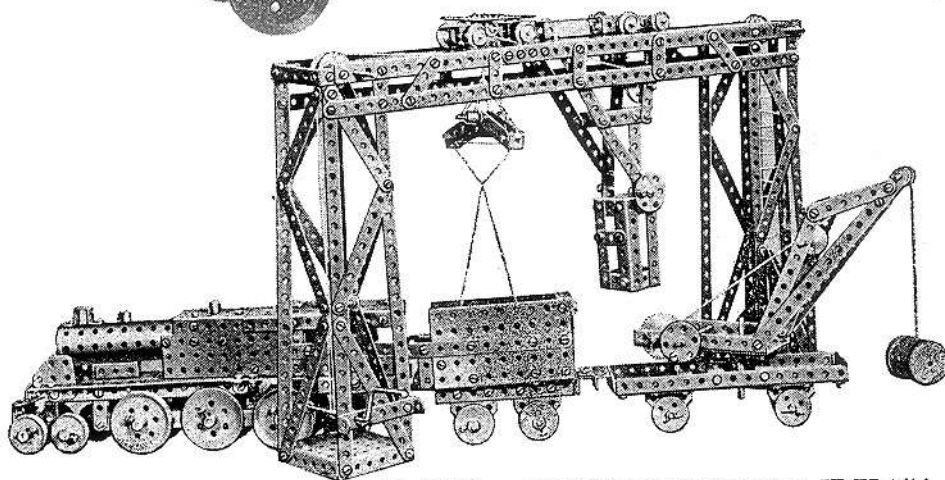
1-8, with a reasonably sized photo of each, and usually a parts list. Extra views are provided for a few of the larger ones, but even so considerable imagination would be needed to complete many of them. None of the models are at all complicated mechanically, but Gears are used in the No.6-8 models, and one Lorry has 'proper' steering, albeit Cord operated. Some models do though have better than usual lines. The Crane in MCS is a No.4 model, but with a different photo and none of the auxiliary views. Below are three of the models, actual size. The Tug & the Traction Engine are from the No.7 set, and the Crane with Train is a No.8 model. Also below one of the 5 'supermodels' that are on the back cover - a Giant Crane, '1.40m long & 63cm high' - the others are 3 Fairground Rides and another Crane.

There is nothing to indicate the manual's date but it looks

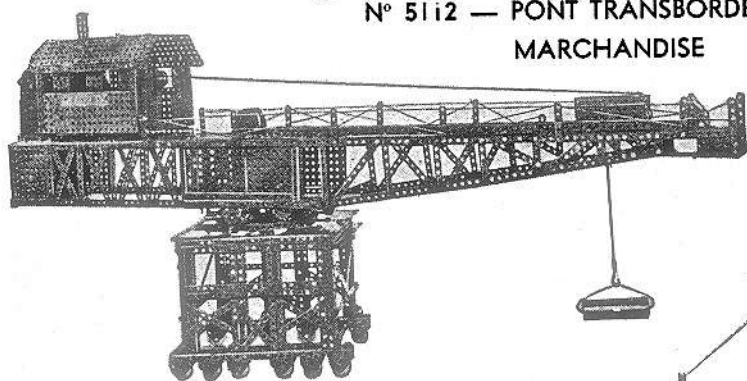


N° 5294 — LOCO-TRACTEUR AVEC ROULOTTE

Pièces employées:				2	n° 92
4	n° 2	2	n° 27	2	100
8	5	4	32	1	101
3	7	2	38	4	105
6	8	4	44	2	106
4	9	12	50	2	107
3	10	2	65	1	124
1	11	4	71	3	125
6	15	1	75	2	126
6	17	2	81	1	127
6	18	2	84	1	142
6	23	2	85	1	160
2	24	2	88	1	168
4	25	4	90	1	180
				6	210



N° 5112 — PONT TRANSBORDEUR ET TRAIN
MARCHANDISE

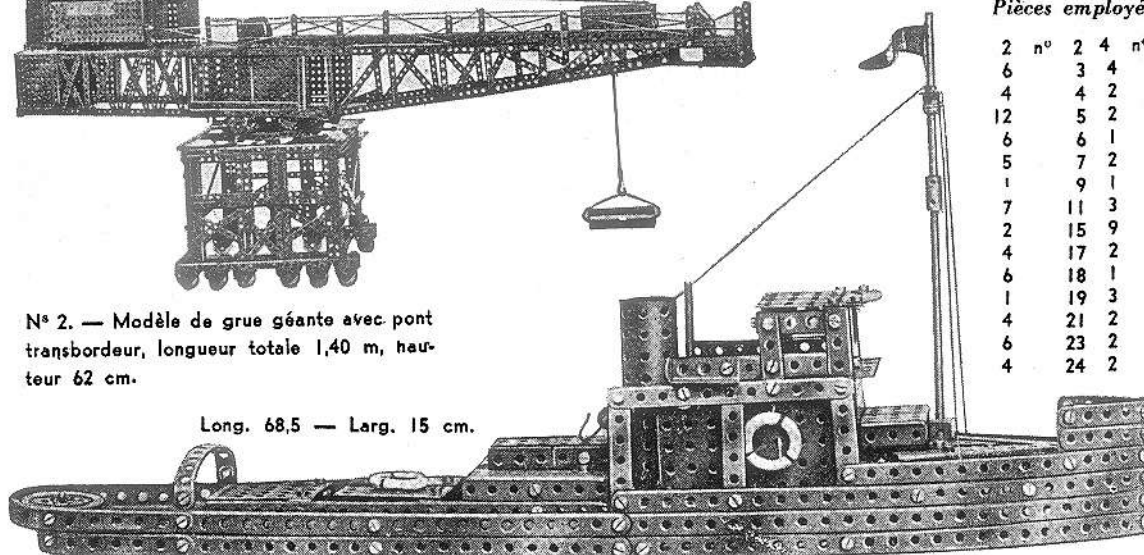


N° 2. — Modèle de grue géante avec pont
transbordeur, longueur totale 1,40 m, hau-
teur 62 cm.

Long. 68,5 — Larg. 15 cm.

N° 5284 — REMORQUEUR DE PORT

Pièces employées:				2	n° 88
2	n° 2	4	n° 25	2	92
6	3	4	27	1	95
4	4	2	32	1	101
12	5	2	38	2	102
6	6	1	40	2	120
5	7	2	43	1	125
1	9	1	44	1	126
7	11	3	45	1	127
2	15	9	50	1	142
4	17	2	53	1	178
6	18	1	65	4	180
1	19	3	71	1	181
4	21	2	81	1	185
6	23	2	84	3	190
4	24	2	85	2	210



early postwar with models of a Helicopter & the V1 Flying Bomb, and a sketch of a Lancaster bomber.

TYPE 2 From this period is a No.4 outfit. Its lid label is shown below & its open box is to the right. Underneath 2 Ebay photos of the open box of a No.6 set, with the manual cover included in the right view. Its lid label is the same as that of the No.4 and is in the same style as the KWIK BUILDER one in 28/827, but with 3 boys instead of two, and also an electrical switch has been added above the top boy's head. As can be seen the manual has an identical picture on its cover - any such manual might shed more light on Type 2, & I'd welcome details from anyone who has one.

The PARTS They can be seen in the open boxes - their hole pitch is 12.7mm and they differ in other ways from the Type 1 pieces. Only the Spanner, A/B, & 4-hole Loose Pulley look similar, and equally they are like K W parts. And again they are the only Type 2 parts that are similar to K W.

