

**EDITORIAL** It dawned on me the other day that subscription rates for OSN should be reduced because postage isn't so high now that the pages are printed double-sided. It's a matter of pennies for UK subscribers so no change there, but the price per issue for 'Europe & surface elsewhere' will be reduced by £0.50 to £6, and by £1 to £6.50 for 'airmail outside Europe'.

These rates should have applied to the 3 issues 31-33 so the accounts of those affected have been credited with £1.50 or £3 as appropriate.

Back Issues prices have also been adjusted and details are given overleaf.

### Shorter NOTES, with thanks to all contributors.

1. Werner Sticht wrote that he has updated his **STABIL** site ([www.stabilbaukasten.de.vu](http://www.stabilbaukasten.de.vu)) with more material including many new illustrations of sets & models. Revised areas are the history of the system & the Walther company, the Inventor sets, the small sets & Kanonenbaukästen, the Motors, and the wooden constructional outfits (Maschinen-baukasten, Record, Zimmermannbaukasten). The STABIL periods 1921-1926 & 1927-1929 are now described in detail and can be considered complete. Other additions include detailed descriptions of the Patented Spur Gears, the Rubber Tyres & the parts made from fabric, and a list of books on MCS. The following chapters are still to be completed: Walther's INGENIEUR Bauspiel, STABIL after 1929, and other STABIL matters (ads, contests, etc.).

#### STABIL: S3

[34/1004]

2. Jack Little has identified the balloon Road Wheel in Mystery Parts No.44 (see 22/640) as a **YOUNG ENGINEER'S** part. He has received a set of 4 of them from Tony Johns, the son of Fred Johns, one of the partners in Johns & Avons who made YOUNG ENGINEER'S sets from 1938-41. It isn't sure though that the rest of the Mystery 44 parts are YOUNG ENGINEER'S. They generally match the Illustrated Parts in MCS but the Plates, #2 & 3, are 6\*5h with perforations along all four edges, and both types of Trunnion, #10 & 11, are the 7h pattern. Also MCS says that YOUNG ENGINEER'S parts were possibly red & green.

#### Mystery Parts 44; YOUNG ENGINEER'S: S1

[34/1004]

3. News from Constructorama sent by Jeannot Buteux. 6 'new' systems have recently come to light:

- **CUBAL**, French, around 1947 (from an unused set with manual).
- **LE CHARPENTO**, French, around 1950 (from a manual and a box with a few parts in it).
- **AUTO-MÉCA**, French, around 1930, a system to make various vehicles (from photos).
- **INGÉNORIA**, French, around 1950, a system to make various motors (from photos).
- **CONSTRUCTO**, French, around 1922, a Plate system.
- **LE PETIT ARTISAN DE LA CONSTRUCTION MÉCANIQUE**, Belgian, around 1950, probably the same as LE PETIT ARTISAN DE LA MÉCANIQUE - a system in MCS but with no illustrations (from photos).

Jeannot is sending details of CUBAL & LE CHARPENTO and I plan to include them in the next Issue.

#### New OS Names: S1

[34/1004]

4. An illustration of the **METALMASTER** DIY Tool taken from a manual was shown in 33/1003 but now Paul Goodman has



tracked down the actual example below. The red body is steel while the base & handles are aluminium. Said base measures 275\*105\*15mm, a little larger than that of the JUNEERO Tool. Cast into its top face is METALMASTER COMBINATION TOOL PATENT No. 17973/45 MADE IN ENGLAND - that would be the patent application number in 1945. The company's name & address, as in OSN 33, is cast into the underside. A 4mm MÄRKLIN Axle is a running fit in the hole made by the punch but a MECCANO Axle (4.06mm) won't enter it.

#### METALMASTER: S2

[34/1004]

5. **Snippet: 'New' System: STAHLBAUKASTEN**

All that was said of the set right was a date -1948. The main parts in the Bridge seem to be Strips with just a hole at either end joined by several types of small Junction Plate. Some of both types of part can be seen in the box, including the unusually shaped hexagonal Plate at bottom centre. There may be some grey plate material under the Spanner and wood-handled Screwdriver

#### STAHLBAUKASTEN: S1

[34/1004]



6. **Snippet: A SPIROU/ROBBEDOES No.6 Outfit** Sets 1-5 are listed in MCS for this Belgian version of TEMSI, but a No.6 was recently offered on Ebay. It is a 2-layer set in a red box, yellow inside, with the parts in card partitioning. Sets 2-5 in similar packaging but with a single layer of parts have also been seen. All have the same lid label design, the one described in 27/783.

Sets 1-5 have also been seen with in each case, the parts in a yellow moulded plastic tray. They are all single layer sets and no doubt later than those above. The boxes are again red

with the same type of label.

One final variation, a No.3 & a No.5 in similar boxes but with blue plastic trays. The layout of the parts in the No.3 is as in the yellow tray but the No.5 has 2 layers (its size is given as 32\*42\*5cm). One other difference in these 'blue' sets, the Bush Wheel disc & the Flat Trunnions are nickel instead of red (no Trunnions can be seen).

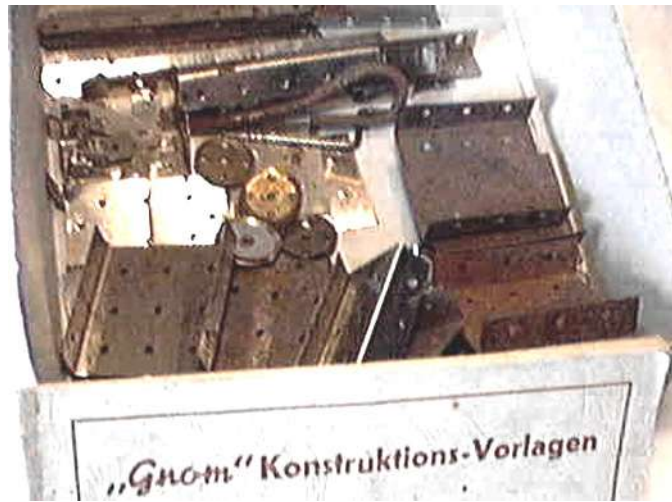
**SPIROU: S2**

[34/1004-5]

7. **Snippets – GNOM** Some sets called Gnom, made by ANDERS, were discussed in 31/932, but there was also a German system called GNOM. It isn't in MCS but there is a photo of a set in *Baukästen*, p217; the maker, Rimü, is given, but with no other details except the dates '1930s' to 1950s'.



The set above was said to be a Nr.0A. The slogan along the top is also on the manual cover right, and means 'for the young engineer'. Lehrspiele would be 'educational toy' in English. The main part in the box is a 3\*7h Flanged Plate. Its top (with a reflection of the lid on it) has holes only along its ends & centre lines. The end holes in the flange can be seen



but any others are hidden by a reflection from the 5h Strip next to it. The other parts are 5h Strips, a 7h Strip (along the top), A/B's, Flat Brackets with one hole slotted, & Bossed Pulleys with Tyre.

Additional parts can be seen in a second set (shown at the foot of the last column): a fully perforated 3\*3h Flanged Plate, a Loose Pulley with 4 face holes, a Crank Handle with near 90° bends, a wire Screwdriver, and what looks like a 5h A/G near the top.

A third outfit is larger and is in a box 30\*22\*4cm. The lid is like that of the first set except that the background colour looks yellowish. The photo of it is very poor but both sizes of Flanged Plates can be seen, also the Strips above, and the Pulley with Tyre. Less clear are a possible 1\*3\*1h DAS and a Bush Wheel.

The *Baukästen* set measures 19.5\*15\*2.5cm and has 'II' on the lid. The logo and wording on it are the same as the Ebay ones, but it is otherwise quite different, light brown with a blue dockside scene in white panel. The date given for the set is the 1950s. The main parts are the two types of Flanged Plate and some Strips - they match those above except that the finish looks to be a matt light grey rather than shiny nickel. Other parts are a Pulley of about the same size as before but with 8 radial 'spokes' pressed into the disc, and lying under it what may be a Bush Wheel with 4 face holes.

Scaling from the various illustrations, the hole pitch may be 18-20mm, the Pulleys about 30mm Ø, and the 'Bush Wheel' 45-50mm Ø.

There is no manual shown with the set in *Baukästen* but all the others have one with the type of cover right. The colours vary though, with the others light grey, dull yellow, & brown.



**GNOM: S1**

[34/1005]

8. Don Redmond wrote that the **ERECTOR No.100** set mentioned in 11/298, 15/411, & 19/544 is not in fact a No.100, it is a No.00. The set number is on the ends of the box and the mix up probably arose from the '100 TOYS IN ONE' slogan on the lid.

**ERECTOR [3b]: S1**

[34/1005]

**SMALL ADS**

[34/1005]

**KLIPTIKO INFORMATION WANTED!** -- Canadian artist living in Holland is preparing a series of small publications -- each one discussing a particular construction set and it's relation to his own art work. Searching for stories, photographs, copies of publicity materials and manuals, special models etc. related to Kliptiko. As there is very little information available every bit is appreciated! (Also looking for Arkirecto related info...). Responses to perry@xs4all.nl please.

**Wanted Manuals** (or copies) of all non-Meccano sets. Please send list and prices to Vern Ellis, P O Box 3277, Alice Springs, Northern Territory, Australia 0871.

**OSN Subscription Rates** The price per Issue, including postage, at Printed Paper Rate where available, is £5.50 for UK; £6 by air to Europe & surface anywhere; £6.50 by air outside Europe. **Back Issues** For the zones above : OSN 1: £1/£1.30/£1.50; OSN 2,3: £2.30/£2.70/£2.90 each; OSN 4-27: £3.60/£4.10/£4.50 each; OSN 28 on (in colour): £6/£6.50/£7. (All colour & some B&W issues are on loose sheets.)

**Payments** Please make cheques etc payable to P.A.Knowles. Remittances must be in Pounds Sterling (GBP) or, as cash, in Euros or US Dollars (at £1=€1.50= \$1.80). Payments from overseas may also be made using PayPal.

**Small Ads** Short ads are free to subscribers; insertion guaranteed in OSN 35 if received by the end of July (but repeats may not always be possible, please ask).

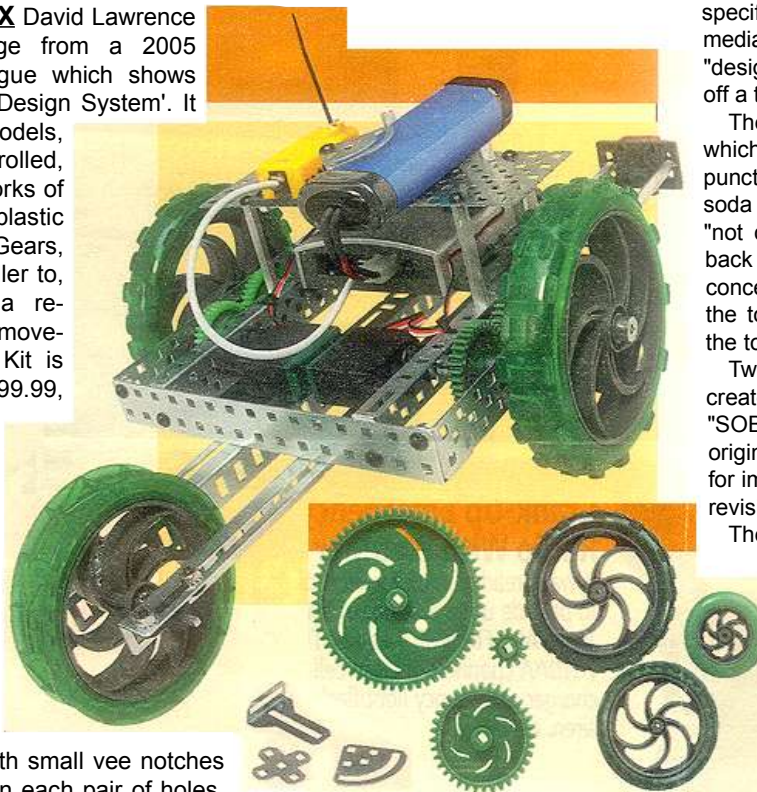
**OSN – Your Credit Balance:**

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Please send at least £ if you wish to receive the next Issue.

**New System: VEX** David Lawrence kindly sent a page from a 2005 RadioShack catalogue which shows the VEX 'Robotics Design System'. It is basically about models, often radio controlled, made from frameworks of metal parts, with plastic looking Wheels & Gears, and a Micro Controller to, presumably, give a repeated pattern of movement(s). A Starter Kit is advertised at \$299.99, and, right, a model and some of the parts shown in the ad. The complete Set can be seen at [www.vexrobotics.com](http://www.vexrobotics.com); it is said to have over 500 parts and a list of the main ones, as shown on the web site, follows.



4x 25h **Strips** with small vee notches in the sides between each pair of holes.  
 4x 2\*2h section **A/G**, 30h long. 6x 2\*20h **Flanged Plates**, with 1h deep flanges on one long and both short sides. 2x 15\*5h **Plates**. 2 each of the 3 **Brackets** shown above.

4 each of the 3 sizes of **Wheels**, and 4 each of the 3 sizes of **Gears**. 23 **Rods** of various lengths. 4 '**Bushings**'.

2 **Motors**, and 2 **Servos** which look identical to the Motors. 2 **Limit** and 2 **Bumper Switches**.

A 75mHz **R/C Unit** with 4 Crystals. A **Micro Controller**. A **Battery Holder**.

The holes are at 1/2" pitch though some are in lines between normal rows, and staggered relative to them. Most are .182" square to take the 8-32 N&B, but a few are elongated, and others are 1/8" square. The bores in the Wheels & Gears look to be square and the Rods are probably 1/8" square to suit. The Bushing looks like a plastic spacer with a round bore but the actual part probably has attachment lugs. So, square section Rods running in round holes?

Other kits are available as extras including

- **Sprockets** in 5 sizes with from 10 to 48 teeth, and Chain (.1227" pitch it says).

- **Omni Directional Wheels** - they have a series of little cylinders around the circumference which are free to rotate and allow the Wheel to move sideways.

- **Tracks** with suitable Track & Idler Wheels.

Another web site, [www.vexlabs.com](http://www.vexlabs.com), lists many more compatible parts including different **A/Gs**, **Flanged Plates**, **Channel Girders**, and 3 **Foam Wheels** from 1 1/2 to 4" Ø.

Most of the structural parts come in lengths of 15 to 35 holes and are to be cut as required. Many of them have edge notches (like the Strips) at 2 1/2" intervals, perhaps as an aid to doing this, or in bending the parts.

In the model above the yellow R/C Unit is on the far side of the blue Battery Box, and the Micro Controller is the grey box under the latter. Each of the two black Motors drives a side Wheel through a pair of the middle size Gears.

The web sites carry pictures of many different Robots. There are notes about a few of them and below those for the machine right, taken from the site.

'**VexLabs - Vex Robotics BottleBot**: This robot was

specifically requested by RadioShack for a media event. The challenge given was: "design a robot which can grab a beverage off a table, open it, and pour it into a glass."

The original concept for this was a robot which would pick up a can of soda, puncture the side of the can, then funnel the soda into a waiting glass. This was deemed "not cool enough" and the designers went back to the drawing board. The final concept would grab a long-neck bottle, pop the top off with an opener, then pour over the top into a glass.

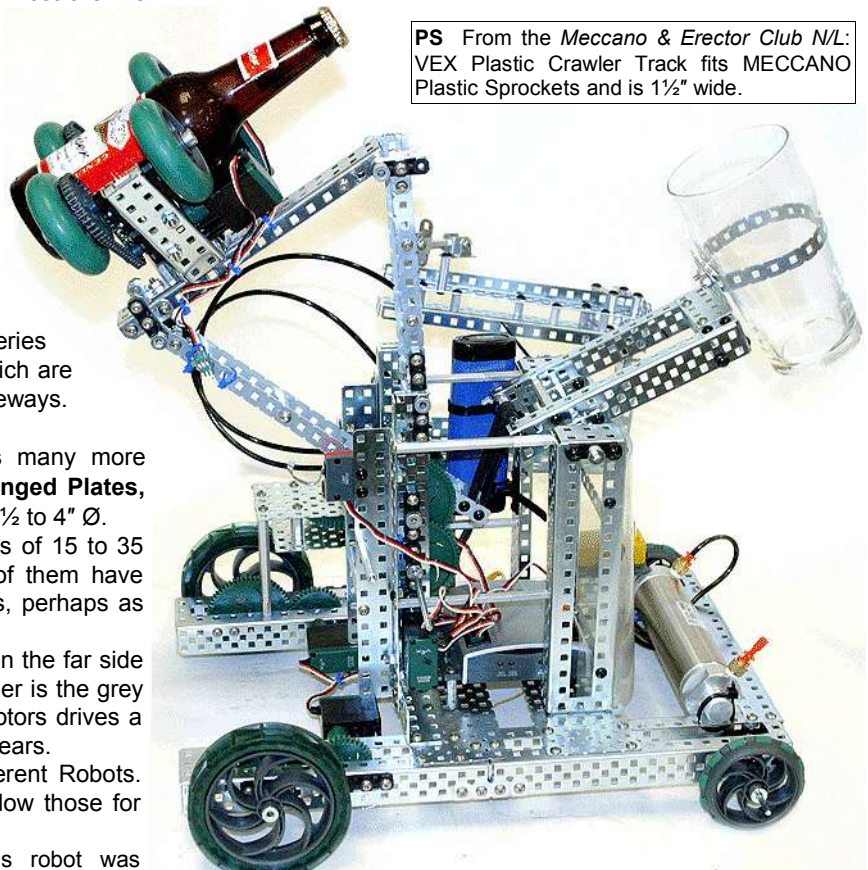
Two fully functional BottleBots were created, lovingly dubbed "BottleBot" and "SOB-Bot" (Son Of BottleBot). Once the original BottleBot was completed, the need for improvement was seen and so a second revision was begun.'

The second machine is the one below and the description of it follows.

- 2 Motors, 2WD
- Dual Rear Omni Wheels
- 4-Bar Linkage Arm
  - Smooth Pouring Motion
    - Suds-Reduction Technology
  - Heavy Lifting Capacity
- Single Sided Roller-Claw
  - 2 Rollers on one side

- Rigid 'track' opposite it
- Stationary Opener
  - Roller Claw 'track' pulls beer into position
  - Integrated Commercial Bottle Opener
    - Driven by a high torque custom linkage
    - Opener retracts out of 'pour path'
- Secondary Cup Arm
  - Raises glass into place when beer-arm lifts
  - As glass fills, springs slowly downward
    - Suds-Reduction Technology
  - De-tensions spring when beer-arm is down
- Water-proofing Protects Vex Brain.'

**PS** From the *Meccano & Erector Club N/L*: VEX Plastic Crawler Track fits MECCANO Plastic Sprockets and is 1 1/2" wide.



**INVENTRIX** *Baukästen* says that this system was made as an additional product by a company called Inventrix Kleingerätebau [small tool maker] GmbH of Alfeld (Leine), south of Hannover. The dates given for the firm are 1946-58 and its principals were Dr. Hans Schellhoss & his wife Anneliese. Of the system's 41 parts the Plates & a few others have something of STABIL about them; the rest are run of the mill except for 2 sizes of zinc die-cast Flanged & Grooved Pulley Wheels with the boss on the 'inside' (like the original MECCANO #20).

INVENTRIX is described in MCS as British because at the time the label on the only outfit known carried the address Inventrix Ltd., 9 Union St., Liverpool 2. Presumably it was an export set - the parts in it are painted but are otherwise, apart from very minor differences, identical to known German equivalents - the latter have a dull grey rustproof coating.

These notes are mainly about the 'Liverpool' set, with its parts still strung, & a similar, near complete 'German' outfit, but other German sets seen on Ebay will also be mentioned.

