

than standard; the 224 is no doubt a concentric drive to the hour hand and appears to have 13/40 teeth. The 10 and 40 could make a useful 4:1 but how the rest of the train would have been arranged I leave as an interesting exercise for the reader.

VEHICLE PARTS. The 1934 List contains a complete list of all the Chassis parts, and those for the 5 bodies that could be fitted to it -the Standard Tanker and the Mercedes Racing Car came later. This list, in German, isn't perhaps hot news but if anyone needs it please ask. In passing there are 48 Chassis parts (C1-C50) and the bodies typically have rather less than 20 each.

FOOTNOTES. • In the '29 List is #44a which I don't remember seeing before, its the 2 hole high Double Bracket, #44, similar to MECCANO #11a, with a boss on the bottom. • The contents of the Zusatzkasten will need to go into MCS together with other material that has appeared in previous OSNs.

INVICTA. At Henley last year José Bernal Moreno kindly brought over an INVICTA Set to show me, such outfits were on sale in Barcelona in the early 1940s. This system is called INVICTA 0 in MCS but the '0' is thought to be an error, the box lid has INVICTA on it but no '0'. Under the name is a ring with Modelo in it and a blank space underneath for the Set No; it is similar to the one on p2 of GOLIATH (a related system) in MCS/FB. There is a number in the INVICTA ring, it might be a 0 but it's too faint to be sure.

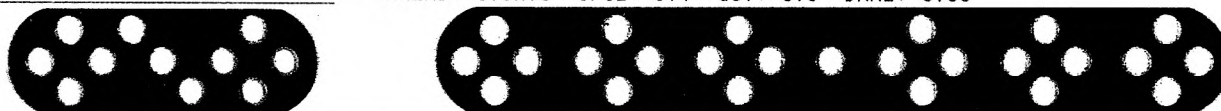
There was no Manual with the Set and it was not complete, but there was at least one of nearly all the parts that can be seen in the models in MCS. The most noticeable thing was the Strips: compared to those seen in MCS the 5 and 9 hole ones had an extra hole in each end (the shorter of them is shown below), and the 13 hole had the same extra holes but in addition the remaining holes were arranged differently (below). The holes in the DAS and the Angle Bracket were as in MCS. So were all the parts originally from this Set? All that can be said is that the finish is similar throughout and that their dimensions are consistent. Now a few comments on the parts:

- The average pitch of the holes in the Strips is 8.1mm, for comparison TRIX is 7.8. There are slight variations of up to .03mm between the 2 shorter Strips and along the length of the longer ones. Strips are .553" wide and .030" thick. The holes in the 26.5mm dia Disc have a pitch of 8.9 or 9.0mm. The dia of all holes is .154" except for the .142" dia centre hole in the 10 and 16mm dia Washers.
- The thread is 3.5x.8mm and so the Washers are a good fit on it but the Discs, with their .154" centre hole, are sloppy. Nuts are hexagonal, .252" A/F; the Bolts are 5mm u/h and have .200" dia tapered cheese heads. Only one size of Screwed Rod was present, 55mm in length.
- All the parts are steel with the screwed parts brass plated. The other parts were generally quite bright in appearance but it was hard to decide whether they had been plated or not, possibly they had a very thin coating of nickel. One side of one Disc looked rather brassy.

José provided some sketches of the parts as well as photocopies of the Strips and these are included in an Extra MCS Sheet. On the reverse side I've put the rather attractive box lid, it shows a small child with golden, curly hair, holding the Monoplane shown in MCS.

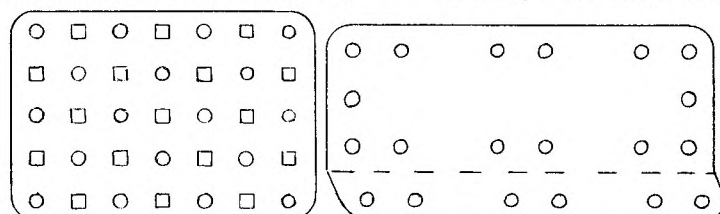
AMENDMENTS TO MCS (as necessary, depending on version): HOLE DIAMETER: 3.9mm. HOLE SPACING: 8.1mm. COLOUR: Unpainted steel or possibly nickel plated. PERIOD: add 'Also known from early 1940s.' COMMENTS: replace by: Parts similar to TRIX but with some holes omitted and slightly different hole spacing. See also GOLIATH. MATERIAL SUPPLIED BY: add: and José Bernal Moreno.