No list of parts is available so below notes on the parts in Set 4, with the quantities found in the Set in curly brackets. After that what can be seen of the No.6 parts.

- **The Basics** Holes are 4.9 to 5.0mm, and all are round except in the A/B. The metal again looks fairly thin, the .9mm of the DAS is probably typical.
- **2,3,4,5,6,7,9,11h Strips** {2,2,2,4,2,4,6,4}. In a few the hole pitch is nearer 12.8mm. **DAS:** 1*3*1 & 1*5*1h {2,4}. The parts are 13.2mm wide (despite the pitch of 12.7mm), and have large radius ends.
- **A/B** with 2 large-radius-ended slotted holes; it looks very similar to the Type 1 & K W pattern, and may be identical {6 nickel}.
- **Pulley Disc**, 39mm Ø with 6 holes at 25mm pcd, and 2, 3.8mm Ø, at about 9½mm radii {4}.
- **Circular Plate**, 103½mm Ø, with 3 rings of 12 holes each at about 37½, 62, & 87mm pcd. Also 2 holes at 12½mm radii, and one at 9mm {1}.
- **Axles**. 4.5mm Ø steel with slightly rounded sheared ends; 55 & 81½mm long {1,2}.
- **N&B**. Steel RH Bolts & hex Nuts, about 8mm A/F.
- **Spanner**. Similar to the K B part, but 50mm long o/a (the

similar Type 1 part, #151, hasn't been seen).

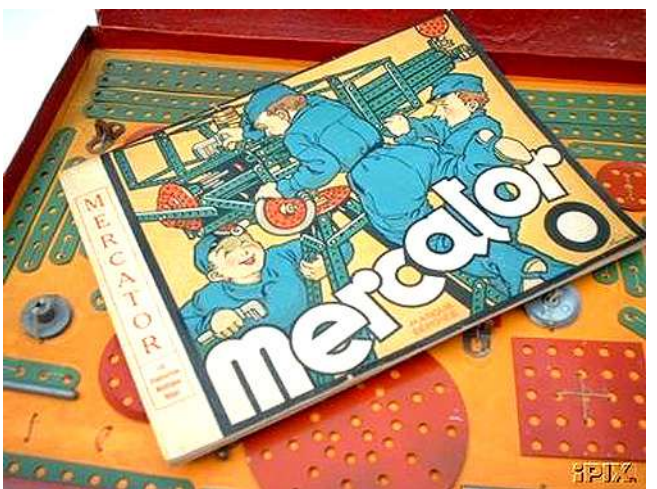
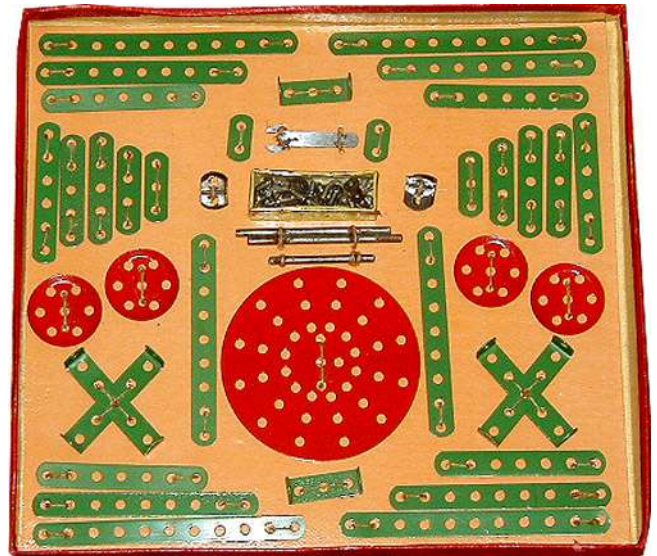
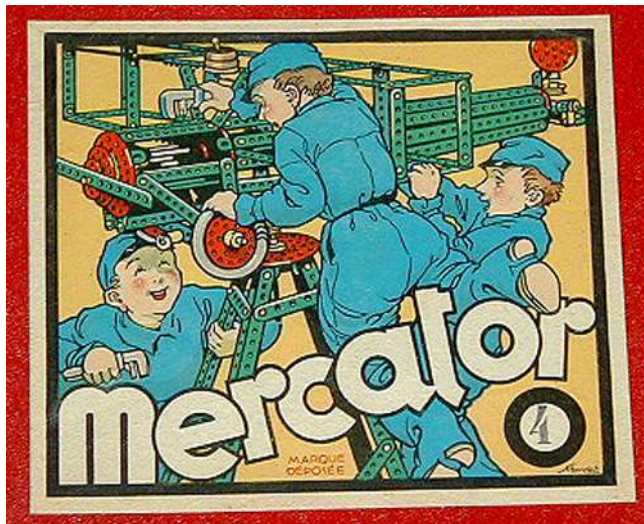
Parts in the No.6 Set The additional parts that can be seen are • 2x 15h Strips. • 5*5 & 5*11h Plates, with square corners as Type 1. • The 5h Ø Circular Plate with rings of 6 & 12 holes, and 2 extra, small centre holes like the Pulley Disc. • 4x bright Loose Pulleys like the Type 1 & K W parts. • A greyish bossed part in the bottom left corner of the box, perhaps a 2h Ø Pulley, and a similar but somewhat smaller part on the RHS. • 2 red Double Arm Cranks, one in each bottom corner. • 3 brass Collars. • A Crank Handle.

The SETS Judging from its contents the **No.4** is an add-on set. The box is red, 29¼*32¼*2¾cm and the label, already shown below left, covers most of the lid. The signature, bottom right, looks like 'X Hardez', though the first two letters are unclear. The parts are strung to the orange card with thin brown cord, and the N&B are in a small yellow box with a clear lid.

The No.6 box is also red & the lid label is about the same size as that of the No.4. It isn't clear whether it is a complete set or another add-on outfit. In another Ebay photo of the manual the printer is shown as IMPRIMERIE D'HONDT & DE GRAVE, Rue des Etangs-Noirs 83-85, Bruxelles-Ouest.

A 3rd TYPE? The evidence here is two batches of photocopied model leaflets, 'lots 1 & 2' I'll call them, both with the wording in French & Flemish. They show simple models made from a limited range of parts, and from outfits with a set structure unlike those for Types 1 & 2. The main types of part used are Strips, DAS, an A/B, a small Pulley, Axles, a Crank Handle, and an unusual 6h disc, apparently a Wheel Disc, which has the 2 smaller extra holes seen in the Type 2 Pulley Disc.

The first lot consists of 3 double sided sheets, about 21*14cm deep, showing simple unnamed models for Sets 1-



6, & A. A note on several of the pages says that Belgian MERCATOR has government approval as a teaching aid (comme moyen matériel d'enseignement). The style of the name (below) on the front page has not been seen in the earlier material. Successive pages show slightly more complicated models and are headed: models made with 'Sets 1, or A'; 'Sets 1,2, or A'; 'Sets 1,2,3, or A'; up to 'Sets 1,2,3,4,5,6 or A'. This would appear to mean that Set A was the largest set and was at least equivalent to Set 1 plus the add-on sets 2-6. None of the models have names or model numbers.