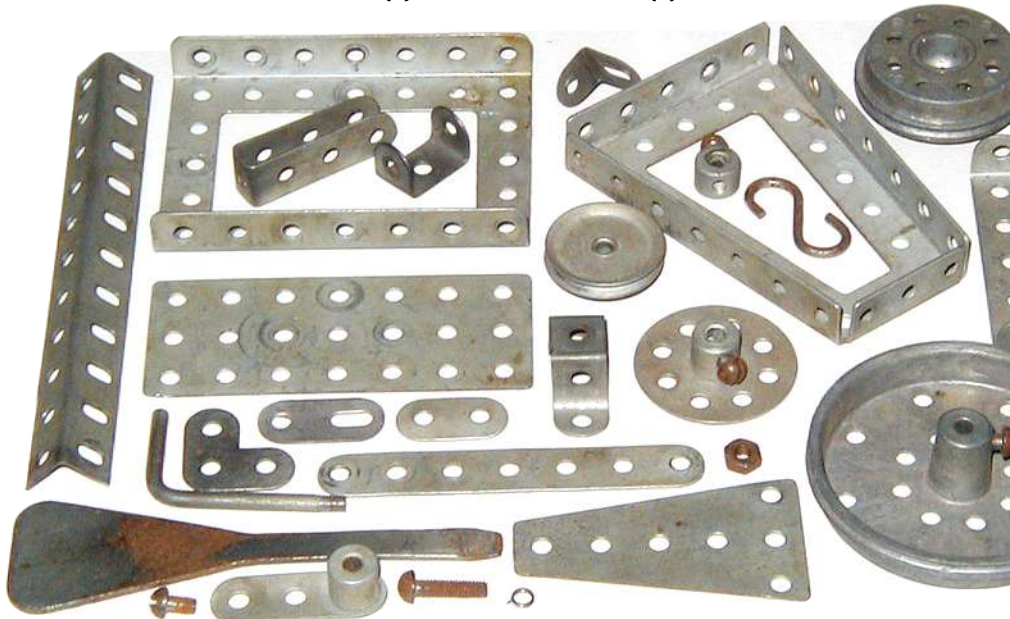
**The 'GERMAN' SET** It is packed in a black box, 43\*24\*2½cm, with red trimmed partitioning to create 9 small compartments for Strips etc, and 3 large ones for brown cards on which the Plates, the Wheels, and a few other parts were strung. The lid label, 26\*18½cm, is in very poor condition but below an identical one from an Ebay set. The logo at the left is



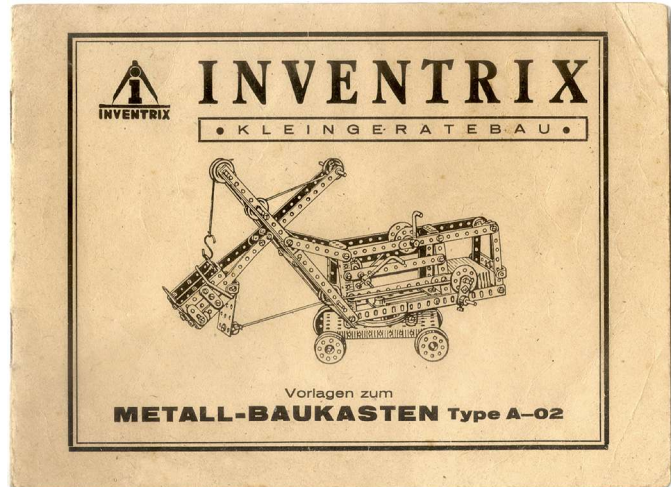
an 'i' inside a pair of dividers, and the model is a Fire Engine. No set number can be seen on the box but there may have been one in the circle in the bottom right corner of the label. The manual has Type A-02 on its cover (right).

**The Parts** in the set are listed below with the quantities as given in the manual in curly brackets. Examples of most of the various types can be seen at the bottom of the page. • **Holes** are mostly 4.2mm Ø, but 4.1mm in some in the smaller parts. • **The hole pitch** is 12.5mm. • **Bosses**, apart from those of the die-cast Wheels mentioned above, are steel, 11mm Ø, held (securely) with a narrow ring of peening. Their bore is 4.2mm, but 4.1 in a few, and they are single-tapped M4. • The parts are generally reasonably well made but from rather soft steel and some are a bit battered from use.

• **2,3,5,7,11h Strips**. All the 'strip' parts are slightly wider than 12.5mm, most by about .1mm. {4,6,12,6,26}. • **DAS** {4}. • **11h A/G**; the slotted holes are 7mm long {10}. • **Flat Bracket** and the **A/B** made from it. The slots are 9mm. {6,16}. • **Double Bracket**, 19mm wide {4}. • **Corner Bracket** {4}.



• **Double Bent Strip** {1}. • **3h deep Single Bent Strip** {2}. • **5\*11h, 5\*7h, 7\*3/5h Pierced Flanged Plates** {1,1,2}. • The 'centres' of these **Plates**, 3\*7h, 3\*5h, 5\*1/3h {1,1,2}. • **41 & 66mm o.d. Flanged & Grooved Wheels**. Both have the same integral tapered boss and a hemispherical recess on the back face. {4,2}. • **28mm Pulley** with 4½mm wide vee {6}. • **37mm Ø Bush Wheel** {4}. • **35,60,100,150,175mm Axles**, 3.9-4.0 Ø, with square sheared ends {4 each}. • **2½\*4cm wire Handle** with about 6mm of thread on the 4cm arm. • **Collar**, 11mm Ø, 8mm wide, & unlike the bosses, double-tapped {6}. • **Single Arm Crank** {4}. • **N&B**, M4, plain steel. • **6 & 15mm u/h Bolts** with 6.9 & 7.3mm Ø RH respectively {80,10}. The 6mm are used as Set Screws. • **Machined hex Nuts**, 7.9mm A/F, & 3¼mm thick {90}. • **50,80,100mm Ø Rubber Driving Bands** of 2¼\*1½mm wide rectangular section {1 each}. • **Axle Clip**; just 2 to 3 turns of .6mm spring wire, like a short M176a but without the arm, and thus exceedingly difficult to 'wind' on or off an Axle {12}. • A flat **Hook** of 2½mm Ø wire, 31mm o/a {2}. • A flat **Screwdriver**, 105mm long. • A **Spanner**, missing but no doubt similar to the one in the Liverpool Set shown later.

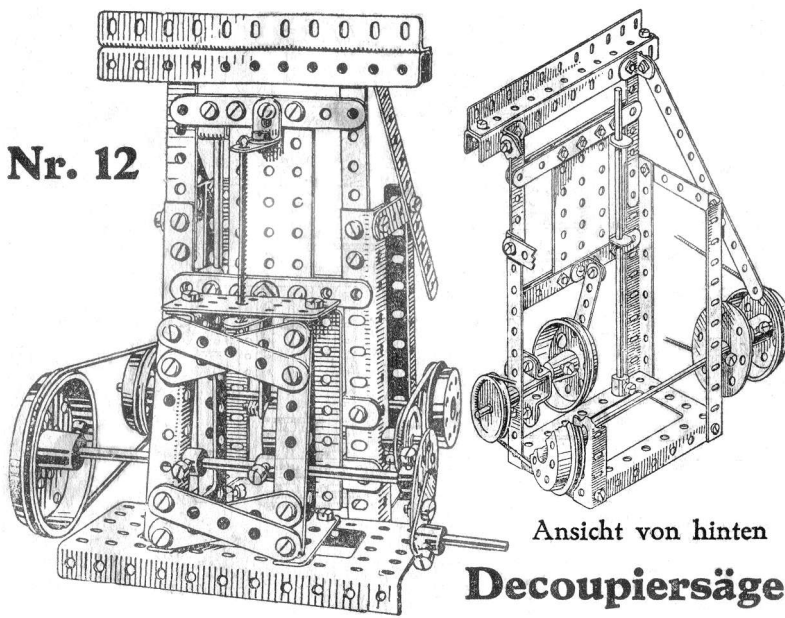


**The Manual** has 16 unnumbered pages, 198\*147mm, plus covers. The latter are all plain except the front above. Pages 1 & 2 have an Introduction (in which an A-01 set is mentioned) & the Inventory is in on p3. There is one model on each of the other pages, from Nr.1 Säulenbohrmaschine (Column Drilling M/C) to Nr.13 Webstuhl (Loom). One shaded line drawing is provided for each plus an auxiliary view or two for most. Also a parts list which gives those needed for each, named, portion of the model, rather like the STABIL method. The models include the Digger on the cover (Nr.10), the Fire Engine on the lid (Nr.4), a Monoplane, a Roundabout, a Windmill, as well as Machine Tools, & a Crane. The Fire Engine & a Reciprocating

Saw are shown, natural size, at the top of the next page. In all a good selection of reasonably attractive looking models. They include many of the essential features of their prototypes (grindstones in the Windmill for instance) with pulley drives used extensively. Beyond that they are fairly simple mechanically - the Fire Engine does have centre-pivot steering but the Crane has no ratchet.

**Other GERMAN Sets** A number of other outfits have been seen on Ebay, all with parts matching those above. 3 are similar examples of the present A-02 set. Another A-02 has a plain brown card box with a whitish

Nr. 12



Ansicht von hinten  
**Decoupiersäge**

label printed in brown and featuring 2 models which are in the manual above, Nr.3 Leuchtturm (Light Tower) and Nr.7 Horizontal-Sägegatter (Log Saw). A very small version of the firm's logo is in the top left corner & the set number is bottom right. With this set was an A-01 outfit in a similar but smaller box. The label model is a simple Loco not in the A-02 manual, and the logo is in red. Neither of these sets had a manual with them but another similar A-01 has one in portrait format with a white cover, again printed in brown, showing a Drilling Machine. It was said to contain 12 models, from Plattenwagen to Bohrmaschine. This set's box is also brown but darker and it looks to be patterned with small embossed circles. The parts are in 1 large & 4 small compartments.

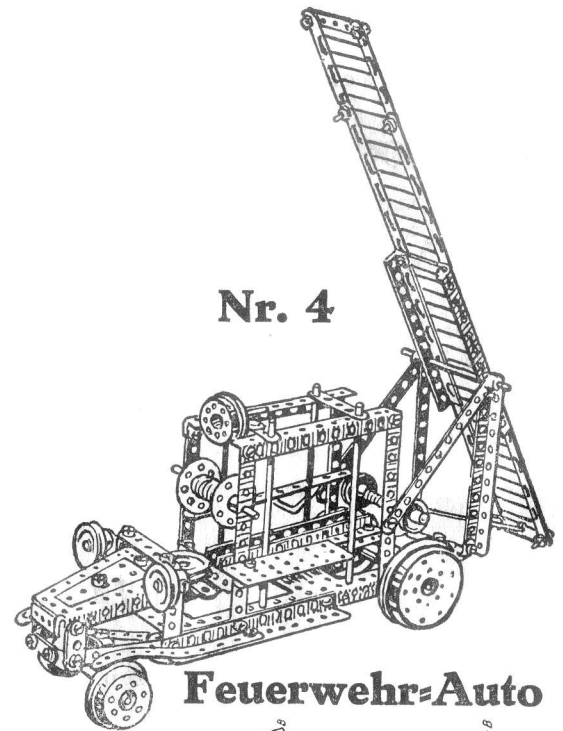


**The 'LIVERPOOL' Set** The parts in this set are still strung but the manual is missing. The box is again black but at 30½\*51\*3cm it is 50% larger in area than the A-02; the contents though are identical (and as the A-02 inventory except that both sets had only contained 4 Flat Brackets). As can be seen above, the lid label, 19½\*31cm, shows it to be a Set No.3 and it also carries the Liverpool address. The model is of course the Digger from the A-02 manual. As already implied this is the only set known with coloured parts, the only one from Inventrix Ltd., Liverpool, & the only one with a set number without the 'A' prefix. Perhaps one day other 'Liverpool' sets will be found, and German sets with coloured parts.

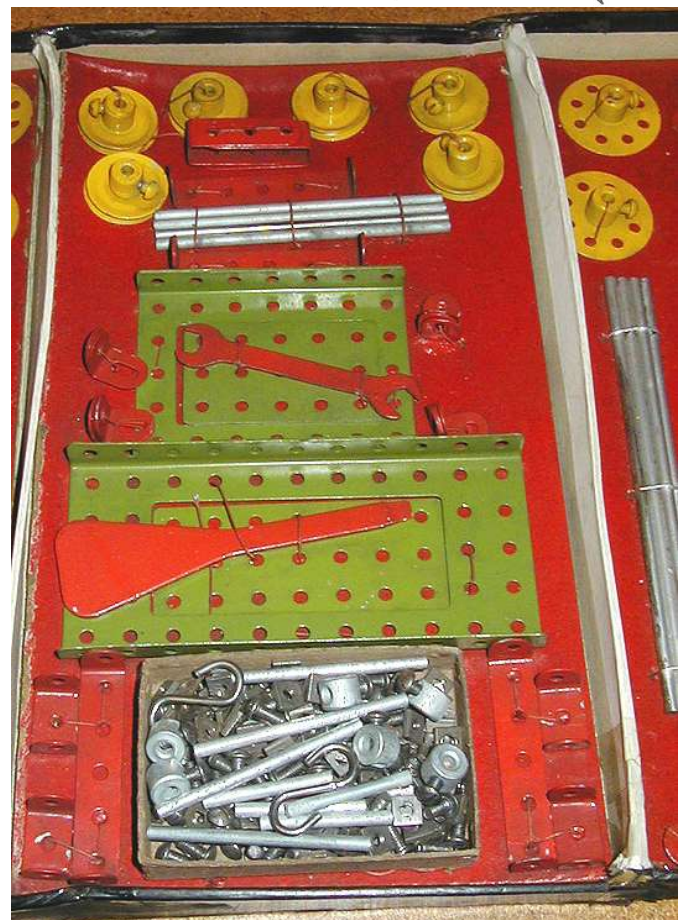
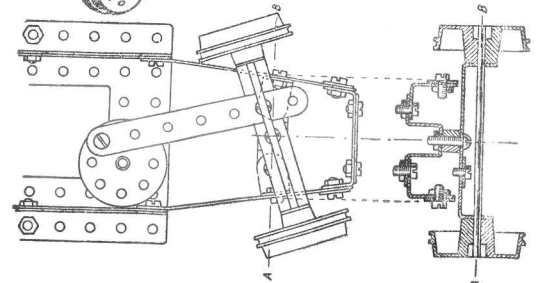
The set box is partitioned into three equal areas and the parts are strung to a red card in each, with the small items in a black topped box at the bottom of the centre compartment. It can be seen with its lid removed in the photo of this compartment right. All the Plates in the Set are painted green, all the Wheels yellow (including their bosses & Set Screws), and all the other parts, excluding Axles, N&B, etc, red. The red is practically the same shade as the backing cards, but all the parts are rather grimy and when cleaned the red is lighter, almost a pinkish shade.

Examining the small parts and those still strung, there are some minor differences from the German parts. • The **holes** seems slightly smaller even allowing for the pain - more are 4.1mm & a few 4.0. • The bores of the steel **bosses** are also slightly smaller, 4.0-4.1mm. • The **N&B** are still plain steel but

Nr. 4



**Feuerwehr-Auto**



the **Bolts** are 8½ & 18mm u/h, with 7.4mm mush heads & 7.1mm tapered cheeseheads respectively; and the **Nuts** are pressed, square, 8.0mm A/F, & 2mm thick. • The **Spanner** is 80mm long o/a.

**POLYLONG Update** Quite a number of different sets have been seen since those mentioned in 30/866-7, 31/910, & 32/962 (METAL KITS); in many cases they have been sold under different brand names. Most of the models though are already known or are small variations on them. One innovation is sets with enough parts to make 2, or 5 different models, presumably one at a time. Virtually all the new sets have only been seen on Ebay, and very often without a Set No. or any other means of positively identifying them, other than a photo of the lid with the featured model(s). And thus it is difficult to refer to them without resorting to a picture of each lid, especially when one finds, for example, half a dozen small Racing Cars that differ only in small details. For this reason a complete account of all the sets & models will not be attempted at this stage, just a list of the known brands and sets, with a photo of a typical lid in most cases, and any points of interest arising. Some sets do not have the POLYLONG logo or boy on them but are included because their models are those of known POLYLONG outfits. In the absence of any official designation for some sets, I've invented names and they are in inverted commas.

Photos of **the 'innards'** of several of the sets have been seen and all show the parts in recesses in blocks of white plastic foam. The Wheels and sometimes other large plastic parts push into individual recesses, as do the Screwdriver (always the type with the fat, green handle, as in the RACING 738 set on the next page); and a long, thin box, probably cardboard, with CONSTRUCTION XXX (the set number) on it, no matter what the Set's brand. The rest of the parts are in clear plastic bags in two or more recesses.

**CONSTRUCTION No.672** below has slightly unusual models. **No.680** has a Helicopter on the lid, and **No.682** a simple Rocket Launcher Lorry with the thin plastic Wheels. Both have similar style lids to No.672. **No.711** (330 parts) at bottom left has the usual cab parts in the Lorry but the 'Blimp' on the Crane is a piece not known before. **No.711** (278 parts) is in a box, 13\*17", with a lid in the same style as the 712. The model is a Lorry of the 712 type towing a Crane on a chassis of about the same length as the Lorry, and with the same type of Wheels. It has the Blimp on its Hook. **No.726**

(153 parts) is the 'Another set' of 30/887.

4 **multi-model sets** have been seen with **HYP** in smallish letters before CONSTRUCTION. Their lids are all in the same general style but in different colours and one, **Super Racing**, is shown top centre below. The second is for 5 'Earth Movers' with 3 like COMBINED EXCELLED Nos.522, 525 & 526, and two tracked models from the CONSTRUCTION Sets 722-726. The third is an 'Aero' set (209 parts), again for 5 models: COMBINED TOYS 501 & 502, and CONSTRUCTION 663 (both models) & 680. Fourthly, a 'Furniture' set with 218 parts and models as in the COMBINED TOYS set below. There seems to be 4 groups of furniture: a bedroom suite including a red-framed mirror; 4 chairs around a table (its top is the Circular frame used as wheels in the 672 set models); a settee & 2 armchairs around a coffee table; and a desk (with a red 'computer' on it) plus chair and bookcase. The blue Seat parts are actually orange in the box, and there doesn't look to be enough parts to make more than one group of furniture at a time.

**COMBINED** The 2 sets with this name both include a Solar Cell and are described elsewhere in this Issue.

**COMBINED EXCELLED** The one addition is **No.802**, with 171 parts to make an Articulated Tanker Lorry using the special cab parts and with a green plastic moulding on the load platform to represent the tank.

**COMBINED TOYS** 3 more sets have been seen, all quite different to the one in OSN 30, and to each other. The first, below, is the 'Furniture' set (218 parts); it was on Spanish Ebay and is the equivalent of the HYP CONSTRUCTION set mentioned above. The second is an 'Aero' set (209 parts) with the same style of lid, & with the same 5 models as the HYP outfit. The third, **Super Tank**, with the lid bottom centre below, and a different Tank on the underside of the box.

**MEKANIX** 4 sets with this name were spotted on the U.S. & Canadian Ebays, and their models are those of COMBINED TOYS 501, 502, 505, & 506. The '506' lid is shown below.

**METALL Baukasten** The lid below is from the one set known with this name. The model is identical to that of CONSTRUCTION No.711 and the Set has the same number of parts, 278.

**MOTORCYCLE** This has a similarly styled lid to the SUPER described later but the wording is in English and, despite the



same 2 model claim, there is only one name, MOTORCYCLE, at the top. Unlike SUPER the POLYLONG logo can be seen on it. The lid model is identical to the one on the SUPER '805' set.

**NUTS+BOLTS** 17 of these sets have been seen, and one is shown below. All the lids are similar and though none have the POLYLONG logo (and the 'boy' is different) all the models on the lids are known from other POLYLONG sets. The 'Solar' set below is the equivalent of the larger COMBINED Solar outfit. 3 of the others are called **Flying Machines, Racing Cars, & Construction Vehicles**, and they are the equivalents of the appropriate HYPA CONSTRUCTION 5-model sets. **Another outfit** builds the CONSTRUCTION 711 model, and **all the others** are for a known small model, nearly all of which are in the 5-model sets. Some of the lids have '4 different Models to Collect' on them, and others say 'Many Models to Collect'. Some of these outfits have names and most of them have one of the letters A, B, C or D on the lid.



POLYLONG: S6

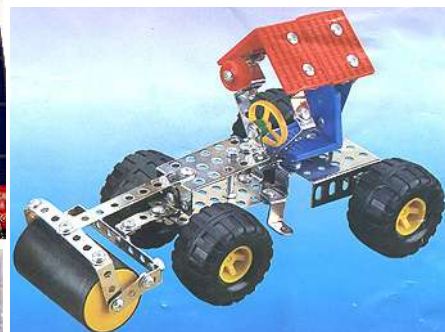
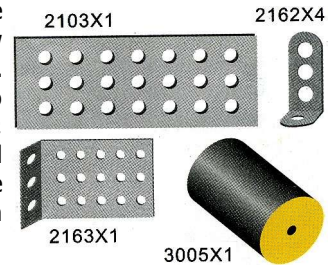
OSN 34/1010

**More METAL MECHANIC Type Sets** Previous relevant articles are about METALLICA in 31/933, and other METAL MECHANIC type sets in 32/958. To start with, **two corrections** to OSN 32. The main & small models on the MECHANIK lid are the METAL MECHANIC models 9, & 4,5,7 respectively; and No.9 is the main model usually seen on the METAL MECHANIC lid (as on MECHANIK).