AMENDMENTS TO INDEX IN OSN 6: THREAD: 3.5x.8 SPCE: 8.1 dST: 3.9 DAXL: 3.58

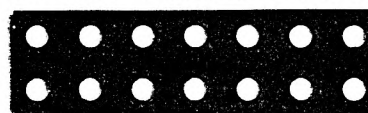


MYSTERY PART No.19. A heavy, nickel plated Flat Plate with alternate holes and squares, traced by Richard Symonds and shown here x.5. The actual pitch of the holes is probably exactly 7/16".

MYSTERY PART No.20. Another from Richard, a Flanged Plate 4x1½" with one ½" flange, again shown ½ scale. Of the 3 found, 2 were painted dark maroon and the third was unpainted. Don Redmond also sent some photos of an identical looking part, this one nickel plated. Since Richard lives on one side of Canada and Don on the other, this part may hail from Canada, or at least North America.



MYSTERY PART No.21. From Peter Kessler, a 2x7 hole steel Plate with 3.0mm holes at 7.0mm pitch, plated dull grey. Photocopied full size.



manual models don't really provide any solid evidence of this although there are a few pointers. For example 2 of the Aeroplanes for the No.5 Outfit show Strips used as propellers, but the proper Propeller Blades, contained in that Set, were included in the Parts Lists for the model. Perhaps it was just that those models were photographed before the range of parts to be produced was finalised. No end date is known but see LE JEUNE MÉCANICIEN (LJM) below.

There's no indication of the maker anywhere but one oddity is that on the cover of the Manual is 'Generalvertrieb: [general distributor] Gebr. Weimar \\\\ Rotterdam'. If that's the city in the Netherlands, perhaps a European common market is not such a new idea after all. Or perhaps more likely, the Set was to be sold there with a separate Dutch translation of the German text.

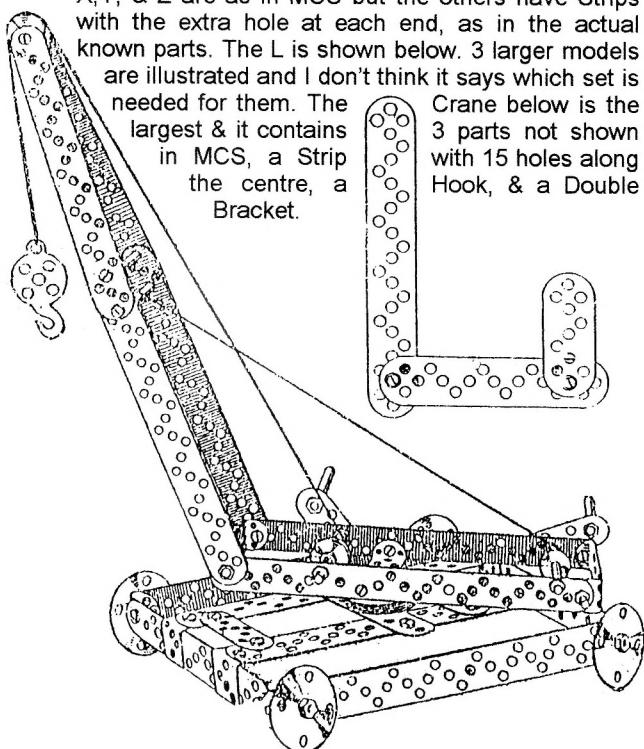
The cover in MCS is identical except that the name of the Distributor is replaced by the logo opposite (50% full size). The wording can't be read even in MCS, but perhaps someone will recognise the shape, heavily inked in here to try to make it stand out.

LE JEUNE MÉCANICIEN It is suggested in MCS that this Belgium system was the same as DJM, and this is confirmed by Thomas's Manual. The illustrations for the LJM models in MCS are identical to those in his Manual, the page numbers correspond, the typefaces are the same, and so are the lists of parts for the models, apart from the language. The suggested date for LJM in MCS is the 1920s but I don't know what that was based on.

An INVICTA No.00 Leaflet Josep Bernal kindly gave me a copy of a Model Leaflet for this small Spanish system - it has parts like TRIX but with some of the holes omitted, see 9/222. It speaks of the system being new and lists the sets then on sale as 00, 0, & 1, with linking sets 00A & 0A. If I've understood correctly the Nos.00 & 00A are identical in terms of the parts in them.