MERCATOR

p1 shows 9 very simple models for Set 1 or Set A (Tongs to Swing). The main parts are 3-9h Strips, and 3 & 5h long DAS. p2 has 5 models (Aeroplane to Chair) for Sets 1, 2, or set A, and the new parts include 11h Strips, A/Bs, & 2x 6h Wheel Discs. The subsequent pages show 4, 3, 2, 3 models (Luggage Barrow to Man; Bed to Bridge; Monoplane & the Van shown at the bottom of the next column; Table to Crane, & the Saw Bench right) for Sets 3-6. The parts in them include respectively, 2 extra Wheel Discs & Axles; 15h Strips; 2 more Wheel Discs; and the Crank Handle & 2 Pulleys in the Saw Bench. This model also has a 5*9h Plate, and similar black parts, but with 5*5 & 5*11h corner holes, are used in 2 of the No.3 models. There is no indication that these parts were not in the appropriate sets. The 5*9h would need a slot in it for the Disc. None of the models are at all similar to the small ones in the Type 1 manual.

The second lot is 2 sides, about 16*21cm deep, showing models N.4-6, Table to Chaise Royale, and N.10-12, Escarpolette to Trapèze (Swing to Seesaw). Though the MERCATOR name is not on either of these sheets, similar parts to those in the Set A models above are used (except the Plates, but none of the Lot 2 models need any), and 3 of the models are in the first lot, with identical illustrations. They include the Barrow right. Each model has a name, and afterwards 'Se construit à la boîte' (Made with set) followed by several numbers. Examples are 'n. 4, 41 (*) 1, 3' and 'n. 9, 91 (*) 3, 034, 036'. Other numbers included for the other models are 2, 5, 6, 8, 41, 81, 82. None of the numbers given for the 3 models common to those in the first lot match the set numbers in the 1-6 series needed to make them. I wondered if the Lot 2 numbers were the PNs of packs of different types of part, but for several of the models this was clearly not the case.

MERCATOR History Based on the general appearance of the lid labels and manual covers it will be assumed that Type 2 came after Type 1. Another pointer that may be consistent with this is the width of the Strips. It was about 13mm for both the 12.7 & the 13.0mm hole pitch parts. It would seem most likely that if the 12.7mm spacing had come first the Strips would have been 1/2" wide.

The only firm date known is from a magazine article in which it is said that after taking out a patent for flexible toy railway track in 1949 the firm that made MERCATOR went bankrupt a few months later. If that meant the end of Type 2 at that time the firm had been very busy since the end of the war in launching (or conceivably relaunching) the Type 1 range, and then altering virtually all the parts for the Type 2 sets. And why would that have been done? The Type 1 parts are perfectly good and so the only obvious motive would be to change to 1/2" pitch, for compatibility with MECCANO as it reappeared on the market, and/or to make it incompatible with the 13mm pitch TECNIC (the other major Belgian system after the war). I suppose that if this change was made the parts would have had to be fairly radically redesigned to avoid confusion between similar parts with

slightly different pitches (12.7 & 13.0mm).

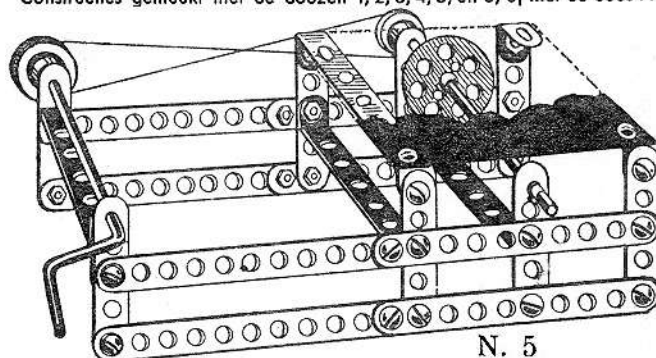
One can imagine a possible alternative. Type 1 ended when the original firm went bankrupt, and then the system was redesigned and relaunched by another company who had bought the MERCATOR name. The similarity of the unusual Type 2 lid label with KWIK BUILDER brings to mind the possibility that its (unknown) manufacturer may have been that company. But apart from the label the only real similarities between the two are the nickel A/B and Loose Pulley.

One other thing, no account has been taken so far of the 12.7mm hole pitch given in MCS for what seem to be Type 1 parts. On the grounds of simplicity one is tempted to hope that this was a mistake. But could those 6-figure PNs in MCS denote a new series of parts with 12.7mm pitch? Please measure your MERCATOR parts carefully.

No theories come to mind for the Type 3? sets, unless they were special outfits used in schools. The style of the name is quite different to those used in Types 1 & 2. The 2 small holes in the Wheel Disc are like those in the Type 2 Pulley Disc, and obviously the latter could be a press formed version of the former.

MERCATOR

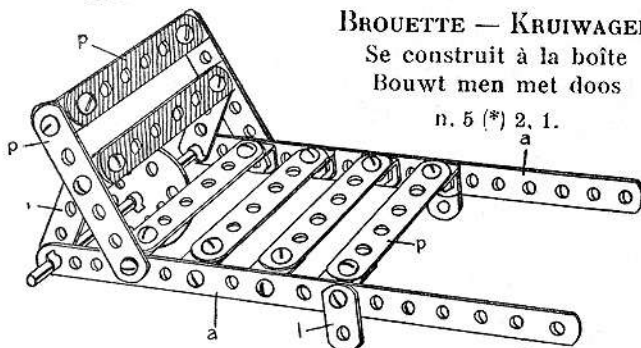
Modèles construits avec boîtes 1, 2, 3, 4, 5, et 6, ou avec boîte A
Construities gemaakt met de doozen 1, 2, 3, 4, 5, en 6, of met de doos A



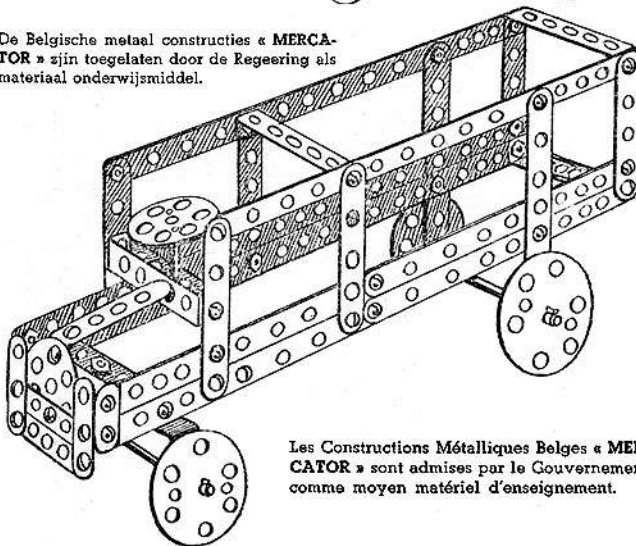
BROUETTE — KRUIWAGEN

Se construit à la boîte
Bouwt men met doos

n. 5 (*) 2, 1.



De Belgische metaal constructies « MERCA-
TOR » zijn toegelaten door de Regeering als
materiaal onderwijsmiddel.



Les Constructions Métalliques Belges « MER-
CATOR » sont admises par le Gouvernement
comme moyen matériel d'enseignement.

EDITORIAL First, please note my new email address above. The OSN web site has changed too – it is now www.osnl.co.uk & includes all the colour illustrations from the B&W issues. (If you find that sometimes a picture does not load, 'refreshing' the page always seems to do the trick.) The old site will continue for a week or two but it will not be possible to update it.

The STRUCTO article in this issue turned out to be longer than I'd anticipated, and as a result several pieces have had to be held over until OSN 31. Apologies to contributors thus affected, but it's encouraging to me that after over 900 pages of Other Systems material there is still plenty in the pipeline. This happy state is of course mainly due to all who have sent items, large & small, so let me take this opportunity to say thank you to everyone, and to hope that you will be able to keep up the good work.