**METAL MECHANIC** The Aeroplane on the **MODEL KIT** lid below is a POLYLONG model and on the bottom of the box it is shown with 3 other of the COMBINED TOYS models: Nos.501, 502, 505, 506 (these are the MECHANIX models too). However METAL MECHANIC can be seen clearly on the edge of the box shown under the lid (from another Ebay item with an identical lid). Thus a positive connection between POLYLONG & METAL MECHANIC, beyond the similarity of many of the parts.

Thanks to John Rix I've been able to examine one of the sets with the OSN 32 No.9 model on the lid, used but complete. It's actually the **Roller Set** (No.7 in OSN 32) and that model (shown below right from the Model Leaflet) is black-spotted on the bottom of the box. Also on the

bottom is 'Imported & distributed by Padgett Bros (A to Z) Ltd., Barnsley S75 5QX, UK', and 'Ref. No.6715'. The box is 28¾\*24½\*4cm and the parts are in a white foam block as in the POLYLONG sets except that all the metal parts are in one large, central recess, and 2 recesses which could take Road Wheels are empty. No doubt the same block is used for the military models that need 6 Wheels. The Set has no long card box, nor is there room for one. The **Model Leaflet** is the same style as the METALLICA one with, as before 'RIG OUT YOURSELF', etc on the front and 58389 under it (it was 58387 for the METALLICA set). The **Set Contents** are listed below with notes on points of interest. The new parts are in the photo right (from the Model Sheet); the others are as illustrated and described in OSN 31 and have the same PNs. 1,2,2,1x 3,5,7,9h Strips. 2x 1\*3\*1h DAS. 1x D/B. 3,4,3x A/B, A/B with both holes Reversed A/B. 2x 2\*2h Corner Brackets. 1x 5\*5h Flanged Plate. 1x 3\*5h Single-Flanged Plate with round holes in the flange. 1x 3\*7h Perf. Plate without the wide edges in the photo. 1x 3/1\*5h Triangular Plate. 4 Road Wheel Hubs & Tyres. BZP Axles: 1x 65mm; 1x 105mm. 34,5,1x crosshead Bolts 5½,12, 30mm u/h; they have small button heads, 7.3-7.4mm Ø & 2mm deep. 43 hex Nuts, 7.0 A/F. All N&B are BZP. 1 Spanner. 1 Screwdriver, the POLYLONG pattern but with a red handle. 2 Axle Stops. 1 'Blob'. 2



METAL MECHANIC Etc: S2

OSN 34/1010

normal size Seats, #2570. 1 Steering Wheel. 4 Plastic Plates, #2146. 1x Roller, 62mm long & 39mm Ø; the yellow end discs push into the rebated ends of the black cylinder.

**SERIES/RIG OUT ONESELF** 3 Ebay sets have been seen with SERIES as the main name on the lids, followed by either METAGALAXY or IRON-VEHICLE. RIG OUT ONESELF also appears but sometimes in small letters. • The **METAGALAXY** outfit below came from the Australian Ebay and features the METAL MECHANIC 'No.2' model - its name, OUTER SPACE AUTOMATON, can be seen along the left side in dull white letters. The set was said to be 'Kit 1' and to have 208 parts plus 2 tools. • The first **IRON-VEHICLE** set was being sold from Spain, and has '58987' on the lid below. The details given were that the box is 44\*34\*12cm, and that the set contains 283 parts and a Motor. I think that's the first set from this

remotely controlled by the Unit in the hands bottom left. I don't recognise any of the 5 models shown from other sets and the small, yellow model at top right looks to have special mouldings as wings. • The **other IRON-VEHICLE set**, from Italy this time, has a lid in the same style but the RIG OUT ONESELF is in tiny letters. The photo is poor and the set number is too blurred to be read, but the number of parts is given as 349 and as the remote Controller is shown, the Set would also contain a Motor. As on the 58987 the lid has a main model, the slightly ethereal looking Helicopter right, and 4 small ones. The latter comprise another Aeroplane & 3 Vehicles, one with the yellow Wings already noted.



stable to have one and it seems to be



**MECHANIC/RIG PUT ONESELF** 4 of the sets with the military models on the lid have been seen. • The set with the 9-model lid shown in OSN 32 has 186 parts, so probably only enough to make the large centre model. • The Lorry at bottom centre on the OSN 32 lid is No.58583 with 147 parts - it is labelled Camion, so a French set. • The Rocket Launcher set is Item No.58589. • The Tank bottom right in OSN 32 is No.58585 with 181 parts and is called Two Tank Artillery, probably because its turret carries 2 barrels side by side.

OSN 34/1011

METAL MECHANIC Etc: S3

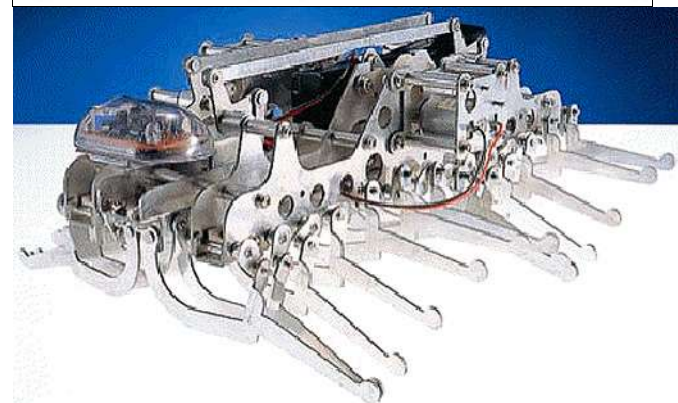
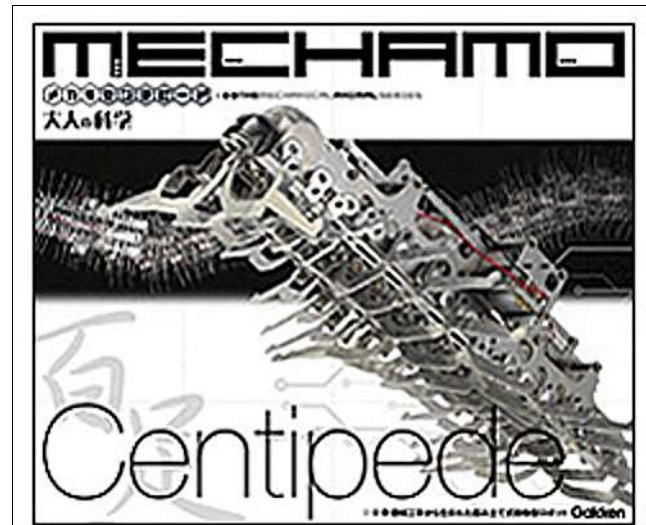
**Snippet – New System: MECHAMO** A little on 6 Japanese MECHANIMALS models was given in 4/66 and three sets have since been seen on Ebay, one labelled Centipede; one SpaceMechanimals Martian Frog; the one



below for an Inchworm, a Spider, & a Snake; and one that probably has the same contents but with a different lid labelled MECHANIMAL 3. For anyone new to these models, they don't look particularly like the animals in question, but their movements are uncannily realistic. The various models have few if any common parts.

Last year three sets from the same maker, Gakken, were introduced under the name MECHAMO. They are to make an Inchworm, a Centipede, and a Crab, all creatures of the MECHANIMALS genre. The first two appear to be considerably revised versions of the earlier models and all three now have infrared remote control, with 6x AA batteries needed. Apart from the featured model, the lids are all similar in style to the Centipede one top right. The photos on them show a somewhat dramatic view of the models, as can be seen from the actual Centipede right.

An Ebay search for Mechamo showed a number new sets being sold from North American at prices of between \$75 & \$110. There was also an outfit at \$240 which claimed to have



enough parts to make all the models, presumably at the same time.

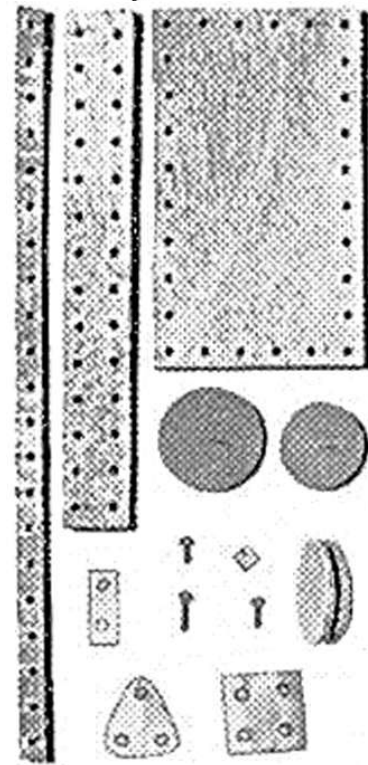
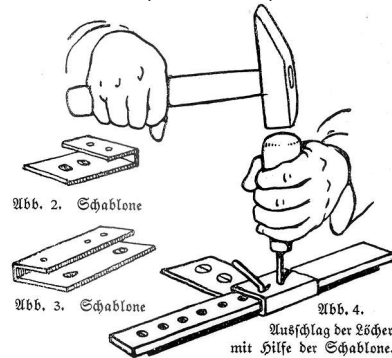
OSN 34/1011

MECHAMO: S1

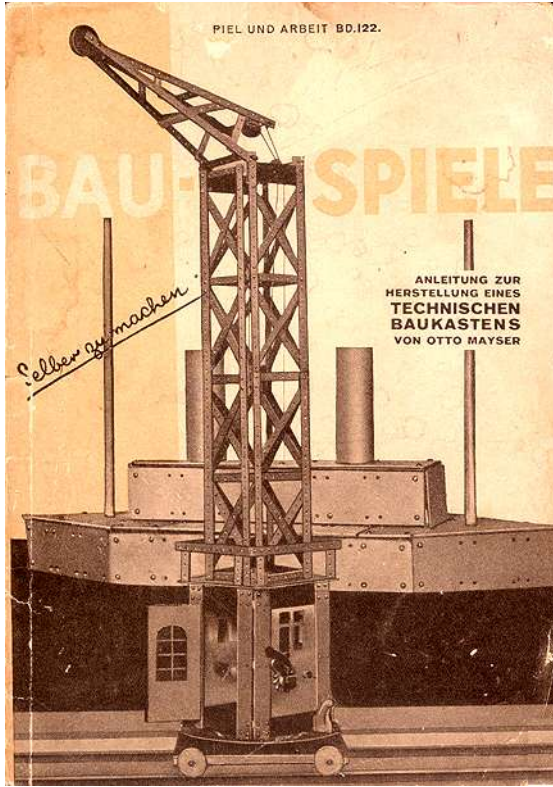


**BAUSPIELE** The book *Making Tin Can Toys* mentioned in 33/973 wasn't the first of its type. Thomas Morzinck has kindly sent copies of the pages in a German book called *Bauspiele* (Building Play) which describes how to make models using Strips & Plates from 3mm plywood, with Brackets etc from old tin cans, and all joined together by 1/8"N&B. It appeared in 1931 as No.122 in a series of *Spiel und Arbeit* (Play & Work) 'DIY' books/manuals from the publishers Otto-Maier-Verlag (Ravensburger nowadays). The first of these was published in 1903 and the series continued until the 1960s by which time there were over 250 titles covering almost every kind of toy, e.g, boats, aeroplanes, a loom, model railways, electricity, & radios.

*Bauspiele* was written by Otto Mayser, a pewterer by trade, and has 20 A5 pages plus two A2 sheets of full-size patterns. The cover is shown right. The parts were to be made using simple tools, a hammer, tenon saw, tin snips, file, etc, plus jigs and a 4mm punch for making the holes in both the wooden & metal parts. Strips and rectangular Plates were to be sawn from ply sheet using a simple jig made from wooden strips overlaying a base board. The jigs for the holes are shown below, one (Abb.2 & 4) for making a series of equispaced holes at 15mm pitch, as in the Crane framework on the cover; and one (Abb.3) for holes at alternate pitches of about 11 & 39mm (scaled from the full-size patterns), as in the Ship behind the Crane. These jigs were to be made from 2mm thick steel and if this presented a problem it was suggested that a locksmith would make them for 'a few pennies'.

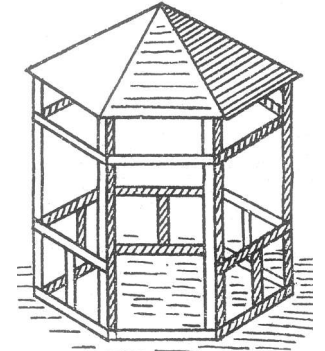


**BAUSPIELE: S1**



various frameworks were given, & also details of more advanced parts including a 16-tooth Ratchet Wheel, a Pawl, and a Roller Bearing.

All this is dealt with at some length and then photos of 8 models are given with some notes about them. They include several simple buildings, the Summerhouse below for example; a quite

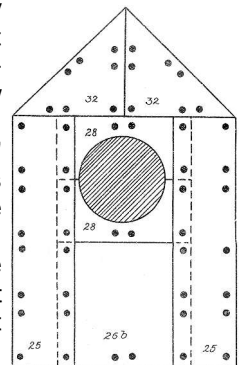


elaborate Castle; the Crane on the cover; and the 24cm Ø Water Wheel driving a

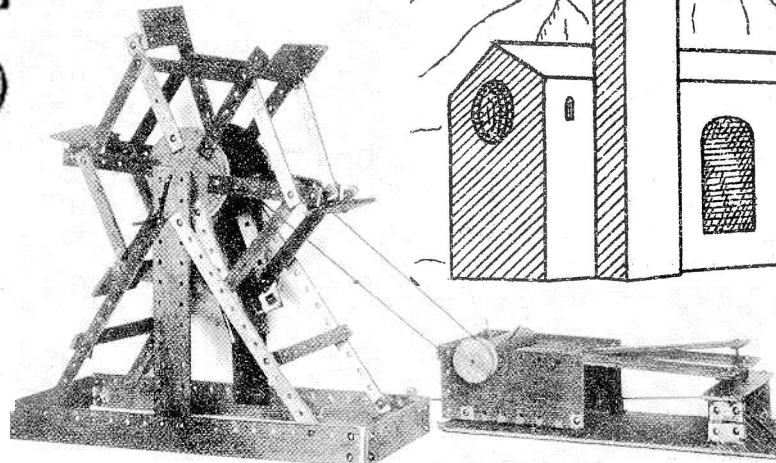
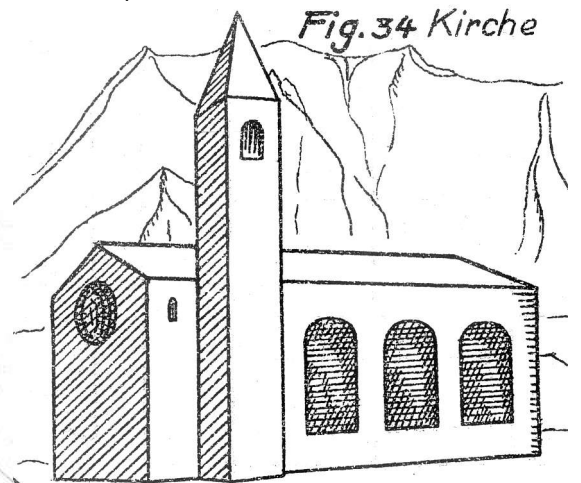
Mechanical Hammer at the bottom of the page.

One A2 Sheet shows the sawing jig full-size, plus parts, some full-size, from the Summerhouse and Waterwheel/Hammer. On the other sheet the parts for the Church below, many full-size. It is 42cm high and is in concept similar to the Castle but covers a smaller area. The parts are in the form of numerous panels so designed that they are a reasonable size & all cutouts start from an outer edge. Hence the horizontal split in the panels around the window in the end wall of the Church, right.

Many of the parts in the 'mechanical' models have 15mm pitch holes whereas in the others the majority have the alternate pitches, as in the Church. Presumably this was thought to improve the appearance of the models, but it means of course that the parts cannot easily be used later with the 15mm type. Given alternate pitches, it is not clear



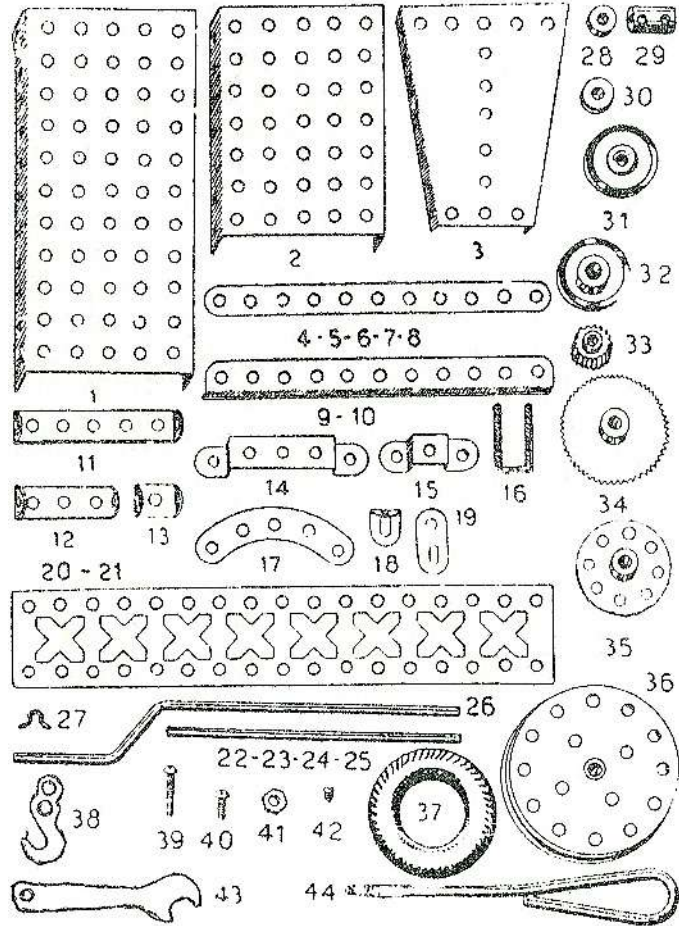
**Fig.34 Kirche**



why multiples of the 'standard' 15mm pitch were not chosen.

**Snippets: F.A.L.T. Sets.** F.A.L.T. was a Turin company which produced 6 sets, probably sometime after WW2. These notes are based on the MCS entry and photos from Ebay. Sets 0-4 were called IL PICCOLO MECCANICO (The Young Mechanic), and were small sets, 100 N&B in the largest, made up from 44 different, sensibly chosen, 1/2" pitch parts. Most were conventional but with a few unusual sizes, and the Braced Girders had uniquely shaped cutouts. No.5 was called FALTERBOT but I don't know the significance of the name. Its contents, as shown in MCS, were those of the No.4 plus 16 Nuts & 4 Bolts, but it also contained over a dozen special parts, some, probably most, wooden. These allowed a range of quite realistic, not to say imaginative, models to be made. A 4-5 conversion set has been mentioned.

**IL PICCOLO MECCANICO** The 'standard' parts in the system are shown below and some notes on them, from the



MCS material & Ebay pictures, follow.

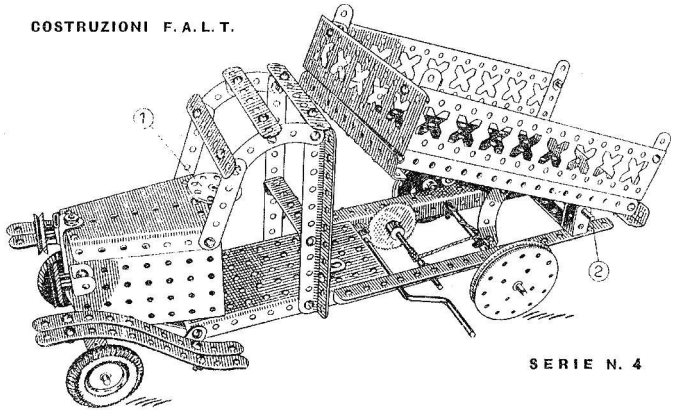
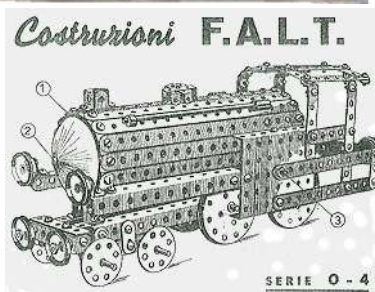
- **Flanged Plates.** The flanges on the 5\*7h are on the long sides, and the Sector Plate is only 7h long. • **The Strips** are 17,11,7,5,3h long. • The **Brackets** #18 & 19 are the only parts with slotted holes. • The **Axles** are 150,100,75,50mm long.
- #28 is a **Collar**. • #30 & 31 are **Loose Pulleys**. • **Gears** #33 & 34 have 16 & 52 teeth, and are thus Mod.75 (34 DP).
- **Bush Wheel** #35 is 36mm Ø. • The **Flanged Disc Pulley** #36 is 62mm Ø and its boss is (unlike MÄRKLIN) on the inside.
- The **Bolts** #39.40 are listed as 5/32 x 20 & 5/32 x 7. • #42 is a **Set Screw**. • The **Spanner** has 8mm wide jaws and can (just be seen in the top left corner of the lowest yellow FALTERBOT card on the facing page.