The Leaflet is headed 'INVICTA No. 00' (in the same lettering as the No.0 Leaflet in MCS), and shows the Letters X,Y,Z,M,H,K,L for the No.00 Set. X,Y, & Z are as in MCS but the others have Strips with the extra hole at each end, as in the actual known parts. The L is shown below. 3 larger models are illustrated and I don't think it says which set is needed for them. The largest & it contains in MCS, a Strip the centre, a

Crane below is the 3 parts not shown with 15 holes along Hook, & a Double Bracket.



TECC I've had no news of this Dutch system, (with the MERKUR parts) since the notes in 12/320, and I'd be glad of an update - when it ceased to be available for instance, or the current range of sets. I'd also welcome details of Sets 4 & 7, see 12/320, if anyone has anything available on them. I have though, courtesy of David Hobson, been able to examine a No.6 manual (see 8/201) in detail, and compare it with the No.5 (see 6/114).

Starting with the **No.5. SUMMARY OF MANUAL** •Name: bart smit TECC CONSTRUCTIE-BOX 5. •Details of maker: bart smit. •Dates &/or Ref Nos: 'Printed by EXPRINT - CS' on BC. •Page size: 320*235mm deep. •No. of pages: 32 inc covers. •Language: Dutch, German, English, Spanish, Czech. •Printing: Colour photos throughout. •Page Nos. of Illustrated Parts & highest PN: 29-29,4037. •Page Nos. of Set Contents & highest PN: 30-31,4037. •Set covered: No.5. •No. of models: 16. •Name, Page No. of first & last model (no Model Nos.): EXCAVATOR,6; HIGH LIFT TRUCK,27. •Other notes: •The covers are in Dutch only. •Basic Constructions on pp3-5. •Photos/contents of Extra Part Packs 101-108 on BC.

As mentioned in 6/114 the featured Excavator is the only large model; the others vary from a very simple (and unrealistic) Airplane needing 8 N&B, to a 40h long, spidery looking Travelling Gantry Crane. The better models are 4 small machine tools and a simple Fork Lift Truck. One model is the Helicopter that is the featured No.4 Set model, see 12/320.

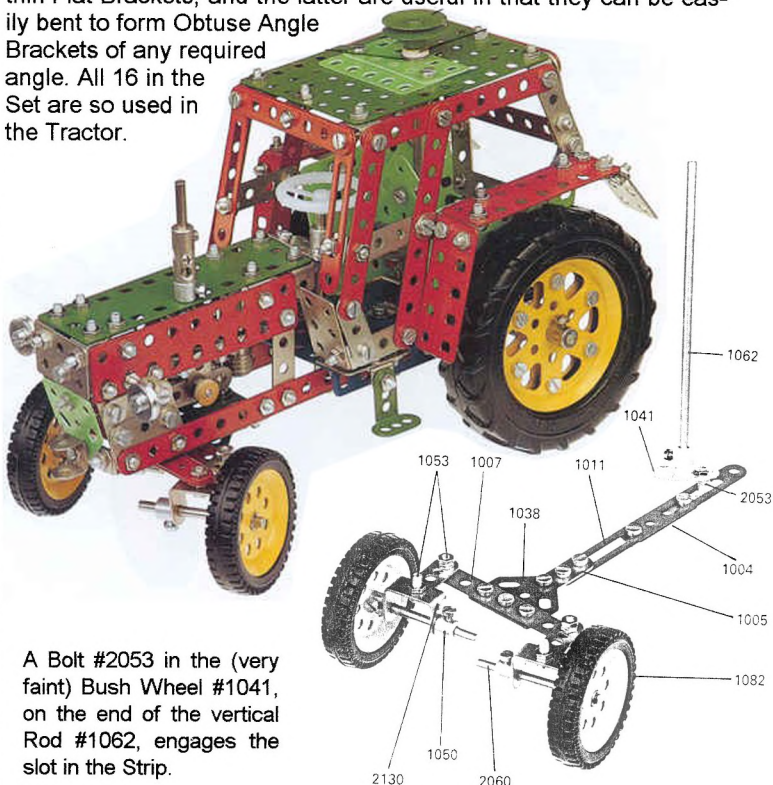
The **No.6** is quite a large set with over 100 Strips, 12 A/Gs, 6 Gears, numerous Plates, metal & plastic, 39 Pulleys, 2x 92mm & 6x 56mm Ø Tyres, 16 suitable Half-Pulleys to fit them, and about 400 N&B.