On the newsletter format, a few of the readers who responded favoured the same margins on all pages, but many more wanted to keep the present arrangement. So be it, and in fact the question may not be an issue in future because I've found, in printing this issue, that the paper I use has been improved, and will now print satisfactorily on both sides. I've tried doing some sample double-sided pages and all seems well, so the next issue may be double-sided – 'may' because unforeseen problems are always possible. In any case the pages will still be loose sheets I'm afraid. I shall also print single-sided pages for my own use (to file with my MCS sheets) and I can easily print more that way if anyone prefers them like that – but if so please let me know by mid-August for the next issue.

Shorter NOTES, with thanks to all contributors.

1. Don Redmond wrote of some of his 13mm pitch **MERCATOR** parts, see 29/848. • The boss of the **18mm Pulley** is d/t M3.5 or similar (but the pitch is not .6mm). • **Peening** is smooth & round with no indents. • The **Gears** have 13 & 39 teeth as listed; the Gear Wheel is 1½" Ø & the face width of the Pinion is 10mm. • The **6*6h 4-flanged Plate #95** is red. • The **Boiler #142** is green and is rolled from a heavy 8*8h plate; the **Boiler End** has a 7mm wide flange and an internal boss ie when the part is fitted on the Boiler body it is on the inside. • Other parts include 5, 6, & 7h **A/Gs**, and 1*4*1h **DAS**.

MERCATOR: S6

[30/876A]

2. News of two hitherto unknown Canadian **CONSTRUCTO** sets (basically MERKUR parts repackaged by Paramount Industries, see 20/565) from Don Redmond. The first is **Starter Set No.0**, a single card with a photo of a boy pointing to 2 small models in the top block, and the parts underneath it held by an adhered plastic sheet. 9 models are shown in B&W on the reverse together with the Paramount address and 'To create more advanced projects...Ask for Constructo Sets Nos.1,2,3,4,5,6,V-8,V-12'. The main parts are Strips up to 10h, a 5*5h Flanged Plate, 2 Flat Trunnions, & 2x 2h Ø Pulleys.

The second item is a **Motor Kit** with similar packaging but the boy is looking at a Lorry & Gantry Crane (see MCS MERKUR (D) 5). The centre piece is a 'jet motor', the small MERKUR motor/gearbox/driving axle unit. Its base is sheet metal 50*26mm with bent-up sides, and the motor, 25mm

long, flattened top & bottom, drives 3 stages of reduction starting with the 10t motor pinion. The final shaft is a standard 85mm Axle which carries the Road Wheels in some models. Some of the parts are missing but 2x 3cm Gears, a Pinion, and a large & a small green Pulley remain. There is also a space that may have housed a Worm. On the reverse are 2 bilingual paragraphs about 'The Constructo JET electric motor', and a list of the sets 1-V.12 again.

CONSTRUCTO [1]: S1

[30/876A]

3. The use of 7-32 N&B by Meccano in America in the 1920s was noted in 29/846 and now Kendrick Bisset has identified the **new MECCANO thread** (in a new Erector Ferris Wheel set packed in a tin box) as the very same 7-32.

MECCANO: S1

[30/876A]

4 From Kendrick Bisset. 'In Toronto Jim Bobyn showed me a **US MECCANO #6** outfit circa 1920, and examination of the A/Bs indicated STRUCTO parts. It later occurred to me that Structo sold their construction outfit line to Meccano in, it is believed, December 1919. On checking my collection I found an incomplete 1920 #5x outfit with all the 5 & 11h Strips, and all the A/B, of STRUCTO pattern. The other Strips are normal MECCANO. So it would appear that US Meccano used certain STRUCTO parts in at least some of their sets circa 1920. All those seen are tin plated.' [When new would they would have been shiny and a reasonable match for the nickel used by Meccano at the time.]

U.S. MECCANO: S2

[30/876A]

5. From Kendrick Bisset. 'A **MASTER BUILDER No.4** set recently obtained, with not too many parts missing, has little new to add to the information in OSN 16/450, except for the Pinion & Sprocket Wheel. The Pinion is listed as 1/2", but it is 1/2" diameter at the root with a pitch diameter closer to 9/16". It has 18 teeth and a 3/16" face. The Sprocket Wheel is listed as 1", but is actually 3/4", with 12 teeth. All of the strips have large radius ends.' [Using the above the DP of the Pinion would be 32.]

MASTER BUILDER: S2

[30/876A]

6. On the numbering of the **Gilbert MECCANO** sets, see p890, it was noted by Richard Symonds in 19/546 that the 110 & 115 sets became Nos.10 & 15 in 1932, and now Jacques Pitrat has come across evidence that Gilbert certainly considered selling the larger sets under new numbers. Jacques wrote that a mint 1932 #15 Gilbert Meccano set, including Meccano Briks, was for sale on eBay and in the description of the set there was the following sentence: 'A label placed inside the cover of the catalog notices that set No.110 is the same as No.10; set No.115 as No.15; set No.125 as No.25; set #150 as No.50.' This does not of course prove that such sets were ever actually sold.

Another point of interest. Among Kendrick Bisset's notes about his c1933 No.10 on his web site (www.usmeccano.com) is: There is a rubber stamped '10' in the top right hand corner of the lid. On checking I found '10' on my box at the same place inside the lid, just in the corner.

GILBERT MECCANO: S1

[30/876A]

More MERCATOR Types 1 & 2 of this Belgian system, and a possible Type 3, were identified in 29/848. Now two Ebay lots of parts to hand, plus a No.1 set kindly lent to me by Richard Gilbert, all with their manuals, shed a little more light on the MERCATOR story.

The First Lot & the No.1 Set (Type 1e)

THE LOT came from France and the parts are probably nearly all of a large set, most likely a No.7. They are broadly similar to Type 1, with the same 13mm pitch holes, but their PN's & the style of the manual are different, and it will be argued that on balance it seems likely that this Lot dates from before Type 1. For ease of reference I'll call it Type 1e (where e = early). The manual covers provided the material for the MCS entry.

One of the Manual models, a Bombe Volant V1, indicates post-WW2 and it is said in the Manual's introduction that the models are an extract from 'notre catalogue général de modèles', and that this was necessitated by a continuing shortage of paper. So was there an earlier full manual? The Type 1 version in OSN 29 can probably be ruled out because some parts listed in it are not in Type 1e. (It was suggested in OSN 29 that because the MCS/Type 1e PN's are (mostly) 6-figure numbers, against the 3-figure of Type 1, this could point to Type 1e being later than Type 1. But as will appear the 6 figures are very likely the factory numbers of the parts, perhaps used before the 3-figures PN's were established.) It is also unlikely that there would have been more paper at any earlier time after the war, so if there was an earlier larger manual it must have been prewar (MERCATOR's start date isn't known). But perhaps 'notre catalogue' simply referred to a manual then prepared but unpublished, and possibly it subsequently became the Type 1 edition.