The **quantities** of parts in the No.4 are: #1-10: 2,2,2,8,16,8, 18,8,4,4. #11-21: 4,4,4,2,2,4,4,12,12,2,2. #22-32: 2,4,2,4,2, 12,2,2,2,4,4. #33-44: 1,1,4,4,4,2,6,94,100, 21,2,1.

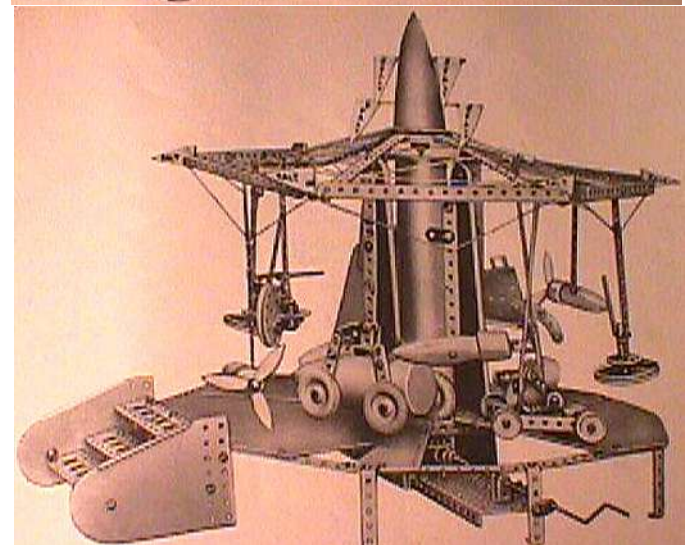
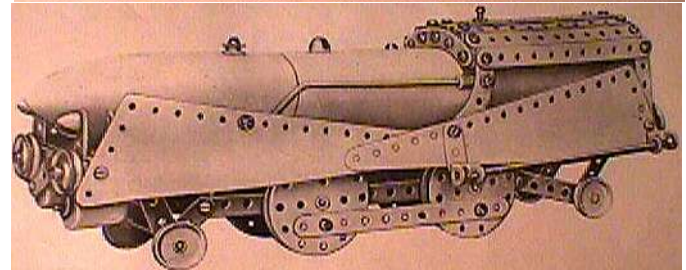
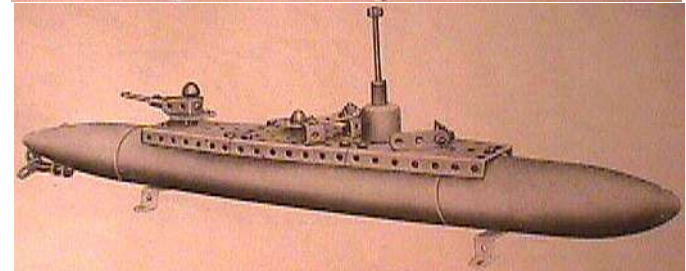
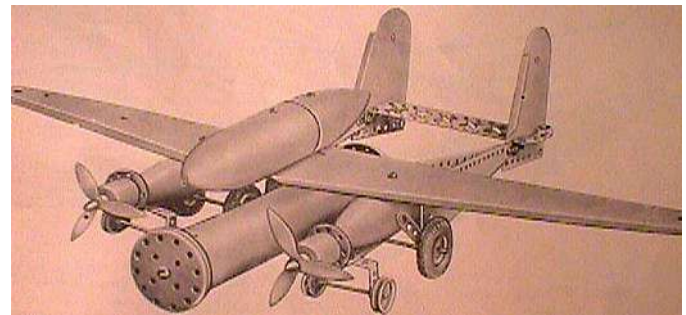
**Sets** The only photo of an IL PICCOLO MECCANICO set, a No.0, is shown atop the next column. FALT can be seen along the bottom of the lid. According to MCS, not all the parts should be in the Set, notably the Tyres, most of the Brackets, & the DAS - and the latter, 2\*5\*2h, are not in MCS at all.



**Manuals** There was no manual with the No.0 but above one for Sets 0-2, another Ebay item. The MCS page right (1/4-scale) is also said to be a manual cover. The Loco is probably a No.4 set model. The MCS model page has the No.4 Lorry below (about 40% f-s).



**FALTERBOT** Photos of the No.5 set are shown in the next column. The wooden box is 50\*35cm in plan and has the **conventional parts** in the bottom. Most are credible but although the 5\*11h Flanged Plate matches the Flanged Disc Pulleys in colour, it could well be a MÄRKLIN part; likewise the Flexible Plates with slotted holes under the blue 5\*7h Flanged



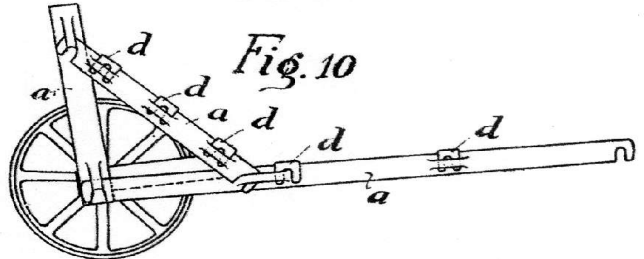
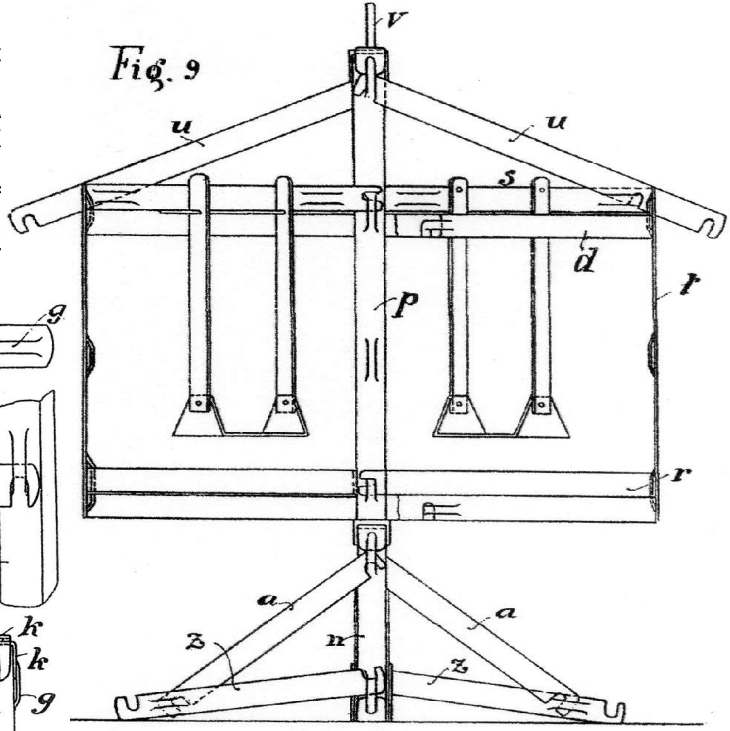
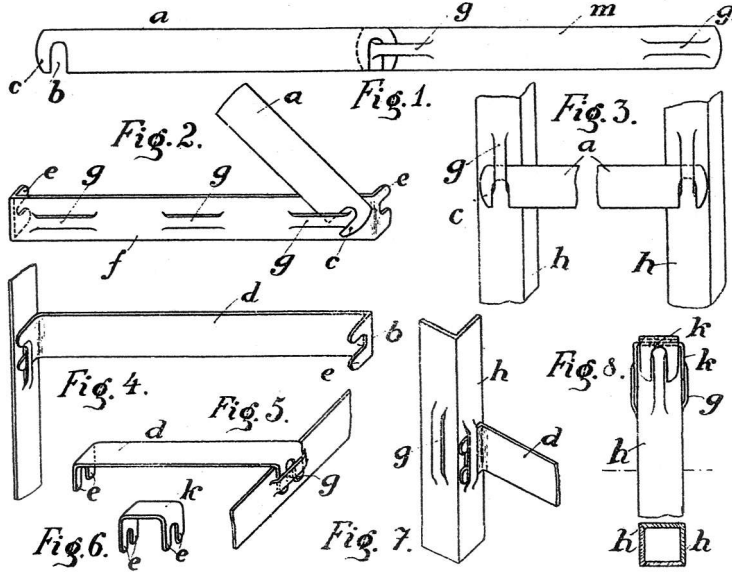
Plates (the blue side of one under the left Flanged Plate & the end of the silver (reverse) side under the right one). The green Braced Girders can just be seen at the back. The **special parts** are tied to, or sit in cutouts in, 2 yellow cards, one shown sitting on top of the bottom parts and the other in the lid. The '3-D' parts are almost certainly wooden, and probably all or most of the '2-D' ones as well. It is clear from the models that the 3-D body with tapered ends on the left is made up of 2 ends and a centre, cylindrical section; perhaps some of the others parts are divided too but what look as if they might be junctions may be cords holding the parts in place.

The **manual** cover, top right, shows a set in the centre of the 5 models and it has the 2 cards with the special parts plus 2 cards of standard parts. The words along the bottom appear to be IL 'FALTERBOT' E ADATTABILE ANCHE SULLE COSTRUZIONI FABBRICATE DELLE MIGNON CASE.

The 4 models shown right are, from top to bottom, Nos.97, 102, 109, & 115 (or 118 possibly) so there may be at least 19 No.5 models, and 4 more of them can be seen on the manual cover. The Ebay ad also mentioned a Seaplane, a Helicopter, & a Race Car. The twin-boom Aeroplane is the model in MCS but there it is a line drawing without a Model No. (it is on a

page numbered 64). There is no indication anywhere of how the wooden parts are held in the models. Standard Brackets could be used in some cases but longer Screwed Rods or the like would also seem to be needed. No doubt the No.5 would have included suitable non-standard parts.

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



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

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

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

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

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

OSN 34/1015

INVENTOR: S2

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



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

OSN 34/1015

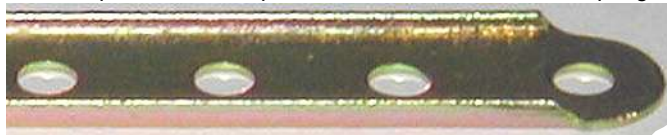
BRAL: S2

**CONSTRUCCIONES METALICAS 'R'** It was explained in 11/296 that CONSTRUCCIONES METALICAS 'R' was a Spanish system, also sold under the name MONTEX. Now Alan Partridge has passed to me some material that he received from a Spanish enthusiast, J. M. Establés Elduque, some years ago - a colour copy of the 'R' manual used for the MCS entry and some notes on the origin of the system. Also David Hobson has lent me his small selection of parts - Strips, a Collar, & some N&B. Thank you to all concerned.

The **manual** has 20 pages (C1+C2+Lámina 1-17+C4) about 16\*23cm, and the front cover is shown right. C2 is blank; pp1-3 has photos of the parts in the Set, their PNs, & quantities (as 4,a,b in MCS), pp 4-17 have 1 model per page, from No.1 Escalera (Step Ladder) to No.14 Noria vertical (Big Wheel, as in MCS); and C4 has only the PR, GRAFICAS OSSO - SAN FELIU DE LL.

The **models** are identical to those on the MONTEX Leaflet but each has a name, number and Parts List. The Crane on C1 is Model 11. Below another Crane and a Lorry, both the original size. The other largish model is a Roundabout with a car swinging under each end of a rotating beam.

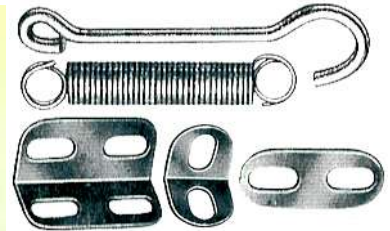
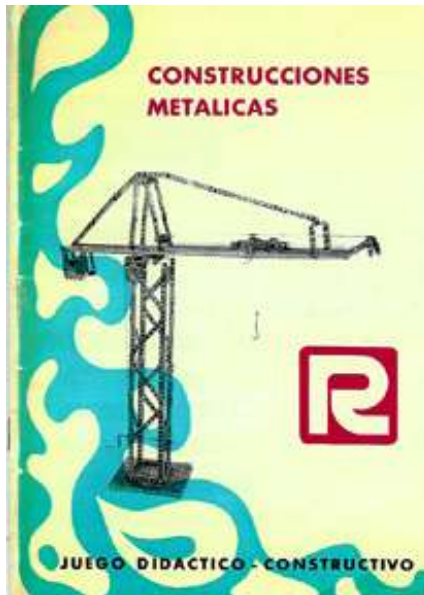
It seems that only one size of set was sold. A list of the 32 **parts** follows, with the quantities, as given in the Manual, in curly brackets, and notes on what is known of the parts. The Manual photos of the parts asterisked are shown top right,



and, above, the end of an actual 10h Strip.

- 13\*7h **Flanged Plate** {2}. • 3,4,5,6,7,8,9,10, 11h **Strips** {16,8,11,15,16,6,6,16,6}. These are made of .80mm thick steel with an iridescent finish. All are 13.9mm wide with flanged edges, 2.6mm deep on the outside. Holes are 4.2mm at 12.7mm pitch.

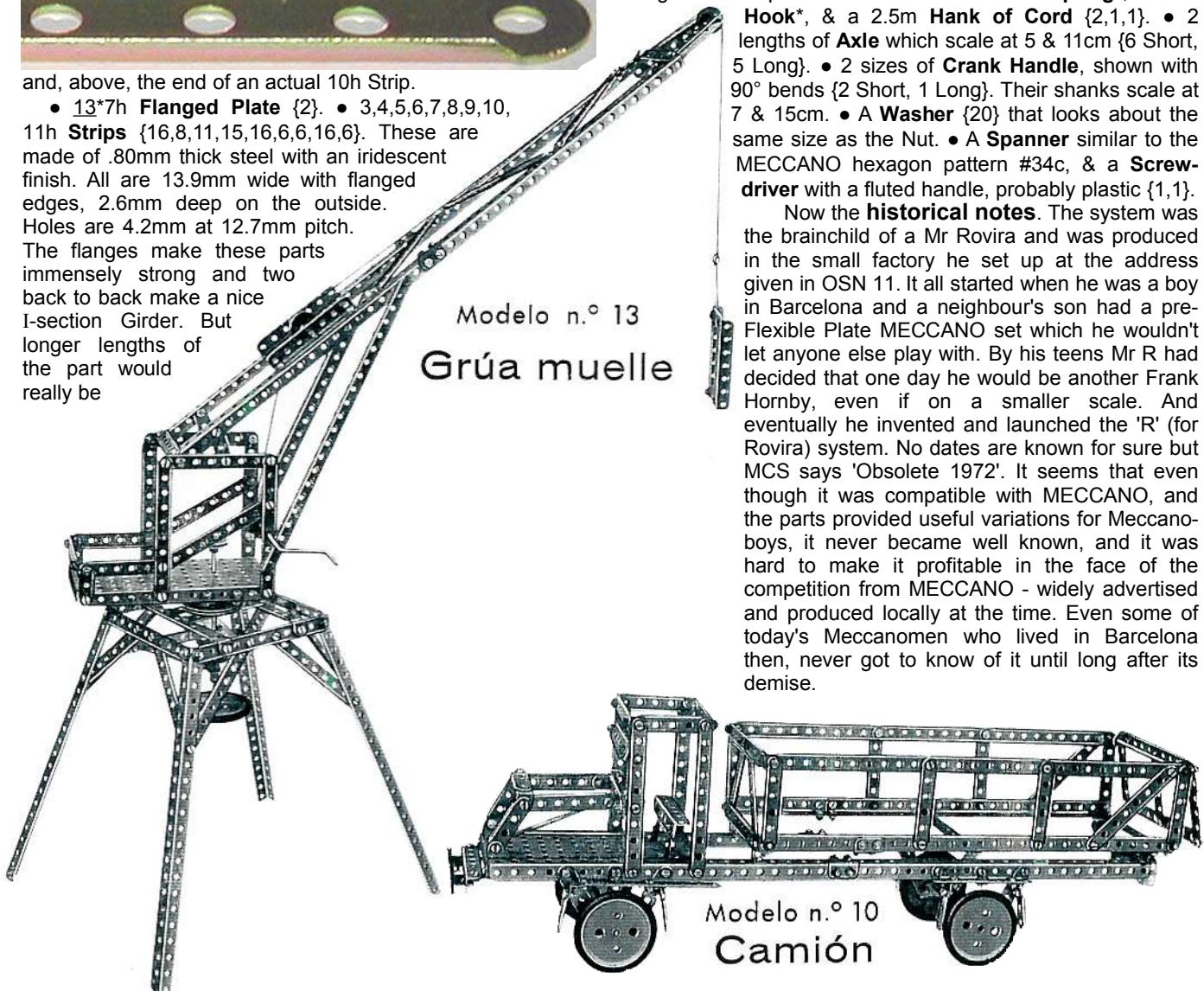
The flanges make these parts immensely strong and two back to back make a nice I-section Girder. But longer lengths of the part would really be



necessary for the larger models in which they would be most useful. The downside of the flanges is that unlike other Strips with strengthened edges, such as MME, ERECTOR, & STOKYS, it would probably not be possible to curve them without distorting the flanges. • 2\*,7,22h **A/Gs** {8,5,14}. The holes in the 7 & 22h are all round. • **Angle\* & Flat\* Brackets** {42,6}. 1" & 2" **Pulleys**, and a **Rubber Ring** for the 2". {10,4,4}.

- BZP steel, M4 **N&B**. The **Bolt** has a 7.0mm Ø, 3.0mm thick CH, and is 6mm u/h; the **Nut** is hexagonal, 7.0mm A/F, and also 3.0mm thick. {170,170}. • A **Collar**, brass, 9.0mm o.d, 4.0mm bore, 7.0mm wide, & single-tapped. The **Set Screw** is iridescent steel, 7½mm u/h, with a 5.6mm Ø mushhead, and seems to be ¼" BSW but is very tight to screw in. Its finish matches the Strips but given that the N&B are BZP & M4, confirmation that the Collar & Set Screw are genuine 'R' parts is needed. • A **Tension Spring\***, a **Wire Hook\***, & a 2.5m **Hank of Cord** {2,1,1}. • 2 lengths of **Axle** which scale at 5 & 11cm {6 Short, 5 Long}. • 2 sizes of **Crank Handle**, shown with 90° bends {2 Short, 1 Long}. Their shanks scale at 7 & 15cm. • A **Washer** {20} that looks about the same size as the Nut. • A **Spanner** similar to the MECCANO hexagon pattern #34c, & a **Screw-driver** with a fluted handle, probably plastic {1,1}.

Now the **historical notes**. The system was the brainchild of a Mr Rovira and was produced in the small factory he set up at the address given in OSN 11. It all started when he was a boy in Barcelona and a neighbour's son had a pre-Flexible Plate MECCANO set which he wouldn't let anyone else play with. By his teens Mr R had decided that one day he would be another Frank Hornby, even if on a smaller scale. And eventually he invented and launched the 'R' (for Rovira) system. No dates are known for sure but MCS says 'Obsolete 1972'. It seems that even though it was compatible with MECCANO, and the parts provided useful variations for Meccano-boys, it never became well known, and it was hard to make it profitable in the face of the competition from MECCANO - widely advertised and produced locally at the time. Even some of today's Meccanomen who lived in Barcelona then, never got to know of it until long after its demise.



## METALLO TECHNIC

by Jacques Pitrat

METALLO-TECHNIC (the words are sometimes hyphenated) is a French system which was made in Lyon by C.A.D. No more details of the company are available, nor any dates, but as there is a model called Jeeps (sic! - it is shown on the facing page) I assume the system was made just after WW2.

This account is based on a set, still strung, and with Model Sheets for Sets 3, 4 & 5. The box, 365\*310mm, has no indication of the Set's size but it is almost certainly a No.3: it has all the parts needed for the Set 3 models but not enough for those of Sets 4 & 5. Below the centre of the lid with label 240\*185mm and the open box.



The principle of construction of the models is to use the formed edges of the Goussets (Clamping Plates, left) to clamp pairs of Tiges (Rods) onto flat Supports (Strips, Brackets, or a large Washer), by tightening down with a central Nut & Bolt.