SUMMARY OF MANUAL (omitted details as above) •Name: as above but '6'. •No dates or Ref Nos. •No. of pages: 36. •Page Nos. of Illustrated Parts List/Set Contents, & highest PN: 32-33/34/35,4075. •Set covered: No.6. •No. of models: 14. •Name, Page No. of first & last model: Bulldozer,6-7; Dump Truck, 29-31. •Other notes: as above.

The first 4 models are (see MCS) the Tractor and Trailer of the Low Loader (as separate models), the Mobile Crane, & the Bulldozer. They are all reasonable looking models but simple mechanically, although the Tractor does have proper steering. It's said that all these four models can be made at the same time and there do seem to be enough Wheels and other key parts, but only 2 Tracks are listed in the Contents.

The next 6 models are small ones identical to six in the No.5 manual. Finally 4 much better models, starting with the Buggy and F1 Racing Car which are in MCS as MERKUR models, from the No.330 manual. Then as shown beside the No.6 cover in MCS, the Tractor (below) and a Side Tipping Wagon. Both have proper steering and the latter has a tipping mechanism.

David mentioned that the parts include both normal and very thin Flat Brackets, and the latter are useful in that they can be easily bent to form Obtuse Angle Brackets of any required angle. All 16 in the Set are so used in the Tractor.



A Bolt #2053 in the (very faint) Bush Wheel #1041, on the end of the vertical Rod #1062, engages the slot in the Strip.



Another INVICTA Set This example of the pre-WW2 Spanish, TRIX-style system is bigger than the set described in 9/222; it seems to be complete except that there are no threaded parts, small Discs, or Tools. When found the parts were still attached to their backing card with clips that had never been opened, and as the box isn't deep enough for a second layer of parts, those missing were probably in a packet. The set's number isn't certain: the Model Leaflet with the outfit has INVICTA 1 on it but there is no number on the box, and there are not quite enough parts to make the largest model shown, the Crane in 20/569. So although the set is most likely a No.1 (the largest in the range) it's just possible it is a No.0A.

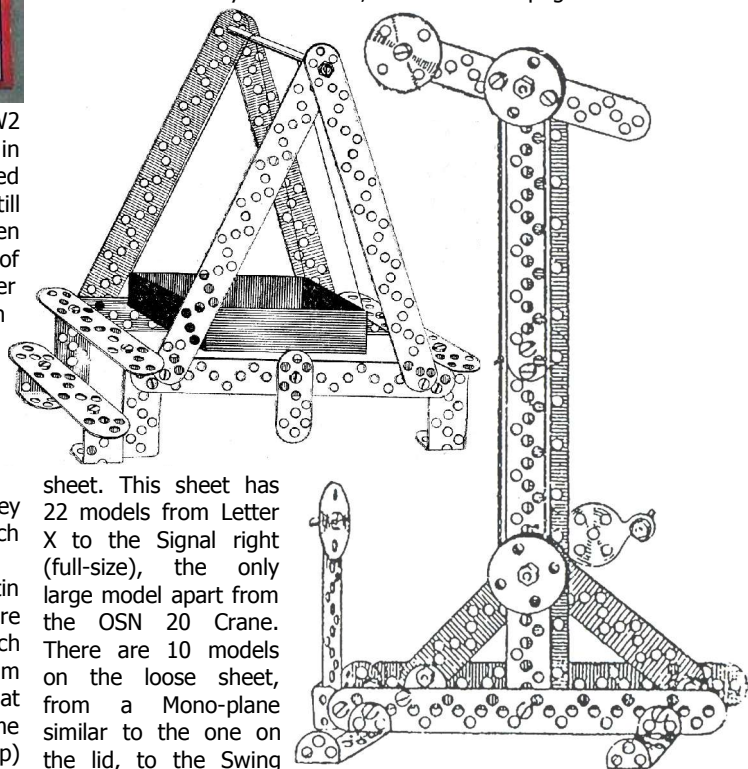
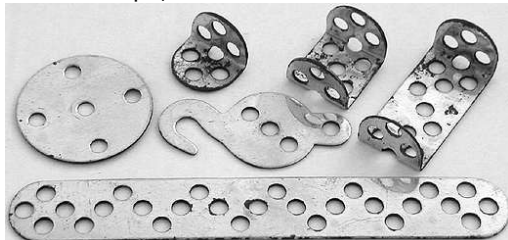
The box is 25½*19½*2cm and above the lid label, 211*150mm. It is the same basic design, but more elaborate and brighter than the OSN 9 example. The backing board is same grey as the box and has the following parts on it: 1 Hook, and 4 each of 5,9,13,17h Strips, DAS, A/B, D/B, & Wheel Disc.