The Parts as Listed. The Type 1e parts are listed in the Manual together with their material, colour, & price. 61 of the parts are on C3 (as in MCS), but there are also some on C2, listed under 3 headings: Pièces spéciales (10); Pièces combinées (12); & Outils de montage (Tools) (2). It seems that the C3 parts are those made in one piece, a Strip for example, or a Pulley with Boss machined from the solid. The Spéciales are again one piece parts of various sorts but their PN's are 4-figure followed by /a or /b – so perhaps they were parts already produced for other reasons (some of them are basic parts such as the A/B & Flat Trunnion, and are included in the No.1 Set). The Pièces combinées are parts made up from more than one component, mostly those with a peened-on boss, and 2 PN's are shown for each, no doubt the factory refs of the different components. For example a Pulley is '2 x 131203/278051' where 2 pulley discs and a boss would be needed. Also included are the 3 sizes of Boiler with Ends (the Ends have a boss), and the 3h long version PN is: 2 x 278051/2 x 131225/121203; the 5 & 8h long ones are the same except that the last figure becomes 5 & 8 respectively.

The Type 1e parts include all but the following 11 of the Part 1 parts in OSN 29 List: #14 or 15, a 15h Strip; #19 Curved Strip; #110, 10mm Loose Pulley; #128, 200mm Axle; #168 Worm; #169 Contrate; #174 Chain; #196 Tyre; #200, steel Bolt; #205, steel Nut; #213 rubber Axle Stop.

Type 1e parts not in Type 1 are a Loaded Hook and a Rubber Wheel.

Some of the Type 1 parts differed slightly from their Type 1e counterparts, as follows: #53 1*4h A/B was 1*3h in Type 1e; #111 18mm Pulley was 20mm; the 5.0mm Axle diameter was 4.9; #138 100mm Screwed Rod was 80mm; #170 130mm Spring was 30mm, & #171 Spring, 4mm Ø & 1,40mm [sic] long was 3mm Ø & 400mm long (some of the lengths are doubtless in error); #215 10mm Washer was 12mm Ø.

The Actual Parts. There follows points of interest about parts not described before and about the Type 1e parts which differ from the Type 1 descriptions in OSN 29, 30/876A, &

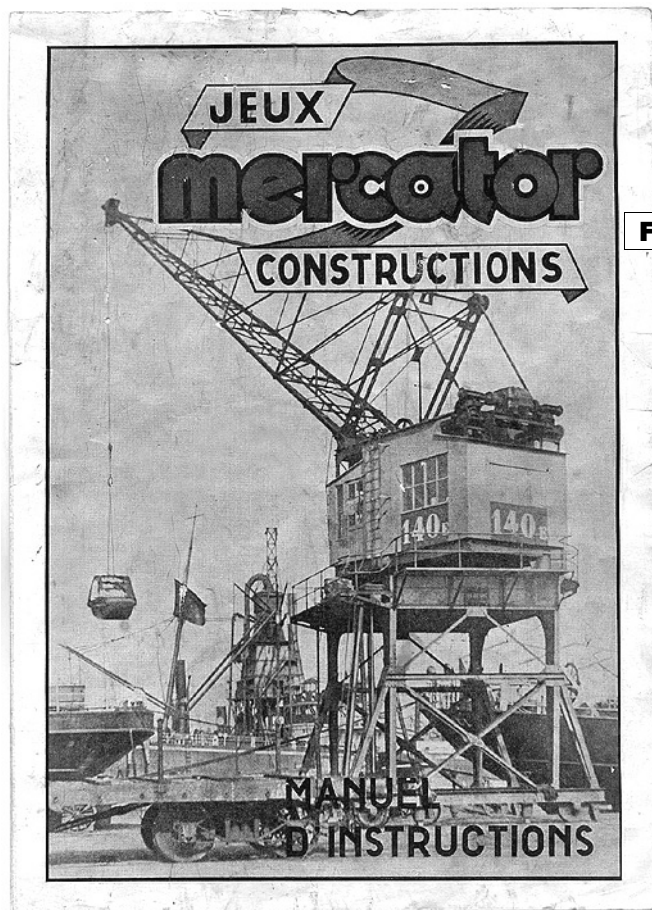


Fig.1

33/972. (Type 1 PN's will be used.) • Except where stated the **colours** are as Type 1. Green parts are a light to medium shade. • With the exceptions noted **bosses** are double-tapped with an unusual thread. The **Set Screw** shank is 3.8mm Ø, and the pitch of the thread is 26tpi (almost 1mm). So this is no doubt the Belgian No.20 thread (see 8/202). Both RH & CH Set Screws were found, both nicked steel with heads 7-7½mm Ø, and 6½mm u/h. #50 **A/B**. Those found are typically 13*14¼mm with both slots 7.9mm long. • #95 **6*6h Flanged Plate** is grey. • The discs used for the **Bossed Discs** #100,101,102 (#100 would normally be called a Bush Wheel) are formed for use as the pulley discs for **Pulleys** #105,106,107. Their rims are 6, 8, 8½mm wide. • #109 **Loose Pulley** is dull plated as Type 1 and generally similar but has no face holes because the discs are tabbed rather than riveted together. As before it is fitted with a black Rubber Ring. • #111 **Pulley** is 18mm Ø as in Type 1. • #114 **Flanged Wheel**. #114 & 115 are both described in Type 1e as Roue, and in Type 1 as Roue à gorge, 20 & 38mm Ø respectively in both Types. I thought roue à gorge meant pulley but it is clear from the manual models that #114 is a Flanged Wheel. Those found are, with small changes to the dimensions, as in OSN 29. Perhaps #115 is a larger version. • **Axles** are nicked steel, 4.85mm Ø, and included two 80mm long. • #130,131 nicked steel **Crank Handles**, 100 & 145mm long o/a. They are 5.00mm Ø, too large to pass through some of the holes. • #142 **Boiler**, 8h long, is made from a rolled 8*8h plate and is 33¾mm o.d. when squeezed slightly to give a butt joint; the 36mm o.d. End is then a push fit on it. • #150 **Spanner**. The OSN 29 description was wrong; it was, like this one, 98mm long o/a, with the jaws angled at both the flat & cranked ends. • The **Pinion** #160 and **Gear** #165 are single-tapped M4. • #180 **Collar**, 10.0mm Ø and 10mm wide, double-tapped. • #181 **Coupling**, 10.0mm Ø and 20.2mm long, double-tapped at about 11mm centres. • #185 **Double-Arm Crank**. A red 3h 'strip' with a centre boss. • **N&B Bolt** brass as OSN 29; the hexagon **Nut** plain pressed steel, 8.1mm A/F and 2.2mm thick. • #203 **Grub Screw**, M4, pointed end, 4.2mm

long. • **Small part boxes**
The Lot included 2 identical to those in the OSN 29 No.5 set.

Type 1e Parts not seen. • #53 A/B. • #89 Perf. Plate 8*8h. • #115 Flanged? Wheel. • #124, 128,129 Axles, 95,200, 250mm. • #135 Crankshaft. • #137 25mm Screwed Rod, described as half threaded in Type 1. • #138



Fig.2

100mm Screwed Rod. • #140,141, 3 and 5h long Boiler. • #155 Screwdriver, but in the Manual it is said to be nickel with a green handle. • #170 & 171, Springs. • #177 Cord, 1m. • #178 Hook & Loaded Hook. • Rubber Wheel (Type 1e: #390001). There were though 4 Road Wheels among the parts. One is shown in Fig.2 and is 49mm o.d. It's unlikely that the tyre could be removed. The bore is 5.2mm. This may well not be original but no other foreign parts were in the Lot.

Type 1 parts not seen for future reference (apart from certain lengths of Strip, Axle, etc): • #19 Curved Strip. • #53 A/B. • #110 10mm Loose Pulley. • #115 Flanged? Wheel. • #155 Screwdriver. • #168 Worm. • #169 Contrate. • #170 & 171, Springs. • #174 Chain. • #177 Cord, 1m. • #178 Hook. • #195 Tyre.