There follows a list of all known **parts** with the quantities in Sets 3, 4 & 5 indicated by a/b/c. For Set 3 they are the number of parts in the box; the others are the maximum called up in the Model Sheets - also I assume that each set has at least as many parts as the one lower. Of course there may be more parts in Sets 4 & 5. [Also included below, in square brackets, a few additional details from some sample parts kindly sent to me once by Jeannot Buteux - Ed.]

The main constructional part is the steel **Tige (Rod)**. Its diameter is 3mm. The sizes are: 350mm: 0/0/8; 250mm: 0/4/

20; 200mm: 4/4/9; 175mm: 8/8/8; 150mm: 8/8/8; 125mm: 4/8/8; 100mm: 4/6/12; 75mm: 4/10/12; 50mm: 14/14/14; 25mm: 0/6/8. [The sample Rods have a light grey rust resistant finish.]

There are 3 other 'rod' parts. • A **Manivelle (Crank Handle)**: 1/2/3. [65mm long o/a.] • 4x 200mm **Anneaux** in Set 5. I assume that they are rods near 500mm long bent so that they form a U, 200mm high. They are only used in the Eiffel Tower model (right). • 4x 50mm **Tiges d'Angle (Bent Rods)**. I was not able to find them in the models. [It is a 50mm Rod angled through 30° half way along.]

The main connecting part is the **Gousset (Clamping Plate)**: 36/48/116. • The steel **Supports** that are used with it are listed below. They are 16mm wide with 3.1mm holes spaced at 20mm centres. This last value is not important because these parts are rarely used as normal Strips, etc.

**Support 1 trou (16mm Ø Washer)**: 8/8/28.

**Support 2,3,4,5 trous (2,3,4,5h Strips)**: 6/6/16; 4/4/16; 0/0/2; 0/0/2.

**Support équerre 2 trou (A/B)**: 10/12/16.

**Support U 3 trous (Double Bracket)**: 4/4/6.

**Support U S 5 trous (Double Bracket 2\*1\*2h)**: 2/4/4.

**Support U 5 trous (DAS 1\*3\*1h)**: 1/3/4.

**Boulons (Bolt, used to denote N&B in the models' parts required.)** The small part box in my set is still sealed so I have no information on their size and the real number in the set; the numbers used in the models are 34/49/118. [The **N&B** are steel; the thread 3mm Ø x .6mm pitch. The **Bolt** has a 5.6mm Ø roundhead & is 6½mm u/h; the **Nut** is machined, 5.0 mm A/F & 3.1mm deep.] • **Pince (Spring Clip)**: 2/2/4; they are on the Screwdriver blade in the Set. • A wire **Hook** is shown in Crane models but isn't listed in the Parts Required.

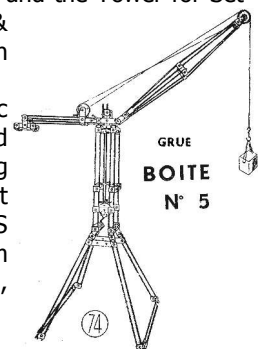
**Roues (Pulleys)**: 6/8/8. There are two kinds in Set 3: 4 with a boss & 2 without, both 29mm Ø. The bossed type is double-tapped; the 'without' is made from 2 pressed discs joined by 2 rivets and it is obliquely tapped through the belled centre. From the model drawings I think the Bolts are used as Set Screws. • A rubber **Tyre**, not shown in the models. There are 4 in Set 3. [Only the Bossed Pulley has been seen. It is die cast, probably zinc, with an integral, 9mm Ø, double-tapped boss with the same thread as the N&B. The Tyre on it is a light brown rubber ring, 41½mm Ø & 7mm wide.]

A **Screwdriver** with a red wooden handle and a steel **Spanner** with two ends. It has 5mm wide jaws at one end, which would fit the Nut, but 4mm at the other - perhaps it was a commercial item made for some other purpose.

[**Colours** The 4 & 5h Strips are green, the other parts can be seen in the box, though the sample 2h high D/B is red. Compared to MECCANO the green paint is similar to the late 1920s shade and the red is like the 1950s colour.]

The **Model Sheets** are 238\*312mm and they are folded in two. There is one sheet for Set 3 with 5 models, one sheet for Set 4 with 5 models, and 2 sheets for Set 5 with 8 models. There were no model sheets for Sets 1 or 2, but it is likely they exist. A selection of the models are shown on the next page at about ¾ their original size. The Gantry Crane is for Set 3, the Jeep & the Crane Wagon are for Set 4, and the Tower for Set 5. The Crane, 4-Engined Monoplane, & Railway Bogie Wagon in MCS are also on the No.5 Sheets.

Many of the models are not realistic due to the lack of Flexible Plates and they are not mechanically interesting since there are no Gears. The best model is probably the Crane in MCS (right). For these reasons this system was not likely to have been a success, and it is extremely rare to find a set.



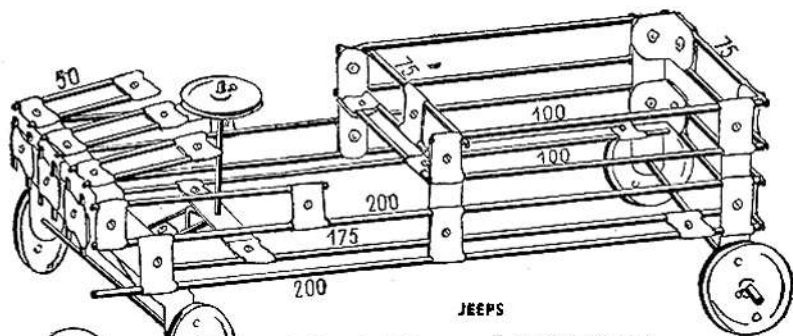
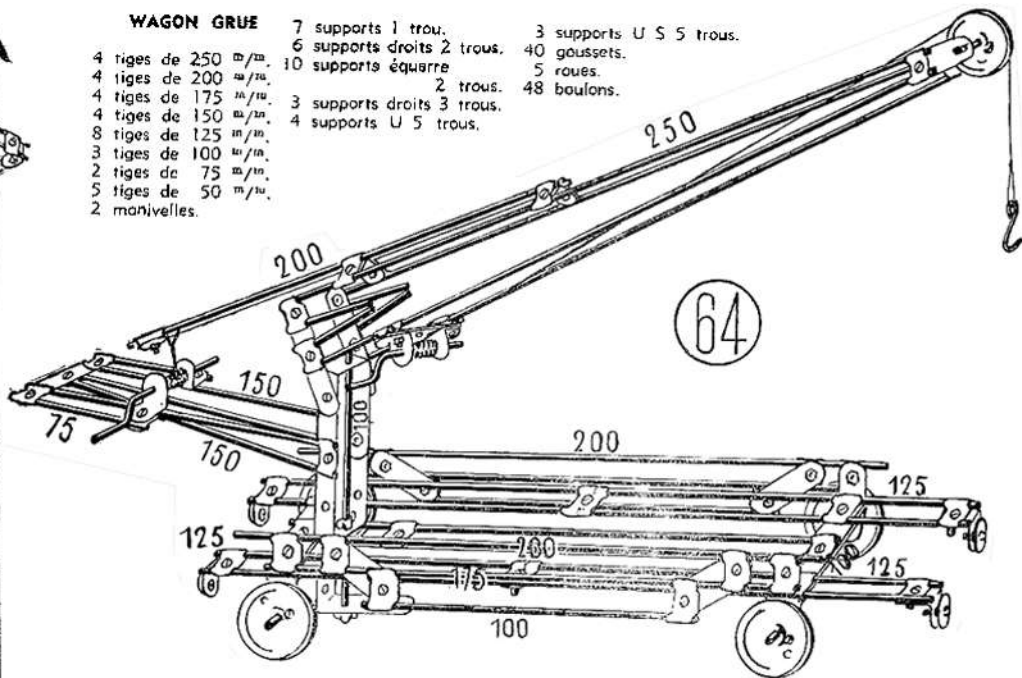
**WAGON GRUE**

- 4 tiges de 250 m/m.
- 4 tiges de 200 m/m.
- 4 tiges de 175 m/m.
- 4 tiges de 150 m/m.
- 8 tiges de 125 m/m.
- 3 tiges de 100 m/m.
- 2 tiges de 75 m/m.
- 5 tiges de 50 m/m.
- 2 manivelles.

- 7 supports 1 trou.
- 6 supports droits 2 trous.
- 10 supports équerre
- 2 trous.
- 3 supports droits 3 trous.
- 4 supports U 5 trous.
- 3 supports U 5 trous.
- 40 goussets.
- 5 roues.
- 48 boulons.

**TOUR EIFFEL**

- 8 tiges de 350 m/m.
- 20 tiges de 250 m/m.
- 4 tiges de 200 m/m.
- 8 tiges de 125 m/m.
- 12 tiges de 100 m/m.
- 12 tiges de 75 m/m.
- 12 tiges de 50 m/m.
- 4 tiges d'angle 50 m/m.
- 4 anneaux de 200 m/m.
- 28 supports 1 trou.
- 16 supports droit 2 trous
- 16 supports équerre
- 2 trous.
- 12 supports droits 3 trous.
- 2 supports U 3 trous.
- 2 supports droits 4 trous.
- 2 supports droits 5 trous.
- 116 goussets.
- 118 boulons.



**JEEPS**

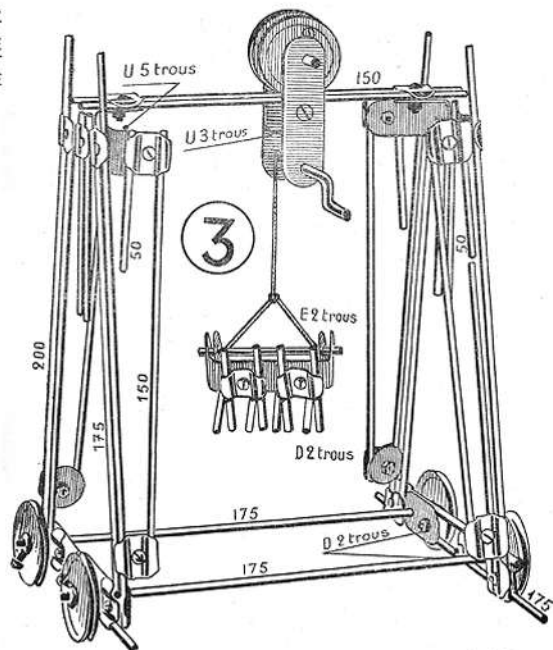
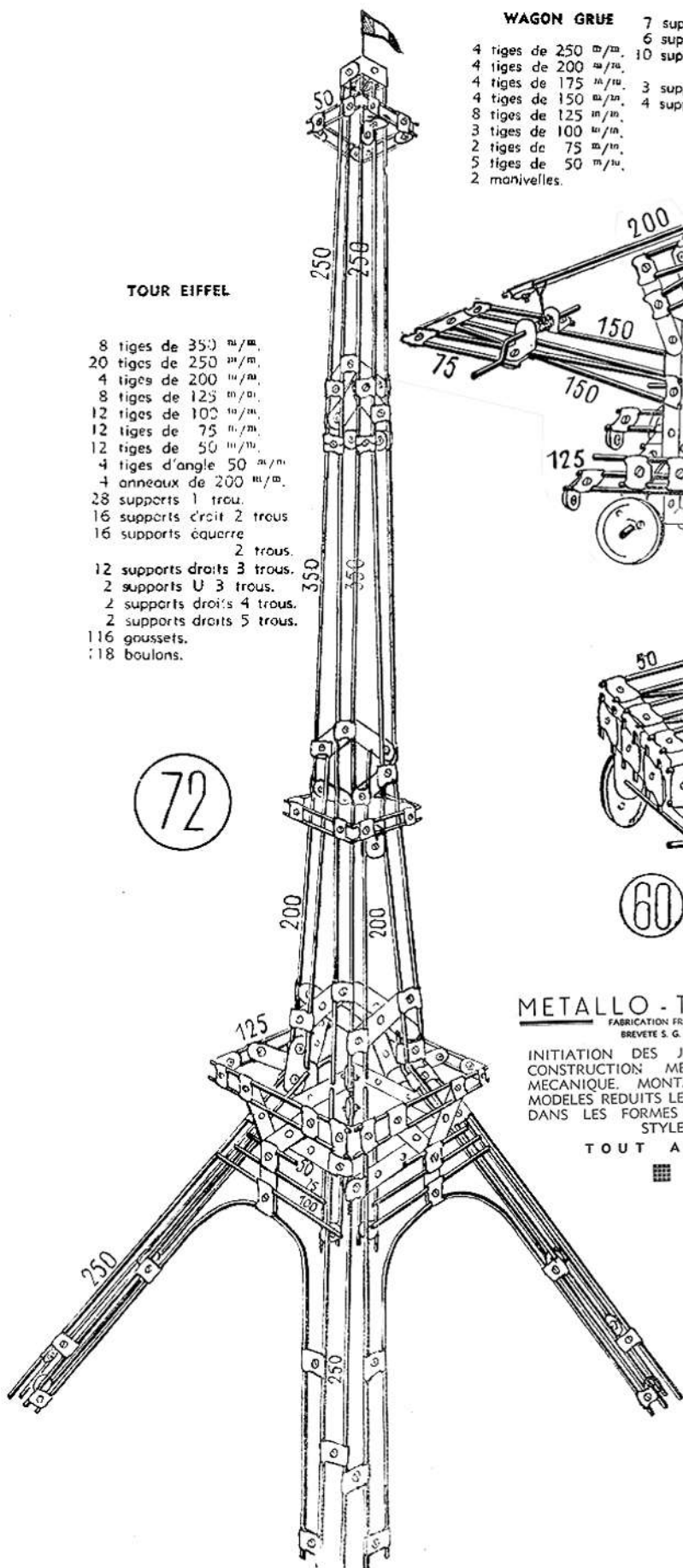
- 4 tiges de 200 m/m.
- 2 tiges de 175 m/m.
- 6 tiges de 100 m/m.
- 7 tiges de 75 m/m.
- 10 tiges de 50 m/m.
- 6 tiges de 25 m/m.
- 1 manivelle.
- 7 supports 1 trou.
- 7 supports équerre
- 2 trous.
- 6 supports droits 2 trous.
- 3 supports droits 3 trous.
- 4 supports U 3 trous.
- 3 supports U 5 trous.
- 35 goussets.
- 5 roues.
- 36 boulons.

**METALLO-TECHNIC**

FABRICATION FRANÇAISE  
BREVETE S. G. D. G.

INITIATION DES JEUNES A LA  
CONSTRUCTION METALLIQUE ET  
MECANIQUE. MONTAGE AISE DE  
MODELES REDUITS LE PLUS PARFAIT  
DANS LES FORMES ET DANS LE  
STYLE

TOUT ACIER



**PORTIQUE**

- 4 tiges de 200 m/m.
- 8 tiges de 175 m/m.
- 6 tiges de 150 m/m.
- 2 tiges de 125 m/m.
- 1 support droit 3 trous.
- 1 support U 3 trous.
- 2 supports U 5 trous.
- 32 goussets.
- 30 boulons.
- 6 roues.
- 4 ressorts.

**METALLO-TECHNIC**

MÉTALLO-TECHNIC BREVETE S. G. D. G.  
FABRICATION FRANÇAISE  
C. A. D. — LYON

**More on GENIAL** The possibility of two types of GENIAL was noted in 31/937 and now one of the non-DUX sets has come to hand. It is a No.2, the largest made, and although it has been used it is virtually complete. GENIAL is quite a small system but some of its 67 different parts are rather unusual. Neither the set nor its manuals give any information about the



maker but the heading of a flyer that was with the set, below, 50% f-s, has the address and a new phone number rubber-stamped on. It also includes an announcement of a competition with a closing date of March 1952. The covers of the 3 manuals with the Set have 'PAT ANG' on their front covers. Incidentally 'genial' in German doesn't mean what it does in English, my dictionary says 'ingenious, inspired, brilliant'.

**PARTS** The Illustrated Parts from the 3 manuals are shown across the bottom of the page. Those in the No.0 are above the red line; the additional ones in the No.1 are between the red & blue lines; & the remainder are only in the No.2. For the No.2, the Gear #59 is incorrectly shown as #57. The Set Contents on the next page lists the parts in numerical order, and some notes on all of them follow.

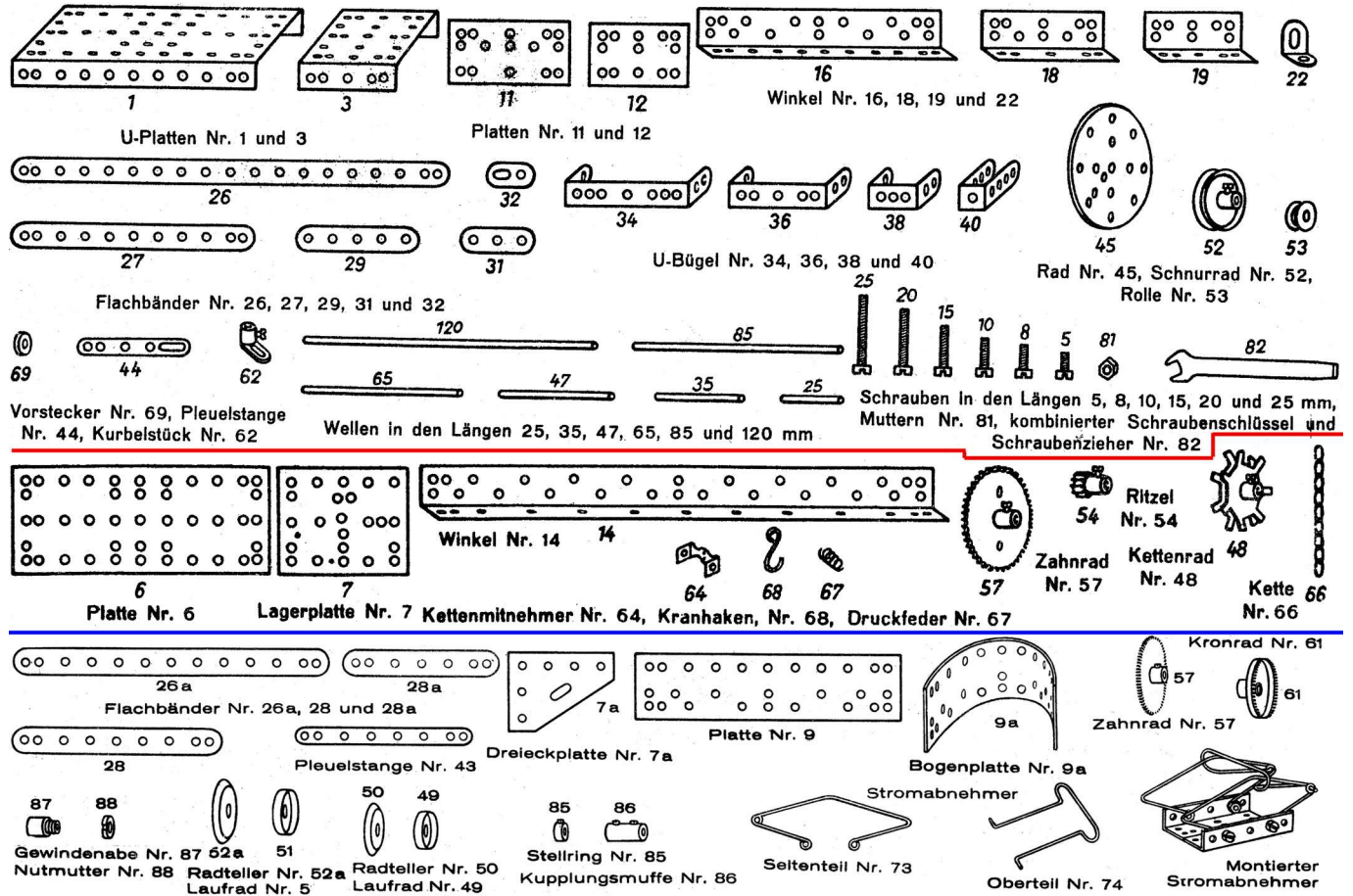
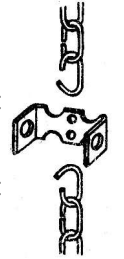
• **Materials.** Except as noted, steel. • **Holes** are 3.3mm Ø, and the basic hole pitch is 10.0mm; a good many though are at 5 or 20mm. • **Thread:** M3, but 2.6x.45mm in some 6mm Ø bosses. • **Bosses** are brass, most 8mm Ø but where noted 6mm, 3.2mm bore, single-tapped and with a very, very narrow ring of peening. • **Colours.** Most parts are blued to almost black but the Corner Bracket #7a is light green, and the Flanged Plates, the Plate #6, & most circular parts are light red - exceptions are noted below. • #1,3 **Flanged Plates**, 60\*100,40mm. #6,7,9,11,12 **Flat Plates** 40\*100,50; 25\*100, 50,40mm. #9a **Formed Plate** 25\*100mm. #7a **Corner Bracket** 40\*30mm. The two dots in the drawing of the #7

40\*50mm Plate are small holes, 1.2 & 1.5mm Ø, purpose unknown. Also the holes on or near the shorter centre line of this part are not at standard spacing, they are, as explained later, to suit the Gears. • #14,16,18,19 **A/Gs**, 15\*10mm in section, & 200,100,50,40mm long. • #22 **A/B**, 9\*12\*10mm wide with a 7½mm slot, and #32 **Flat Bracket** made from it.