The parts differ from those in OSN 9 in several ways. All are tin plated, bright & shining except for some patches of grey. They are dimensionally different too with 3.7mm Ø holes at 7.8mm pitch (so quite similar to TRIX - the OSN 9 parts were typically 3.9mm Ø at 8.1mm pitch). The Wheel Disc is 29mm Ø with holes at 10.5mm pitch (26½ & 9mm before). The strip parts are the same thickness (.75mm) but 15.0mm wide (15.5 for the 17h Strip) against 14.0mm.

Also none of the parts have the 'diamond' hole pattern of the previous 13h Strip, all the Strips have the 'V' pattern, with an extra hole at each end, as in the Strips in the Letter 'L' in 20/569,

& the 13h Strip below. Of the other parts the A/B & D/B are made from fully perforated 3 & 5h 'strips'; there are 2 extra holes in the 7h strip for the DAS; & the Hook has only 3 holes in its ball. These parts and a Wheel Disc are shown right.

The models are on a sheet folded to make 4 sides 219*156mm deep, and on both sides of a single loose sheet of the same size. None are named and the only words anywhere are the INVICTA 1 already mentioned, on the front page of the doubled



sheet. This sheet has 22 models from Letter X to the Signal right (full-size), the only large model apart from the OSN 20 Crane. There are 10 models on the loose sheet, from a Mono-plane similar to the one on the lid, to the Swing above (80% f-s). Only a few of all the models show the extra hole at the end of the Strips.

Apart from a couple of Letters, all the No.0 models in MCS, and all the No.00 in the OSN 20 Leaflet, are included.

INVICTA: S1

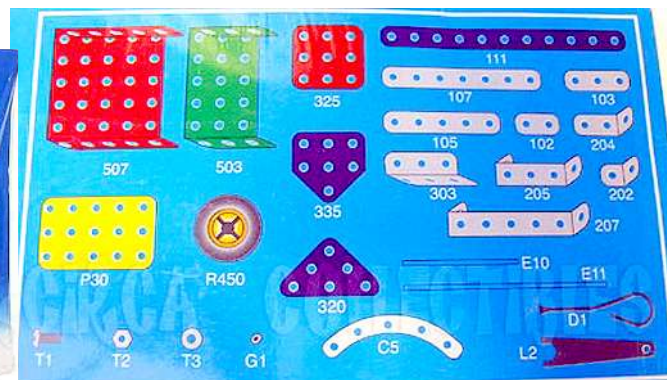
OSN 36/1078

Snippet. New Argentinian System: MEKNEX

Several examples of the MEKNEX outfit right have been offered on Ebay from time to time since mid-2005. It has sometimes been called MEKANEX but the name on its lid is MEKNEX, and that is the name used on Argentine toy shop web sites.

According to the lid the Set has 127 parts, and 3 models are mentioned at bottom right. The Moto on the lid, a Buggy called Auto, mentary Lorry (Camión), are shown on the back of the box. Each has a reasonable picture and a list of the parts needed, so perhaps there is no model leaflet in the Set. Also on the back, the panel top right showing the range of 26 parts. E10 & E11, above the wire Screwdriver, are Axles, & G1, to the left of the Curved Strip, is probably a plastic Axle Stop.

The toy shops mentioned above do not show this Set but instead have small blurry pictures of 7 models. They include the Moto



but not the Auto or Camión. The other 6 models are a Crane (Grúa), a Helicopter (Helicóptero), a small twin-boom Monoplane (Avioneta), a Racing Car (Formula 1), a Mechanical Shovel (Pala), & a Crane Lorry (Camión Grúa). The last 2 are perhaps the most interesting looking & are shown right. It isn't clear if the 7 are made from individual sets or from one large one.



MEKNEX: S1

OSN 36/1078