The Manual It is in French and consists of 7 loose sheets 190*267mm, inside covers 195*274mm. The sheets, and a vee formed inside the covers at the fold, are punched, and are held together by a short length of thin string. The front cover, Fig.1, is in the style of the Type 1 lid in OSN 29 but in B&W and with a different industrial scene. Inside are the lists of parts already mentioned, and an introduction on C2 mentions Sets 1-8, and linking 'a' sets; also extra parts and boxes of 50 N&B sold separately. On the back is a halftone of a Crane (as in MCS) with brief explanations of 9 constructional details. The only name given, of the printer probably, in small type at the bottom of C4, is M. Weissenbruch S.A., Bruxelles.

The inside pages have models for Sets 1-7, with one page, printed double-sided, for each set. There is just one reasonably sized halftone for each model, and all are in the OSN 29 manual with the same name and in all but one or two cases the same model number. One of the No.7 model is a No.8 in the OSN 29 manual There is no indication if there was ever a No.8 page but there is possibly one in the Ebay set mentioned later.

There are 13,7,7,8,7,6,6 models for Sets 1-7. The first & last models for each set, with my English descriptions where appropriate, are: **1:** 5137 AVION MONOMOTEUR, WAGON GRUE (Mobile Crane); **2:** 5146 CARROUSEL, 5152 CAMION (Lorry); **3:** 5144 LOCOMOTIVE, 5169 TRAINÉAU (Sledge drawn by 2 dogs); **4:** 5168 HYDRAVION (Flying Boat), 5158 GRANDE GRUE ROUTIÈRE (Large Mobile Crane, the model on C4); **5:** 5166 TRACTEUR ET REMORQUE À BOIS (Tractor and Logging Trailer), 5164 ASCENSEUR DE MINES; **6:** 5173 AUTOBUS URBAIN, 5171 DOCK FLOTTANT POUR L'ENFONCEMENT DES PALPLANCHES (Floating Crane used to drive wooden piles); **7:** 5.187 AUTORAIL TRIPLE (3-Unit Railcar), 5.191

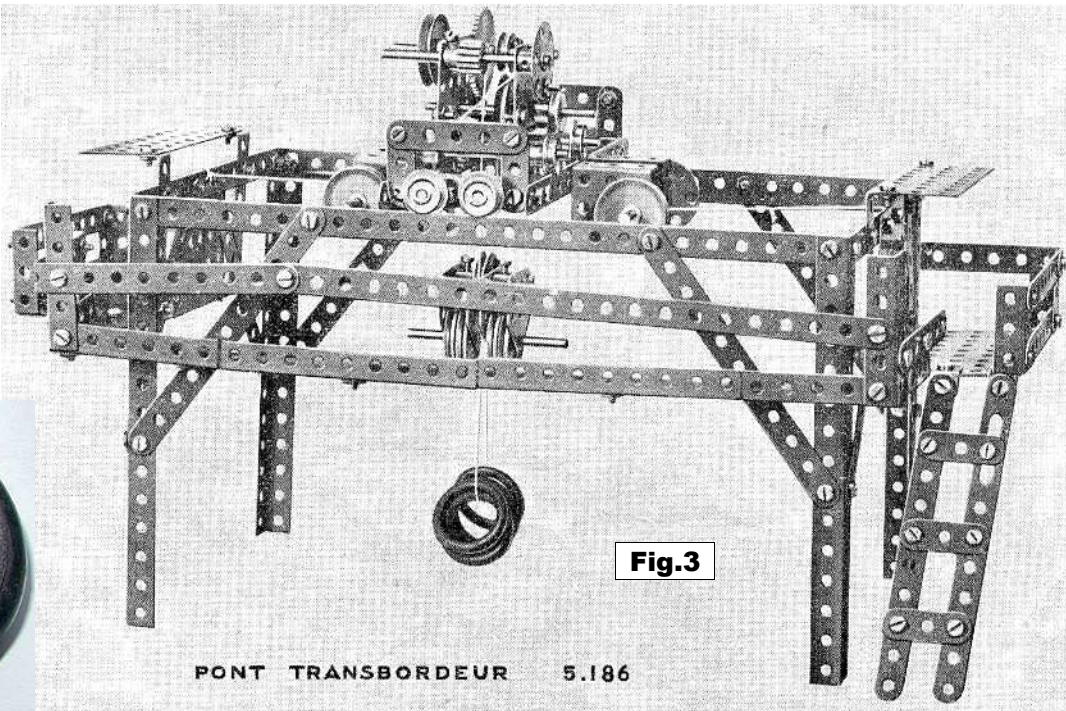


Fig.3

TRAIN DECAUVILLE (Narrow gauge Loco & 2 tipping Wagons).

One of the more 'mechanical' No.7 models is shown above. The crab runs on the Flanged Wheels #114.

Snippet: AN EBAY SET The parts are in a dark brown 4-drawer wooden cabinet similar to the No.8 one shown in the OSN 29 manual, though with 'old-fashioned', hinged, 'outline' handles. At 42*31*16cm high it is about the same size and has a hinged lid with a label on the inside like the one on the OSN 29 No.5 lid. The manual with the Set is like the Type 1e one described above except that it has 8 loose sheets inside. The parts of the first 7 that are visible match those for Sets 1-7 above but not enough of the 8th can be seen to be sure it is the No.8 sheet.

THE No.1 SET Its box is red, 31*20¾*2½cm, with a portrait label identical to the Type 1 shown in 29/848, and pasted along the length of the lid. There are 'MERCATOR' labels on the lid's end aprons with a '1' sticker beside one of them. The parts are strung, mostly individually, to a red card with thin white cord. The N&B etc are in one of the red boxes as before, also strung to the card. The Set is complete except that 4 parts, almost certainly Pulleys #109 (see 29/849), have been removed. From the size of the empty space they were not fitted with Rubber Rings.

With the few exceptions noted in the set contents listed below the remaining parts match those in the Type 1e Lot. The main point of interest is that though the N&B can only be seen through the clear panel in the top of the small parts box, they look to have the same Belgian No.20 thread that was used for most of the bosses in the Type 1e Lot, and for those in these parts.

The **Set Contents:** • 4,2,2,8,6,4x 11,7,6,5,3,2h **Strips.** • 2x 1*3*1h **DAS.** • 8x **A/B.** • 2 **Flat Trunnions.** • **Flanged Plates:** 1x 3*7h red; 2x 3*3h, grey. • 2 **Bush Wheels** with 10.5mm Ø bosses. • The **Set Screw** is the nicked steel CH type with the Belgian No.20 thread. • **Axles:** 2x 70mm, and 2x about 25mm which can be seen in the small parts box. • 1 **Crank Handle**, 4.8mm Ø and 100mm long o/a. • Some **Spring Clips** can be seen in the small parts box. • The **N&B** are nicked steel. The **Bolt** looks like the Set Screw, with the same thread. The **Nut** is hexagonal and about 8mm A/F. • 1 **Spanner**, strung on top of the 3*7h Flanged Plate. • 1 **Screwdriver**, 119mm long o/a with a 2.8mm Ø shaft and a 70mm tapered wooden handle, both painted green. • Judging by the stringing holes the missing **Pulleys** have 4 face holes rather than tabs.