• #26,26a,27,28,28a,29,31 **Strips**, 10mm wide & 170,110, 90,70,60,50,20mm long. #43,44 **Narrow Strips**, 6mm wide and 60,35mm long. Strip lengths are between end hole centres. • #34,36,38,40 **DAS**. All have at least 2 holes in their lugs, and all at are 5mm pitch. #45 **Disc**, 50mm Ø. The 'extra' holes are to allow the Crank #62 and other parts to be bolted to it. • #48 **Chain Wheel** with red painted aluminium discs, 30mm across the 'spikes'. Two have 6mm Ø bosses and one an 8mm. #66 **Chain** (right) with steel links a little over 5mm long o/a



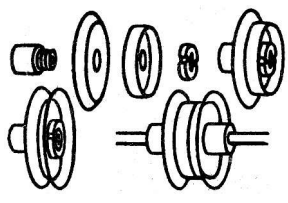
& made of .8mm wire. As can be seen above, horizontal links sit on the lands between the spikes while the lower part of the vertical links drop into the groove between the two discs. The Chain runs surprisingly well, at least at the lowish speeds I've tried. Only 35cm of Chain was left in the Set. #64 **Kettenmitnehmer** (Chain Carrier Link) is shown right; it is 11mm across, 6mm wide, & the large side holes take a Bolt or Axle. In the manual models it used with Cord rather than Chain, usually with a Strip bolted to one of the lugs which pulls, pushes, or steadies a moving part. How successful that would be I'm not sure. The Link wouldn't ride around the Chain Wheel of course but it probably would around a Pulley, though it doesn't need to in the manual models. • #52 **Pulley** is 25mm Ø with a 4½mm wide vee. Some of those in the Set have come apart and the centre hole in the discs is 4.1mm Ø. #53 **Loose Pulley** is brass, 10mm Ø





Nr.	Bezeichnung	0	1	2
1	U-Platte . . . . .	1	1	2
3	U-Platte . . . . .	2	2	4
6	Platte . . . . .	-	2	2
7	Lagerplatte . . . . .	-	2	4
7a	Dreieckplatte . . . . .	-	-	4
9	Platte . . . . .	-	-	2
9a	Bogenplatte . . . . .	-	-	2
11	Platte . . . . .	2	2	8
12	Platte . . . . .	2	2	8
14	Winkel . . . . .	-	4	6
16	Winkel . . . . .	2	4	8
18	Winkel . . . . .	2	4	8
19	Winkel . . . . .	2	4	8
22	Winkelstück . . . . .	6	10	16
26	Flachband . . . . .	2	2	4
26a	Flachband . . . . .	-	-	4
27	Flachband . . . . .	2	2	8
28	Flachband . . . . .	-	-	8
28a	Flachband . . . . .	-	-	4
29	Flachband . . . . .	2	2	8
31	Flachband . . . . .	4	4	10
32	Flachband . . . . .	4	6	10
34	U-Bügel . . . . .	2	2	4
36	U-Bügel . . . . .	2	2	4
38	U-Bügel . . . . .	2	2	4
40	U-Bügel . . . . .	1	1	2
43	Pieuelstange . . . . .	-	-	4
44	Pieuelstange . . . . .	2	4	8
45	Rad . . . . .	1	1	2
48	Kettenrad . . . . .	-	2	2
49	Lauftrad . . . . .	-	-	4
50	Radteller . . . . .	-	-	4
51	Lauftrad . . . . .	-	-	4
52	Schnurrad . . . . .	4	4	4
52a	Radteller . . . . .	-	-	8
53	Rolle . . . . .	1	1	2
54	Ritzel 15 Zähne . . . . .	-	1	3
57	Zahnrad 60 Zähne . . . . .	-	-	1
59	Zahnrad 80 Zähne . . . . .	-	1	1
61	Kronrad 45 Zähne . . . . .	-	-	1
62	Kurbelstück . . . . .	3	4	6
64	Kettenmitnehmer . . . . .	-	2	2
66	Kette . . . . .	-	1	2
67	Druckfeder . . . . .	-	2	5
68	Kranhaken . . . . .	-	1	1
69	Vorstecker . . . . .	15	25	30
73	Stromabnehmer Seitenteil . . . . .	-	-	4
74	Stromabnehmer Oberteil . . . . .	-	-	2
85	Stelling . . . . .	-	-	2
86	Kupplungsmuffe . . . . .	-	-	1
87	Gewindenabe . . . . .	-	-	4
88	Nutmutter . . . . .	-	-	4
25	Welle 25 mm lang . . . . .	2	2	3
35	Welle 35 mm lang . . . . .	2	2	3
47	Welle 47 mm lang . . . . .	2	2	4
65	Welle 65 mm lang . . . . .	2	2	4
85	Welle 85 mm lang . . . . .	1	1	4
120	Welle 120 mm lang . . . . .	1	1	1
185	Welle 185 mm lang . . . . .	-	-	1
5	Schraube 5 mm lang . . . . .	27	35	130
8	Schraube 8 mm lang . . . . .	6	6	8
10	Schraube 10 mm lang . . . . .	4	5	10
15	Schraube 15 mm lang . . . . .	6	7	9
20	Schraube 20 mm lang . . . . .	2	2	3
25	Schraube 25 mm lang . . . . .	2	2	3
81	Mutter . . . . .	47	68	150
82	Schraubenschlüssel . . . . .	2	2	2
	Vorlage Nr. 0 . . . . .	1	1	1
	Vorlage Nr. 1 . . . . .	-	1	1
	Vorlage Nr. 2 . . . . .	-	-	1

& 4mm wide. ● #54 **Pinion**, 15t, brass, 8½mm o.d., 3mm wide face. #57,59 **Gears**, 1½mm wide aluminium discs, 60,80t, and 31,41mm o.d. There are no holes in either disc. They are Mod.5 (51 DP), and do not mesh at standard spacing, even using the 5mm pitch holes. The approximate centres for the 15/60t & 15/80t combinations are 19 & 24mm, and the non-standard holes in the Plate #7 provide these spacings. #61 **Contrate**, brass, 45t, 51mm o.d. ● #25,35,47,65, 85,120,185 brass plated steel **Axles** with sheared ends and as long in mm as the PN. Different examples vary from 3.08 to 3.18mm Ø and some are slightly oval. ● #62 **Crank**. The arm is 6mm wide and has a 9mm slot. The boss is 6mm Ø. 3 of the 6 have nicked arms. ● #67 **Compression Spring**, 4½mm Ø, 8 to 9mm long, and wound from ½mm wire. ● #68 **Hook**. 1mm plain steel wire, flat, 21mm o/a. ● #69 **Axle Stop** is pressed from light brown fibre, 8½mm Ø & 2-2½mm wide. ● #73,74 are the side & swinging top of an imitation loco **Current Pick-up**. They are of 1.2 & 1mm copper plated wire respectively. ● #85 **Collar** is brass, 8mm Ø & 5mm wide. ● #86 **Coupling** is brass, 8mm Ø & 15mm long, with the two tapped holes at about 8mm centres. ● #87 **Threaded Hub**, 8mm Ø, 10mm long o/a with 3½mm threaded M5. #88 **M5 Nut**, 2½mm thick, 8mm Ø with indentations both side to match the width of the Span'driver jaws. The Hub can take suitable combinations of #50, 52a **Pulley Discs** 20,25mm Ø (the 20mm is plain brass; the 25mm is steel painted red on the concave side only), and #49,51 plain aluminium **Wheel Flanges** 15,20mm Ø, 5½, 6mm wide. Examples are shown right. All these parts have a 5.5mm centre hole. ● #5,8,10,15,20,25 **Bolts** have a 5.5mm Ø cheesehead and are as long u/h as the PN in mm. #81 pressed **Nut** is hexagonal. 5.5mm A/F & 1.7mm thick. All the N&B are bright steel. ● #82 **Span'driver**, 65mm long and 1mm thick.

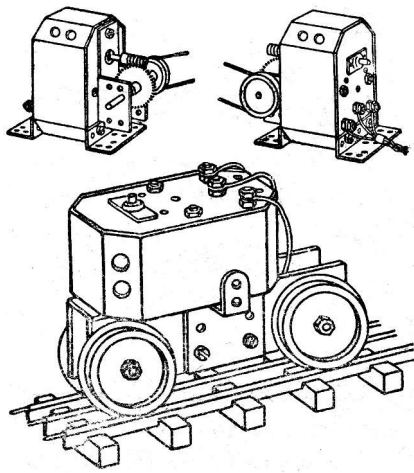


**SETS** The No.2 manual described later has the Set Contents for Nos.0,1,2 & linking sets 0A,1A: these with the 'A' sets omitted are shown left.

The box is a similar orange to the one on the right in OSN 31 and its outside paper covering is printed with manual models at reduced scale. It measures 35\*27¾\*6¾cm and one long side folds down to ease access to the 2 trays inside. These are cream, and pierced with small holes for clips and/or cord to hold the parts. The lower one sits on 6 cream 2½cm deep trays glued down around 3 sides of the bottom of the box. Perhaps a card occupied the remaining rectangular space. The label, 24¼\*19cm, is also similar to the OSN 31 example but has a dark brown ground; it is 'signed' ATELIER JANKOWITZ JA along the top right side. There is a round '2' sticker on the right edge of the lid.

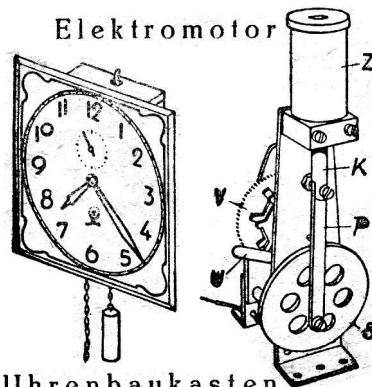
The **Flyer** lists the Sets 1-3, 0A, 1A, and also an add-on Nr. EE outfit. This allows Gauge 0 electric Locos and additional rolling stock to be built (perhaps adaptations of manual models). A springy Current Collector is mentioned, also plastic Wheels & normal Axles. A Motor & Track are referred to but it's not clear to me if they are included in the Set - they are listed separately later in the flyer.

The 20v, 1 amp Motor (E-Bau) for use with the standard Sets is shown right. It is fitted with a 40:1 worm reduction, and (I think) remote control (fernumschaltbar). A Motor Unit, ETW 32, (right) is specifically intended for Gauge 0 Locos built from the standard sets. It looks to be based on the E-Bau but has a 20:1 reduction. The wheels are brass and the axles silver steel. Plastic wheels fitted to axles are also listed, 21mm Ø for Wagons & 25mm for Locos.



Various parts for the hobbyist were available including all those in the Sets; additional Gears with 10, 45, 48, & 75t; a Mod.7 Worm with

20 & 40t Worm Wheels; and Wheels with Tyres.



Various Transformers were listed, PN 80, 201, & 200. Also Sets to build a weight-driven Clock (14 hour run) and a Solenoid Motor (8v, 1 amp, to power small models). The illustrations of these are shown left - there is no mention of the use of standard parts in them but perhaps some of the Gears were used in the clock, & the Gear V in the Motor looks to be on the same shaft as a Chain Wheel.

Another, similar flyer has been seen on Ebay, but the EE set isn't listed in it. A competition is advertised but the closing date can't be read. The telephone number in the heading can't be seen clearly either but is probably the 'old' one and there is no rubber-stamped 'new' one. So it may be an earlier issue.

**MANUALS** All the covers are similar in design to the lid label except that they are printed in two colours with no red, and have the set number in the bottom right corner. All have a brown ground with the light colour pale green for the Nr.0, pale blue for the Nr.1, and beige for the Nr.2. The printer's name, Liepolt Fally, Wien, is on the back cover.

**The Nr.0** has 12 unnumbered pages plus covers, 295\*210mm. C2 has an Intro, and the Illustrated Parts & Set 0 Contents. pp1-12 have 55 models starting with 2 groups of 4 on p1 under the general heading LEHRMODELLE: Abb.1-8, Schnurantriebe (Cord Drives) & Flaschenzüge (Pulley Blocks). The models that following are 9. Karren (Cart) on p2, to 56. Dekupiersäge (Fretsaw Machine?) on p12. Also on that page one Nr.1 model, 106. Lastaufzug (Load Elevator). C3 has 11 basic constructions and C4 is blank apart from the printer's name. The models are shown as line drawings with auxiliary views in many cases, and with a little explanation for a few. There is a good selection of quite attractive little models with some emphasis of items of furniture, 6 including a Grand Piano; railway models, 8 including 5 Wagons; and machine tools, 14 in all. Unlike the other manuals no mention is made of the 'A' sets.

**The Nr.1** has 8 unnumbered pages plus covers, 295\*206mm. C2 has the Illustrated Parts for Set 0A, & the Contents of Nos.0,0A,1. Also on this page 3 Lehrmodelle 101-103 for Chain Drives. pp1-8 have 14 models from 107. Flugzeug (Aeroplane) to 120. Automatische Druckmaschine (Automatic Printing Machine). Again the models are shown as line drawings but this time with many auxiliary views & more explanation - on C3 for models 116,117,119,120. C4 is as the Nr.0. Again there is a good selection of models of all types, some more complicated mechanically than would be expected for this size of set.

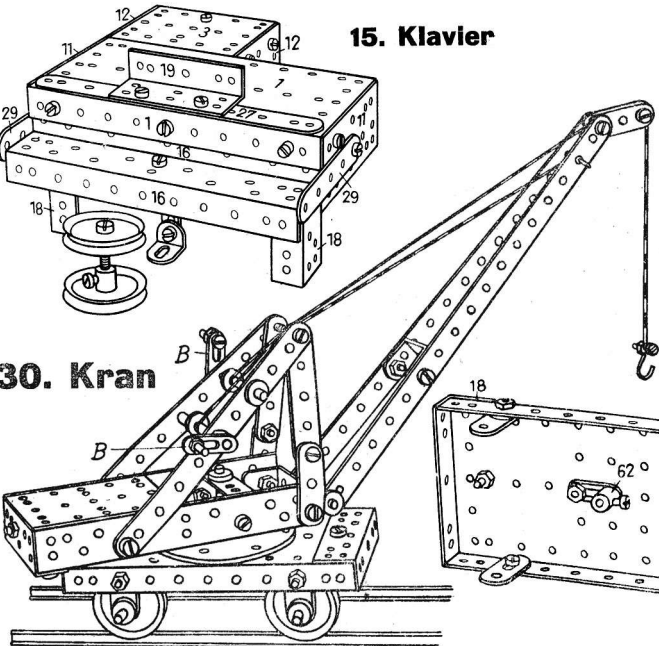
**The Nr.2** has 8 pages plus covers, 290\*203mm. C2 has an the Illustrated Parts for Set 1A, & the Contents of the 5 Sets 0-2. Also on this page, how to make pulleys & flanged wheels using the Threaded Hub etc. pp1-8 have 12 models from 201. OFFENER GÜTERWAGON (Open Goods Wagon) to 212. GREIFBAGGER (Grabbing Crane), on pp6-8. The presentation is as before but with many more auxiliary views (22 for the Greifbagger). All the explanatory notes are on C3. C4 has an ad for the Nr.200 Transformer and its use with the E-Bau Motor and toy railway track. 8 of the models are Rolling Stock including 2 Electric Locos and 2 Passenger Coaches. The others are a Loading Machine, a Tram, a Lifting Bridge, and the Grabbing Crane. All are attractive looking and the last four are quite complicated.

Right & on the next page, a selection of the models.

**Another Look at OSN 31**

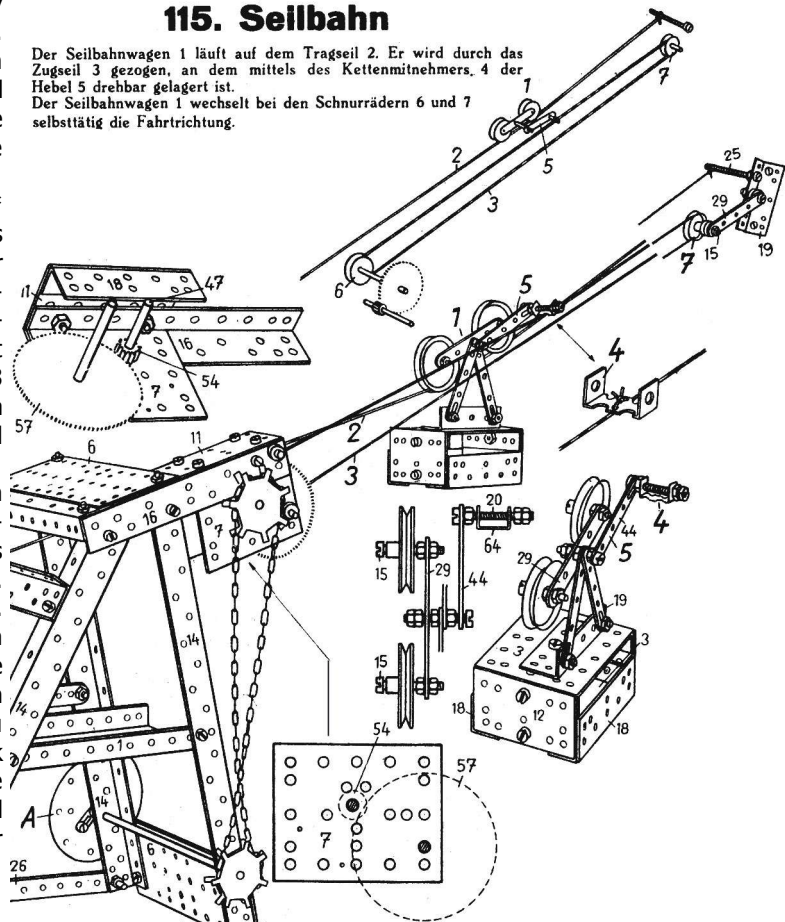
Now that details of the present No.2 are known it is virtually certain that there was no DUX connection. The lefthand set in OSN 31 looks like the remains of a GENIAL & a DUX outfit in a GENIAL box. The 2 manuals with the Set support this. Also it can be seen that the basic pitch of DUX holes is 15mm against 10mm for GENIAL.

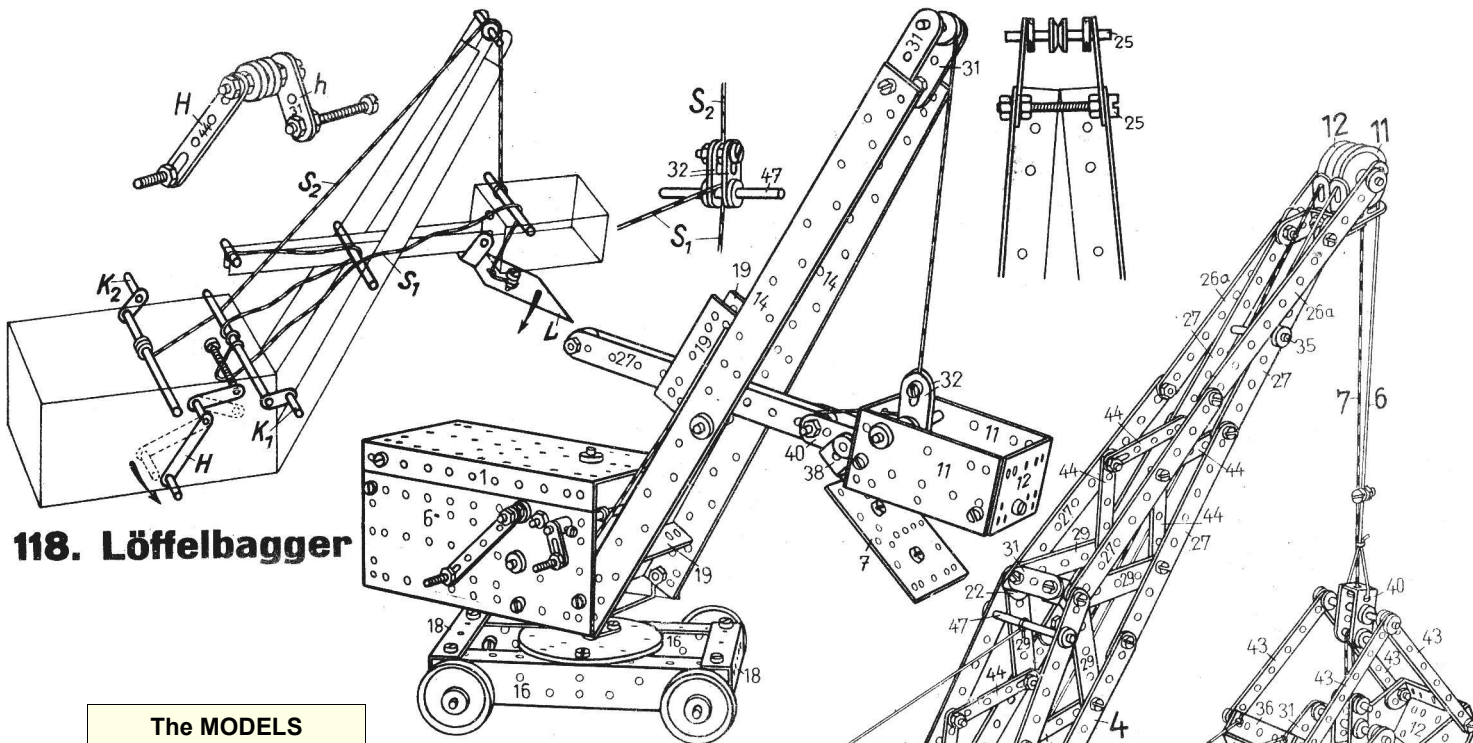
The cover of the GENIAL manual in OSN 31 is quite different to the ones with the No.2, and from its appearance it looks to be later. That would place it beyond 1952 if the Flyer was current when the No.2 was made. If the colours of the models on the OSN 31 cover are correct some parts were white at the time, the door (Plate #11) & bonnet side (A/G #18) on the (No.0) Lorry for instance.



**115. Seilbahn**

Der Seilbahnwagen 1 läuft auf dem Tragseil 2. Er wird durch das Zugseil 3 gezogen, an dem mittels des Kettenmitnehmers, 4 der Hebel 5 drehbar gelagert ist. Der Seilbahnwagen 1 wechselt bei den Schnurrädern 6 und 7 selbsttätig die Fahrtrichtung.





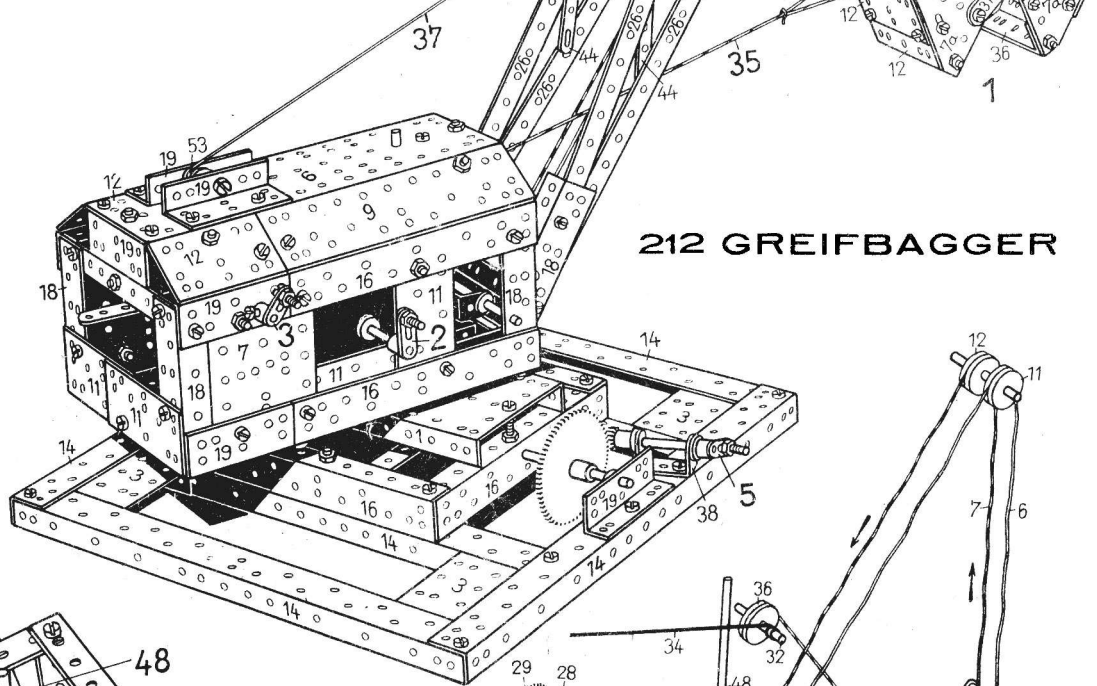
### 118. Löffelbagger

#### The MODELS

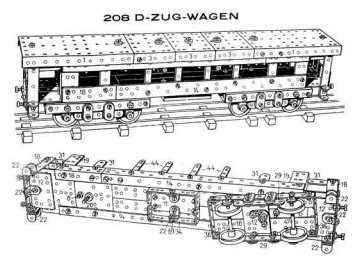
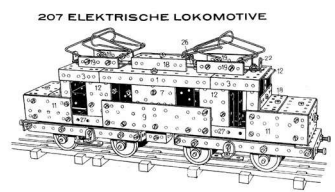
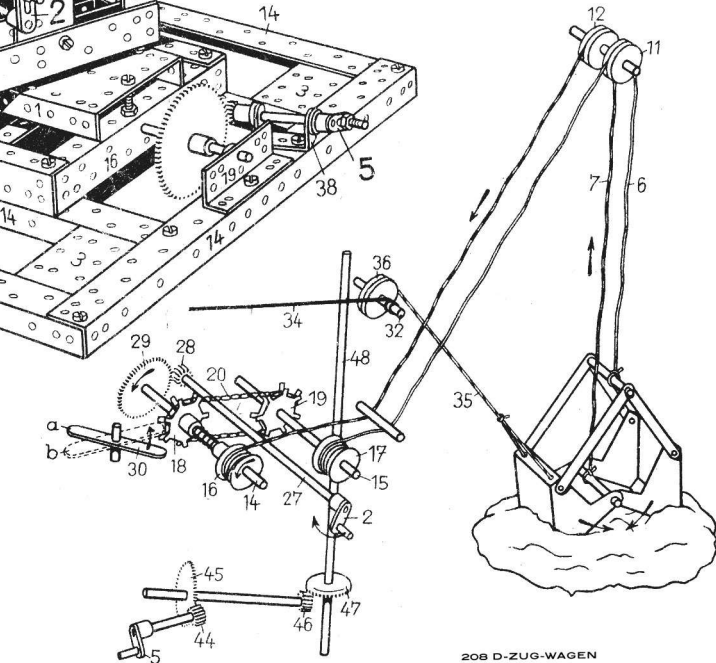
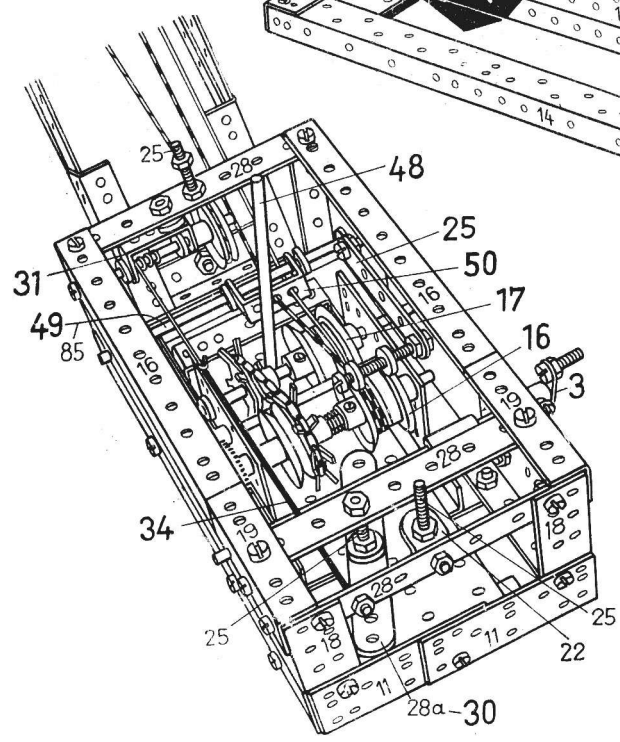
Left are No. 15 (65% f-s) & 30 (90% f-s), both from the No.0 Set. Also parts of the No.1 Seilbahn (f-s) to show one use of #64 Chain Carrier Link.

On this page the No.1 Set 18 & the No.2 set 212. In both only a selection of the manual figures are shown (all f-s). In the bottom right corner are thumbnails of 2 other No.2 models (35% f-s), which don't do the models justice.

The small numbers on the models are PN's; the larger ones refer to the instructions.



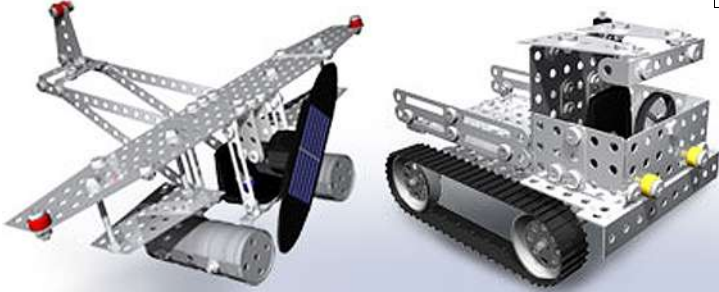
### 212 GREIFBAGGER



**CONSTRUCTION in 2005** First thanks to all who sent me the Eitech 2005 catalogue. Compared with 2004 (see 31/910) all the large sets remain unchanged; of the others 3 have disappeared and 4 have been added. All the sets in the catalogue were listed on the firm's web site ([www.eitech.de](http://www.eitech.de)) when I looked in February.

The **sets deleted** are No.11 (described in 14/383), No.65 (see 22/622), and the Solar Set No.78 (see 25/726).

The **new sets** are: • **No.74** with 300 parts including the Solar Cell that acts as a propeller in the model below left. In addition the lid shows another, smaller, Flying Machine, and a Propeller-driven Sledge complete with a blue plastic 'Driver'.



• **No.12** with 300 parts. 4 models are shown on the lid including the Truck above right. The others are a Digger, a Crane, and a Dozer, all fitted with the rubber-looking Tracks.

• **No.14** has 500 parts for the models on the box lid below, and they include the Truck with Ladder alongside the lid. Two of the others look to be Crane Trucks. There seems to be no steering in the 'Ladder' model, and, in normal Eitech fashion, no mention is made of a Motor being included in either the No.12 or No.14 outfits.

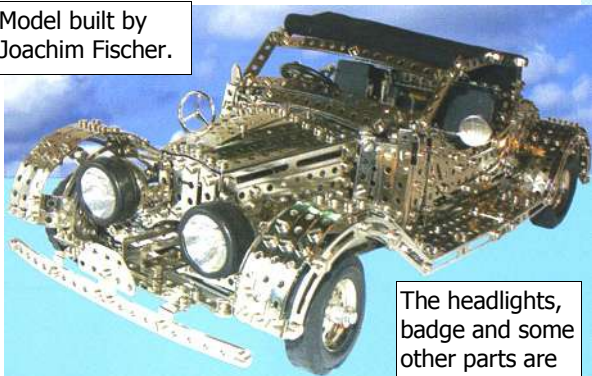


The **lids** of the new sets are similar to existing ones except that the background is a darker blue.

The **Parts Packs** are unchanged except that No. 109's Battery Box is now as in No.117 (see 31/910)

One new feature in the catalogue is 2 pages with photos of 5 attractive 'super' models: a Gantry Crane, a Flying Carpet fairground ride, & the 3 models on this page. All these and several others can be seen in the Galerie section of the Eitech web site.

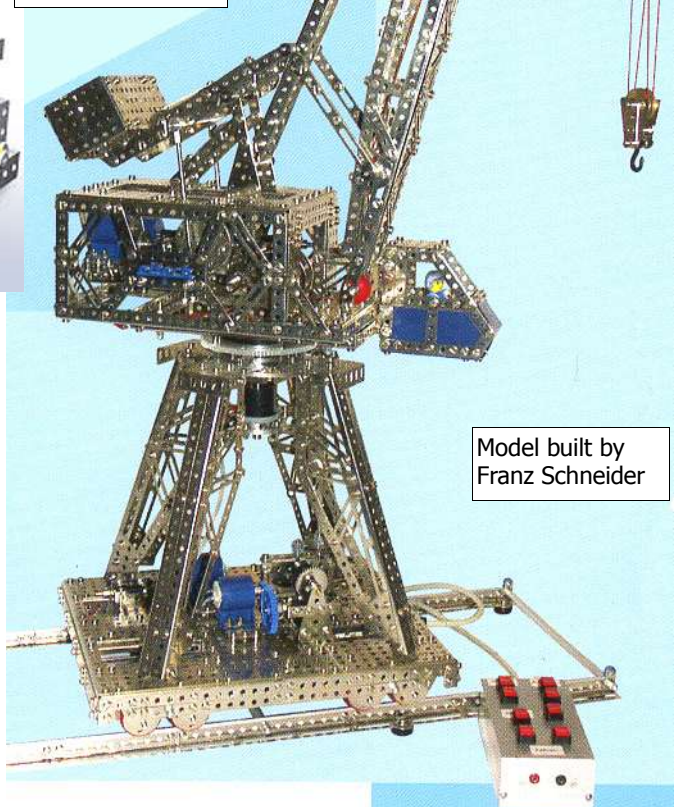
Model built by Joachim Fischer.



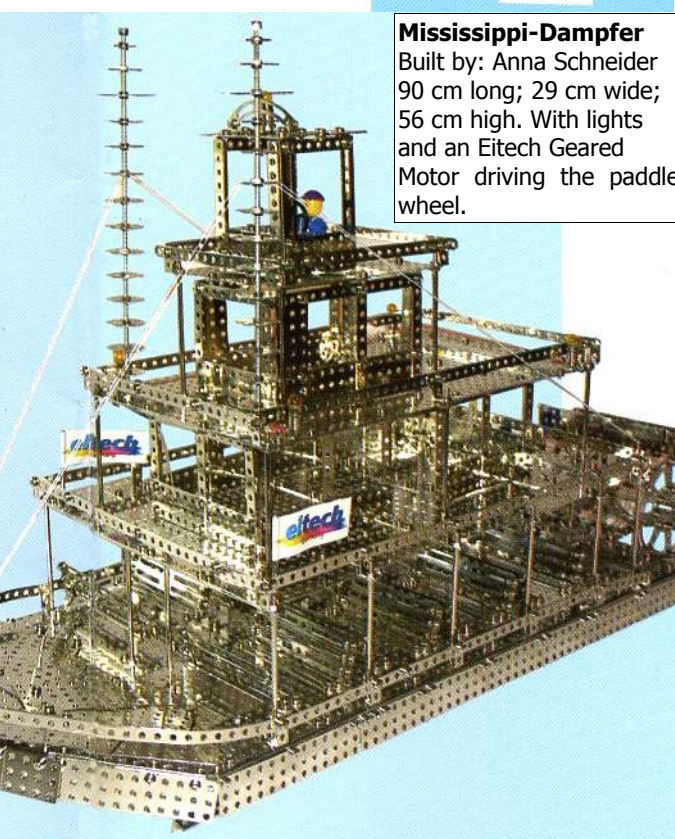
The headlights, badge and some other parts are non-standard.



The large slewing Gear looks non-standard; also perhaps, the black cylinder below it.



Model built by Franz Schneider



**Mississippi-Dampfer**  
Built by: Anna Schneider  
90 cm long; 29 cm wide;  
56 cm high. With lights  
and an Eitech Geared  
Motor driving the paddle  
wheel.

**New System: STEEL TEK** That's STEEL TEK not STEEL TEC, and it was introduced last year by a new New York company, Toyplace International. I was alerted to the system by a letter from Madhav Bhalerao in the 4th quarter issue of the Meccano & Erector Club N/L. He had found two of the sets in (an American) Toys-R-U's, and full details of the current & planned sets can be found at [www.toy-place.com](http://www.toy-place.com). In general terms the present range follows in STEEL TEC's footsteps to a degree, and some of the parts (made in China) look similar, but there's nothing to indicate that there is any definite connection between the two systems. The hole pitch is 1/2" but the thread is said not to be 5/32" BSW, M4 perhaps. All the details that follow are taken from the web site.

parts, 2 models with a simple chassis from 'standard' parts, to which a dummy Motor, Seats, etc are added, and then a complete (plastic?) Body is bolted on.

● #82557 **American Chopper**. 111 parts, 3 models including the two below. A real engine sound is claimed, probably made by a something in the engine unit driven by a band from the back wheel.

● #86252 **Master**. Motorized. 499 parts, 10 models are shown on the lid but 40 possible claimed, and the manual (from the web site) has 15. The Plane below is one.

3 of the **manuals** can be downloaded from the web site (#82556,82557,86252) - they are all in B&W but otherwise are in the STEEL TEC style. The boy in them is very like the one



The photo above shows the motorized Master set box and models from some of the outfits.

**Current Sets** These are listed below. The numbers of parts on the set lids are hard to read and so may be wrong, particularly the middle figure.

- #80251 **Helicopters & Race Cars**. 109 parts, 8 small models.
- #80255 **Road & Air**. 280 parts, 15 models including the Plane above but without a Motor, or the Battery Box bolted to the port side undercarriage legs.
- #80256 **Big Builder**. 280 parts, 15 smallish earth moving style models.
- #81251 **Race Cars, Trucks & Robots**. Motorized. 238 parts, 12 models including the red Robot above.
- #81253 **Constructional Vehicles**. Motorized. 389 parts, 12 models including the Dozer above.
- #83250 **Power Tool**. This is included in some of the sets.
- #82556 **H2 Hummer & Escalade** (the Cadillac below). 404



in STEEL TEC but doesn't have a name on his hard hat.

**New Outfits** are promised. First 2 **Can Dooz** 'in-a-can' sets: **Robotniks & Trucksters**. 3 (very simple) Robots can be made at the same time with one and 3 Trucks with the other.

Next 3 **Radio Control** sets, one for the R/C **Race Car** below; one for an R/C **SUV**, and one with parts to build either.



The Controller is said to be built up.

Finally **Trump Tower**, a set with over 1100 parts to build this famous New York skyscraper. It's not clear what types of part are used.

The two sets that Madhav saw were the Big Builder and the Road & Air - at \$20 each he thought them rather expensive. Last January Toys-R-U's had reduced their prices to \$15. Some of the other U.S. stores listed a few of the sets and the Hummer, the Chopper, & the Constructional Vehicles were \$40 each. Nearly all were out of stock though. No reports so far of STEEL TEK outside the U.S.A.

## 'New' System: TIM

by Jacques Pitrat

TIM is a system for building full-size toys, and is comparable to the 1920s Gilbert New Wheel Toy (see 18/522), and MAFELL in the 1930s (19/531). The set to hand is not numbered and there is no indication that there were any others in the system. The slogan on the box lid, right, might be very loosely rendered as 'Now he only has eyes for Tim'.

The manufacturer's name does not appear anywhere but it is likely the system was made in Switzerland, for two reasons: I bought it there and the names of the models are in both French & German. The only indication of date is '49'



under the artist's signature on the lid (right), and this fits with the Outfit's general appearance.



The Set is in a cardboard box 57\*38\*8.5cm, with 5 compartments, & 3 plain cardboard boxes for small parts.

The open box is shown below left, and under it a sheet showing the parts that was with the Set (but rearranged and with the original hard to read PNs replaced). Some of the actual smaller parts can be

seen in the photo bottom right.

Notes on the parts follow with their PNs, and quantities in brackets. It seems that the set is complete except for some Nuts, Bolts & Washers, and apart from these it is possible to build all the models for the Set with the parts in the box.



First there are aluminium **Tubes** (19mm dia.) with a hollow steel spigot at one end (15mm dia.) so that one can join them together. They have cross holes at both ends and each connection is strengthened with one Nut & Bolt (PNs 3 & 4). The holes in the Tube are conical to match the shape of the N&B, so when tightened the Nut and the Bolt are both flush with the outside of the Tube.