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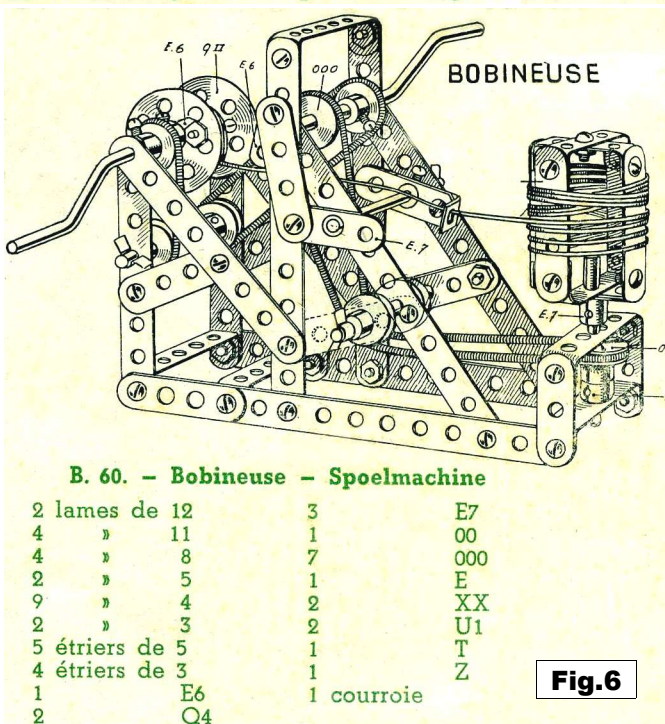
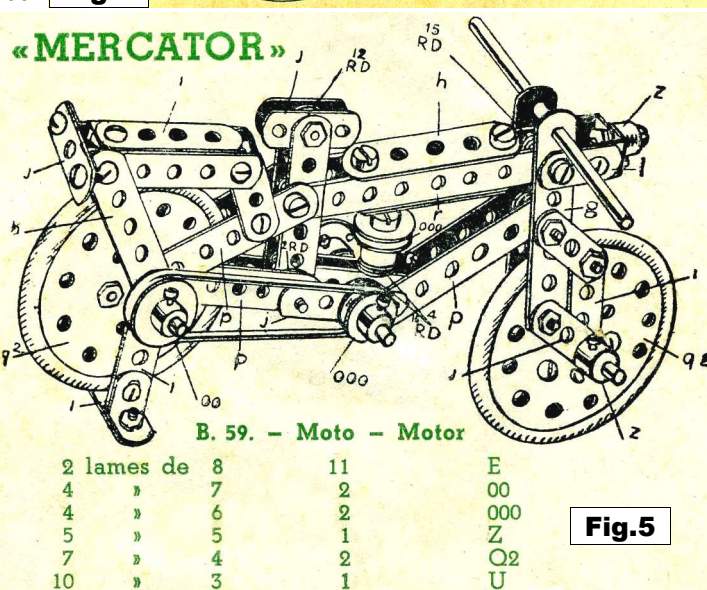
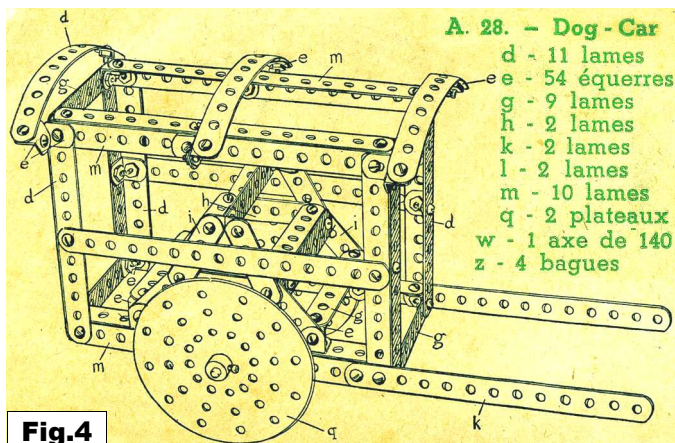
The **Manual** has the covers already described but with just the Sheet with the No.1 models inside. The Pulleys in the models are shown with 4 face holes, and without Rubber Rings.

The Second Lot (Type 2/12.4)

This lot from the UK Ebay consisted of a manual with the Type 2 cover shown in 29/851, and some parts which included all the main pieces in the 2 sets in OSN 29 except the Loose Pulley & the large Circular Plate. However the **pitch of the holes** in the Strip parts is 12.4 mm against 12.7mm in the OSN 29 No.4.

The Parts All the different types in the lot are noted below with points of interest and any noticeable differences between the 12.4 & 12.7mm pitch parts. Most of the parts can be seen in the models right (Figs.4-6). • **The green parts** are a light shade. • **Strips** 2-11h as before plus matching 15h, and some 13h which are wider (15mm), thinner (.55 against .85mm), have nearly fully-radiused ends, and are a darker green. If not MERCATOR what other system has 5mm holes at 12.4mm pitch? • **DAS** 3 & 5h long and nickelled instead of painted. • **Perf. Plates** The holes in both the 5*5 & 5*11h are at 12.5mm pitch. • **A/B** The overall dimensions vary from 14*14 to 15*15mm with all slots 6.9mm. • **Pulleys.** They are cast zinc, 25 & 18mm o.d., 5 & 6mm wide, with 10 & 9.6mm Ø integral double-tapped bosses. The **Set Screw** is blackened steel with a 5.6mm Ø, 6mm u/h round head. The thread is perhaps the 3mm x 40tpi Belgian standard No.18 (see 8/203) - 1/8" BSW will fit if the shank diameter is reduced a little. • **Pulley Discs** The 5h Ø Plate of OSN 29 is actually a 64mm Ø Pulley Disc with, as also for the 39mm one, holes at 12.5mm pitch. The small holes in both are 4.0mm Ø at 18.5mm centres. • **Double-Arm Cranks** The 2 types have their holes at 25 and 18mm centres, and the smaller one can be bolted across the small holes in the circular parts. Both are painted red included the 10mm Ø brass bosses, the latter tapped as the Pulleys. • **Axle** 4.92mm Ø, 80mm long, nickelled, and matching **Crank Handle**, 166mm o/a with a 110mm shaft, and 44mm handle offset 25mm. • **N&B** Only one steel pressed Nut was found, 8.0mm A/F & 2mm thick. It's thread may be a slightly damaged 5/32" BSW - it runs down a MECCANO Bolt until the last thread. • **Washers** 3 were found, all steel, but one brass plated, and all 11.8mm Ø by .6mm thick. • **Spanner** 50mm long o/a. • **Spring Clip** 6mm wide with 8mm wings, and made of dull plated mild steel, so no grip on an Axle.

The Manual It should have 24 pages 204*268mm including covers (with pages numbered 1-22 from C2 to C3, and printed in black with green text,) but the centre pages 10-13 are missing. The front cover is identical to the one in OSN 29: it is printed landscape but the spine is along the top edge and the inner pages are in portrait format. All the text is in French & Flemish except the names of the parts and the words on the front cover: MERCATOR Les Constructions Métalliques Belges || MARQUE DÉPOSÉE. p1 (C2) has an introduction which includes details of the sets in the system and they will be discussed later. At the bottom of this page is 'MERCATOR' made of Strips as in Type 3 (29/852) with 'L'AJUSTEUR' (= the fitter) in similar style under it. There is more about MERCATOR on p4, notably: the name of the company, Mercator S.P.R.L.; that MERCATOR isn't compatible with any other similar toy; and that the parts are enamelled, the axles are nickelled and the N&B 'cadmiées'. There is a further note on p17 that MERCATOR is also sold under the name MECANIC (not to be confused with other toys of similar name, it says). [There is an MCS entry for this MECANIC with a No.0 manual cover showing a typical Mercator boy flying astride a Seaplane which is an 'A' model in this manual. The holes are given in MCS as 5mm at 12.4mm pitch, and the colour as polished steel.] The back cover is blank except for 'Ets D. BRANCKAERT, Rue de la



Buanderie, 28-30, Bruxelles. Tél. 11.62.69', in small type, the printer no doubt.

The models are as follows, using the French names. **Sets 1,2,3 or A:** 12 models on p2 from the first of 7 Signaux de chemin de fer, to 5. Berceau (Cot). All these are among those

on the 6 pages of Type 3? models in OSN 29. **Set 0:** 22 models from 0.6 Pantin (Puppet) on p3 to 0.27 Trapèze équilibriste (a wide See-saw with a bar at each end) on p8, plus 0.30 Patinette (Scooter) among the 'A' models on p9. **Set A:** 11 models plus those on the missing pages, from A.28 Dog-Car [sic] on p9 to A.52 Grue No.3 on p18. **Set B:** 8 models from B.53 Tourniquet (Turnstile) to B.60 Bobineuse (Spool Winder). There is also a **D model**, D.61 Eglise on p22 (IBC).

There is a one line drawing for each model, quite large for some, plus a parts list for most of them. The parts may be listed under their names or by a code letter, sometimes the initial letter of the name. The method isn't consistent and can be fairly confusing. The models in Figs.4-6 are shown full-size apart from the Dog-Car at 75%. The latter, an A model, is the only one in the manual in which the Circular Plate is used (the background colour is due to discolouration of the paper). The 64mm Pulley Disc is used in the Motorcycle and one other B model. The Tyres are not used elsewhere, nor are they referred to. The Winder is the most complicated 'mechanical' model.

Some parts are used in the models that have not been noted so far, as follows: 8,10,12,13,14,16h Strips; a Wire & a Loaded Hook; a Driving Band that looks like spring cord; and possibly a small Roller or Loose Pulley.

The Sets The introduction in the Manual has a paragraph about the sets available and it says that there are 13 in all, Sets 1-6 described as boîtes secondaires / kleine dozen, and Sets 0, A-F (the 0 is sometimes written as the letter O). Then it is said of these latter sets that each, starting from 0, can be converted to the next larger set by adding a Set 0, and thus if a Set 0 is added to a Set B, it becomes a Set C. That sounds clear enough but as Jacques Pitrat pointed out when I checked with him that I had understood the French correctly, it seems

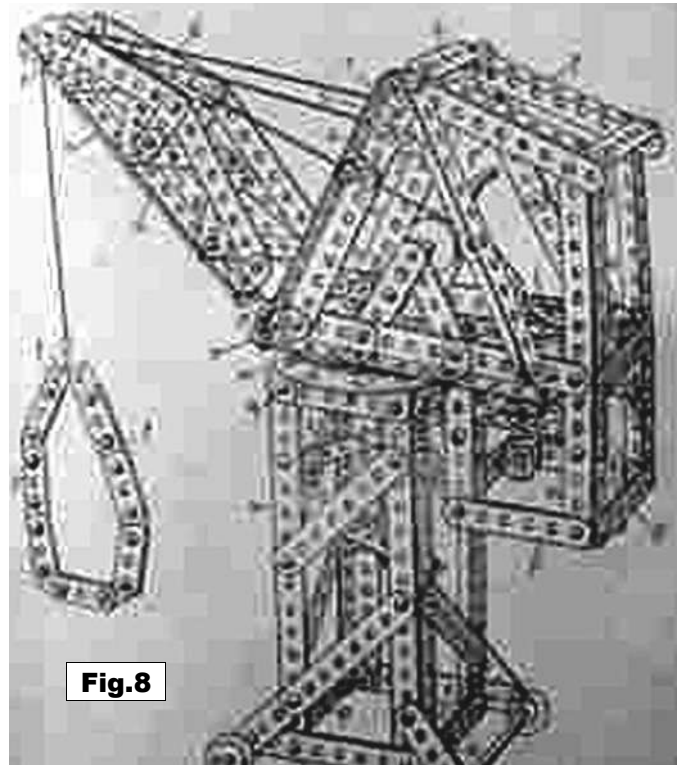
Fig.7



to mean that a Set F would simply consist of 7 of the Set 0. That sounds odd but if correct it would mean that to make the models in the present manual a Set 0 would need to contain for instance a Circular Plate (to give 2 for the Set A Dog-Car), 2x 64mm Pulley Discs (to give 4 for the Set B Motorcycle), and 2x 25mm Pulleys (to give 4 for a Set A Travelling Crane). A unique marketing idea, or did the writer of the Manual get it wrong? One possibility that has been suggested is that the Sets 1-6 were the 6 linking outfits needed to take a Set 0 to a Set F. In that case Sets 0 & 1 would still have to have, between them, the 2 Circular Plates for the Dog-Car - still unusual to have this part in small sets but more credible than Set 0 as the universal linking outfit.

Snippet: An Ebay Set, again from the UK. The lid and manual cover are as might be expected (see 29/851) but there appears to be no Set Number on the lid. Points of interest in the box (Fig.7) are the 10h Strips, the 2 sizes of Pulley top right, and the 2-colour Cord. The N&B are in a box top left with 2 A/Bs to its right, and an Axle, & a second Spanner, below it, under the cellophane. 5 pages from the manual were shown, 3 with models from the present manual, though at least one with a different page number. The other pages have a reasonable Chair-O-Planes model of about 12" diameter, and the Crane below, with the Wire Hook just visible. Either model would need a lot of parts, mainly Strips.

Fig.8



MERCATOR: S11

OSN 40/1224

CONSTRUCTION in 2008 from a catalogue in German and the Eitech web site. 6 new sets were added for 2008 and 11 dropped.

The new range, with the new sets asterisked, is: 03,05*, 08*,12,17,18,19*,20*,23,24*,30,31,51,52,53,54,61,62,64,67, 72,73,74,82,83*,84,85,87,155. **The lids** of the new sets, and some of the existing ones, are of a new design with emphasis on 'eitech', & with CONSTRUCTION in much smaller letters. The example in Fig.1 overleaf is typical.

The New Sets. • **No.05** with over 270 parts. The featured model is a small Crane in which the tower and integral horizontal jib slew. Alternative models shown are a Windmill & a Gantry Crane. • **No.08** has over 430 parts and the lid is shown in Fig.1. • **No.19** has the Lorry in Fig.2 on its lid and

has over 500 parts including hollow Tyres (Eitech: Luftreifen). Notice the one-piece Cab Side. • **No.20** with over 420 parts and features what is perhaps a Multi-Rocket Launcher on the lid, with smaller photos of a Tank & a Mobile Crane (on the Eitech web site the Crane is featured). All the models have tracks. • **No.24** is a 27/40 Mhz R/C set with over 250 parts and the 2 models shown have 'utility' bodies sitting above the R/C Unit and the large, fat Wheels. A battery charger is included. • **No.83** (over 170 parts) features a wheeled Bulldozer, and 2 variant models are claimed. The Wheels and Cab Sides are as in the No.19.

None of these sets have a Motor (apart from No.24 of course) but for all but No.08 there is an Accessory Pack with a Motor, blue plastic Gears, & the other parts needed for motor-

CONSTRUCTION [1]: S7

OSN 40/1224