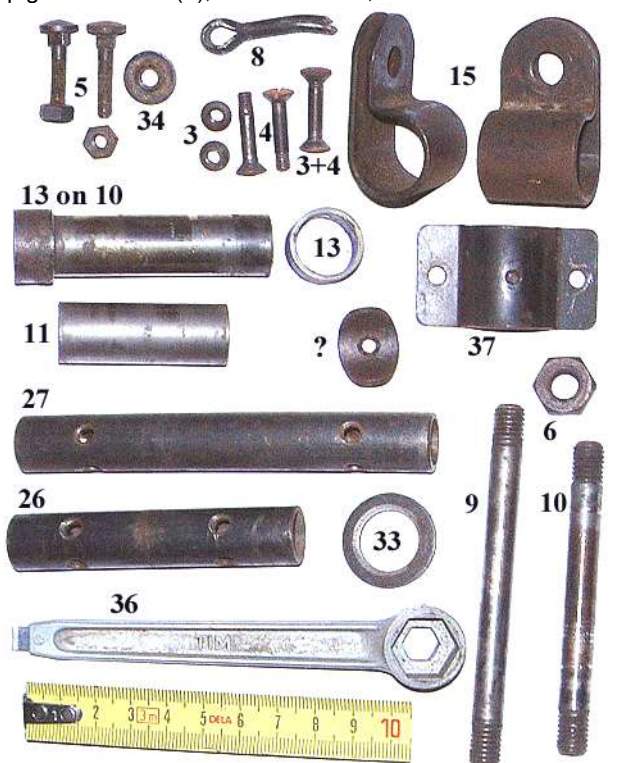
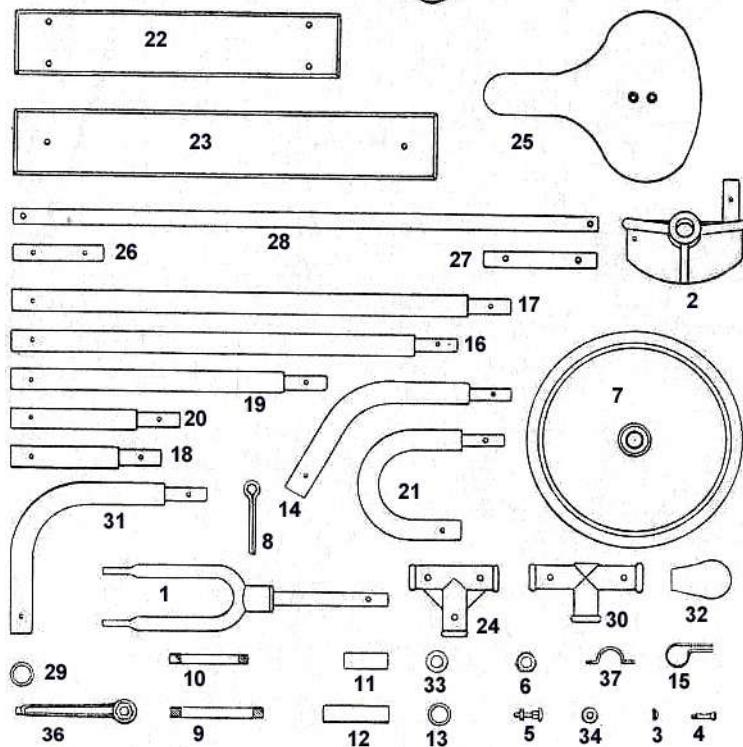
The tubular parts are as follows. 5 lengths of **Straight Tube**. I indicate their length in mm without & with the spigot: PN 17 (2) 420-460; PN 16 (2) 371-409; PN 19 (2) 277-316; PN 20 (4) 152-192; PN 18 (4) 133-173. A **Right Angle Tube** PN 31 (6). An **Obtuse Angle Tube** PN 14 (6). A **U Tube** PN 21 (2). A **Fork** PN 1 (1), with holes for an Axle and a very long spigot, 155-260.

There are two kinds of blue aluminium **T Connectors** with bores the same diameter as the spigots: PN 24 (6), size 8.5\*6cm, has cross holes for

## Bestandteile



## Pièces





**'New' System: TECO** These notes are based on a No.IV set which was sold on Ebay from Uruguay, but was said to be Argentinian, and on a manual to hand, this time from Argentina. It will be seen that most of the parts have a resemblance to STABIL, & some look identical. (See 13/352-6 & 14/370 for details of the STABIL parts referred to below.

To start with **the MANUAL**. It is 264\*187mm, and is for a small set but which one isn't stated anywhere. Nor is there an Introduction or any reference to a maker, just the cover below,

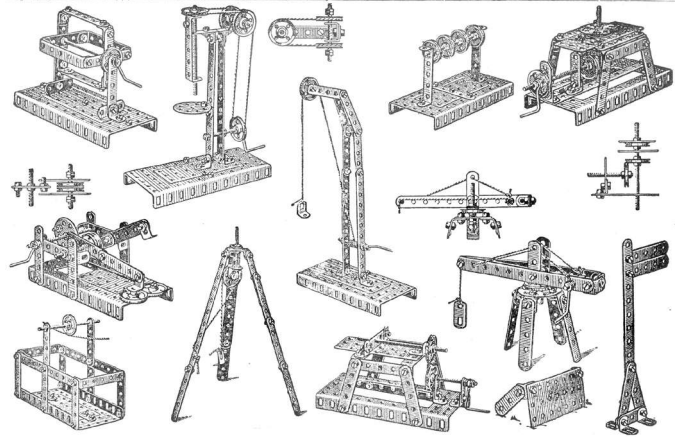


some constructional tips on C2 & C3, and 8 single-sided pages of models, 113 in all, from a 2-Prong Fork to a Porter's Barrow. p5 is shown right and the models are identical to those on a page in a STABIL manual for Set 48, except that the model names, numbers, & the explanatory text that was

with the auxiliary views have been omitted. The other 7 pages are also from the original 13 in the German manual. The Crane & Loco on the cover are STABIL models too but the Digger isn't, and some of the parts in it don't look like STABIL, particularly the 7h Flat Trunnion used to attach the bucket arm to the main jib, as in the enlarged view right. This model is similar in some ways to one in post-WW2 MÄRKLIN manuals.



TECO TECO TECO TECO TECO



TECO TECO TECO TECO TECO

**The SET** Below a general view and on the next page a close-up of some of the parts. The No.IV could have been based on a Nr.51 STABIL outfit but there are no Flanged Plates, or their pressed out middle Plates, and no 11h Strips can be seen. There seem too few of other Strips too, so perhaps there was another card of parts

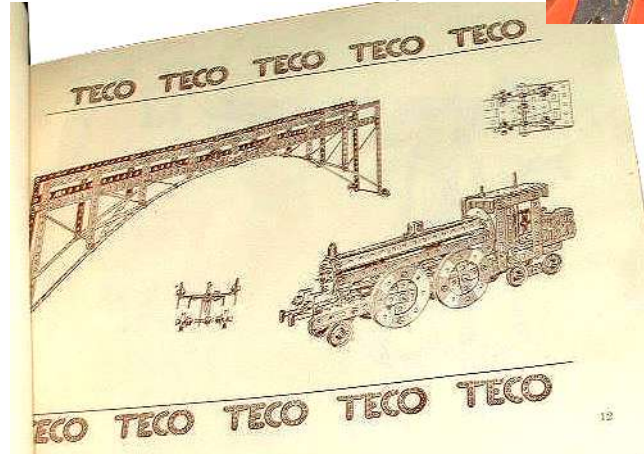
once. The box was said to be 16\*19", and apart from the colour the lid label is identical to the manual cover above except that it has Marca Registrada in the bottom right corner.

A list of **the parts** that can be seen follows with comments where they differ from STABIL: ●2,4,2x 3,5,25h **Strips**. ●4x DAS. ●2x 5h **Curved Strips**, with 2x **Semi-Circular Strips**





under them (perhaps like the 'C' in TECO). They may be simplified versions of STABIL Inventor Set parts. ●2x 25h A/G. ●2 Double Brackets. ●A Double Bent Strip. ●2 Corner Brackets. ●4x 5h Ø Flanged Rings. ●2x 8h Wheel Discs. ●2 Circular Plates or Rings (under the Wheel Discs). They have extra holes in the outer ring as in the 'O' in TECO. ●4 Flanged & Grooved Wheels (inside the Flanged Rings). ●4x 2h Ø Pulleys (with no face holes) fitted with Tyres. ●2x 5h & 1x 11h Slotted Plates. ●1 each of 14 & 28t Gears, similar to the Bakelite version but they look like metal painted gold. ●4 Collars. ● The non-STABIL Screwdriver & 2 Spanners. ●The light blue Flexible (presumably) Plates on the separate card: 2 each of 5h\*3,5,11h. Only the inner end holes are slotted. ●In the N&B box: Hex Nuts & RH Bolts of various lengths up to an



estimated 3cm. A/Bs. 2 Reversed A/Bs with a longer than usual centre section. 2 of the little Grooved Cylinders (the later STABIL type). A Wire Crank. ●No Axles or Screwed Rods can be seen anywhere.

The manual cover is like the '48' and the one inside page shown (p12 left) has 2 STABIL Nr.51 models on it, the Loco on the cover & a Bridge. The pages are again single-sided.

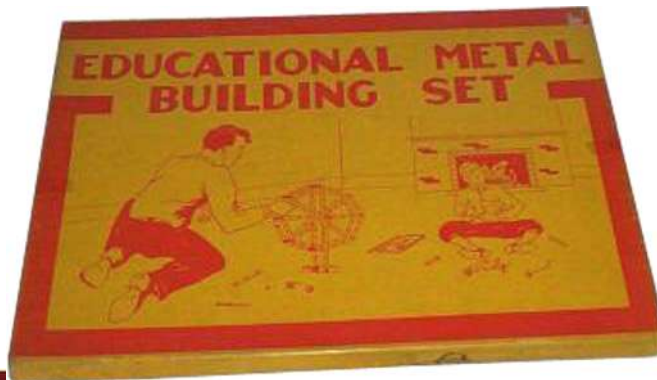
**DATES** None have been found but most of the 'imitation' Argentinian sets appeared in the decade after WW2. STABIL Flexible Plates were introduced in 1953 so that may be a pointer. The TECO/STABIL models shown are in both pre- & postwar STABIL manuals, but the Loco & Crane are the prewar versions - Flexible Plates were used in them later. The MÄRKLIN Digger mentioned earlier was probably introduced in 1957 but I've not seen earlier post-WW2 editions.

TECO: S2

OSN 34/1028

### Snippet – The EDUCATIONAL METAL BUILDING SET

All the Ebay photos are shown here and the parts in the box are immediately recognisable as being similar to THE CONSTRUCTIONNEER (see 9/206 & 26/779), a system made by the Urbana Manufacturing Company, Urbana, Ohio. No more detailed address is given in any of the the material to hand. The company on the envelope below is the Urbana



No.4 had only one Large Flanged Plate (the No.6 had 2 but more Pulleys & Tyres). Photos of later No.4 & 6 sets show them to contain two 11h A/Gs, and it's possible that these are hidden from view at the bottom of the box.

The 2 top photos on the sheet below the Set appear to be the lid (on the left) and the open box. (It's possible that the darker line along the bottom centre of the box are the pair of A/Gs - they were usually painted yellow.) The models below could well be made from THE CONSTRUCTIONNEER parts but I've not found any that look similar in the two manuals to hand: an early edition, ©1946, with a boy playing with a Mobile Crane on the cover, and one, ©1948, with a boy, a girl, & a Chair-O-Planes model, as in OSN 9. So perhaps the



Engineering Co., 631 (or similar) Carwin Street, Urbana, Ohio. So an allied enterprise no doubt. From the parts that can be seen in the box it looks to have a similar content to a No.4 THE CONSTRUCTIONNEER, except that the

models on the Sheet were created especially for the EDUCATIONAL METAL BUILDING SET.

THE CONSTRUCTIONNEER: S2

OSN 34/1028

## The COMBINED SOLAR SETS

One of these POLYLONG outfits, with 172 parts, was mentioned in 33/973 with a picture of its lid.; It has continued to be sold on German Ebay ever since, and has been joined by a larger set boasting over 530 parts. Both are sold under the name Playtastic, the small one often called 'Karussell-Windmühle' and the other 'Truck'.

### The ROUNDABOUT/WINDMILL OUTFIT

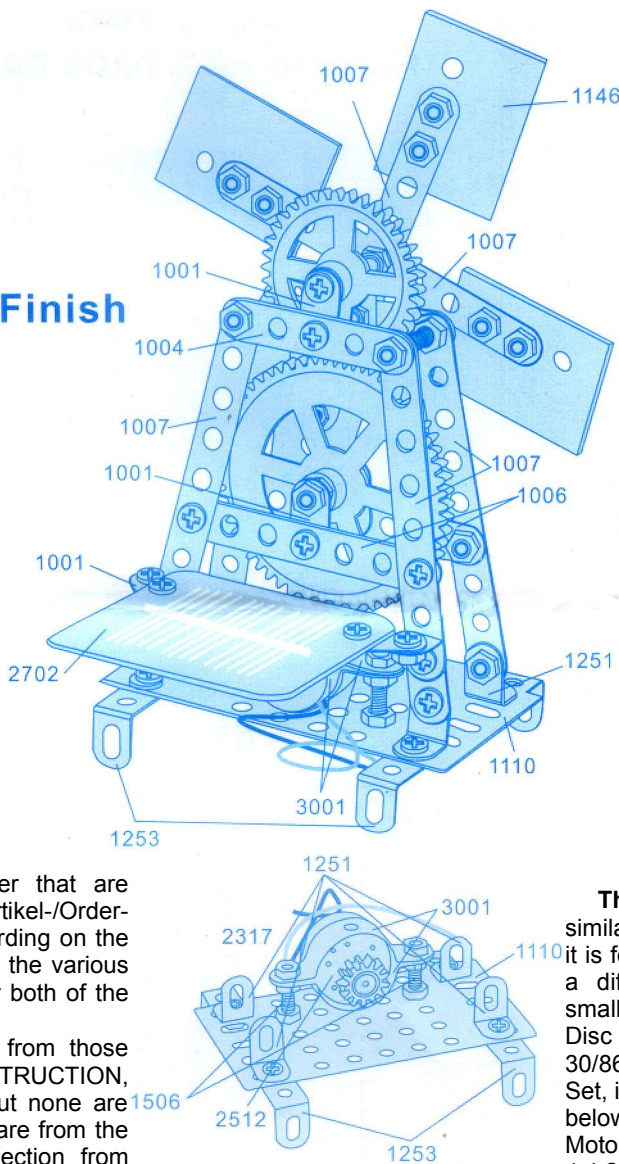
One of the Karussell-Windmühle outfits is now to hand. Its end-opening **box** is 28\*24\*4cm & the parts are packed in plastic bags housed in recesses in a white expanded foam slab. The front of the box is as in OSN 33 except that it has 'Playtastic' in small letters in the top right corner instead of the superimposed red star. The back is generally similar but has 2 small white panels, one about age suitability in German & French, and the other, in German, is headed PEARL, and has Pearl's web addresses in Germany, Austria, Switzerland, and France (www.pearl.de; .at; .ch; .fr). Under that are 'Solar-Baukasten 1 | Playtastic | Artikel-/Order-Nr. PE-7412'. All the rest of the wording on the box is in English. In November last the various Pearl branches were selling one or both of the two Sets.

**The PARTS** The parts, apart from those special to Polylong, look like CONSTRUCTION, and many have the same PNs. But none are identical (though most of my parts are from the 'VEB' era with only a limited selection from Eitech). In the list below those with the most noticeable differences are in red. In all the parts the holes are slightly smaller, typically 4.2mm Ø against 4.3 for CONSTRUCTION (and this also applies to the No.702 set in 30/886). Also the NBW & the Thread Ended Rod are BZP instead of nickel. The Strips & Brackets are made of quite soft steel.

The parts in the Set are as follows. 8,2,2,6x 4,5,7,9h **Strips**. 6 **Flat Brkts**. 6 **A/B**. 4 **A/B** (2 slotted holes). 4x **2\*1h A/B**. 5 **Rev A/B**. 1x **5\*9h Plate** with 8mm slotted end holes and the 2nd & 8th rows of holes omitted. 1,1x 30,50mm Ø **Discs**. 1,1,1x **13,38,58t Gears**. They are Mod.1, 15,40½, 61mm o.d. & 1.9,4,0,4,0mm bores. The 13t is a push fit on the Motor shaft; the larger ones run on Long Bolts or pushed onto an Axles. 30,4,6,2,3,1x **6,8,12,18,22,30mm Bolts**. They have crossheads, 6.1mm Ø for the 6mm & 6.5 for the longer ones, both much smaller than the 8mm of the Eitech crosshead Bolts to hand. 49 **Nuts**, 2.9mm thick (Eitech's 2.1). 1 **Washer**. 4 yellow **Axle Stops** with a round bore (most Eitech ones are square). 4 green **Spacers**, like the Axle Stops but only 3½mm wide and with a recess in one face. 1x 90mm **Thread Ended Axle** (my Eitech ones are 95mm long). 1 **Solar Panel**, 60\*60mm with 9 rows of 'cells', not with rows over the whole width as in the illustrations. 1 **Motor** with a 24mm Ø body, 12mm deep, and with a 2mm Ø shaft. 2 **Motor Brackets**, #3001, as in the scrap view above. 4 yellow **Windmill Sails**, like Eitech but with an extra hole between the existing pair. 8 dark blue **Seats**, like Eitech but with deeper, wider crosswise recesses. 1 **Spanner**, 1.2mm thick against Eitech's 1.9mm. 1 crosshead **Screwdriver**, 104mm long o/a, with a 3mm Ø blade and a green, ribbed plastic handle.

**The INSTRUCTIONS** are a single A3 model sheet with shaded line drawings in blue. It has no set name or indication

Finish



of the maker, just No.556A on one side and No.556B on the other. Each side has a panel showing the parts in the A or B sets, with quantities, & 2 models. The 556A side has those on the lid with, for each, the finished model and 6 scrap views. Many of the parts are labelled with PNs. The scrap views aren't in any particular order & certainly don't constitute step-by-step instructions. The Windmill from the lid & one of the scrap views for it are shown left. I made this model - it required a little thought and any child who made it model unaided could justifiably feel proud of itself. One minor problem - no means was shown or provided to join the bared ends of the flying leads from the Motor & Solar Panel, so they had to be twisted or soldered together. When finished the model ran well with a 100w bulb about 5 cm from the Solar Panel, & after careful adjustment of the Gears 10cm was possible. Strong sunshine is awaited.

**The 556B SIDE** of the sheet has a similar layout but as in-dicated above, it is for a different set. The models are a different Round-about, & a very small Big Wheel with the 4-Spoked Disc used in the roller of the model in 30/866, as the sides of the wheel. The Set, if it exists, has the 139 parts listed below, with the same Solar Cell, Motor, and Gears. The 556B parts are:

4,4,2x 4,5,7h Strips. 4 Curved Strips. 4 A/B. 6 A/B (2 slotted holes). 4x 2\*1h A/B. 1 Double Brkt. 4 Rev. A/B. 1x 5\*9h Flgd Plate. 1x 5\*9h Plate. 2x 4-Spoked Wheel Disc. 1,1,1x 13,38,58t Gears. 18,6,2,2,1,4x 6,8,12,18, 22,30mm Bolts. 42 Nuts. 1 Washer. 4 Axle Stops. 4 Spacers. 1 Solar Panel. 1 Motor. 2 Motor Brkts. 8 Seats. Tools as 556A.

**The TRUCK SET** It has 538 parts and is intended for the 6 models on the lid below: a Helicopter, Lorry, Big Wheel, Tractor, Satellitenanlage (Satellite Tracker?), Fahrradfahrer (Bicycle Carrier?).



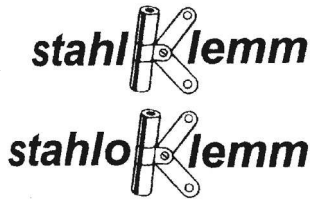
The Lorry (below) has the Solar Panel behind the cab with the Motor below it. The drive appears to be a 1-stage reduction to the axle. One wonders if the Panel & Motor are the same as in the smaller sets.



**Snippet – STAHL-KLEMM**

Bau-kästen and the lower one, with a rather faint large 'K' in the middle, can be seen on the lid & manual of the set below. According to Baukästen the first name of this Austrian system was STAHL-KLEMM and the 'O' was added in 1969 when the original firm of A. Theobald became Blanke & Theobald. In Baukästen that last name is preceded by 'BeEsA Mfg. & Supply Co. GmbH', and perhaps both should be. Only STAHL-KLEMM is in MCS and the entry consists of a list of the system's 28 parts in English & German, plus 2 models, a Pair of Scales & a Helicopter. (Despite the logos the hyphenated forms of the names are used in Baukästen, and the entry name in MCS is hyphenated too, but it's not clear if these forms were ever used in any of the firms' material.)

The logos right are from



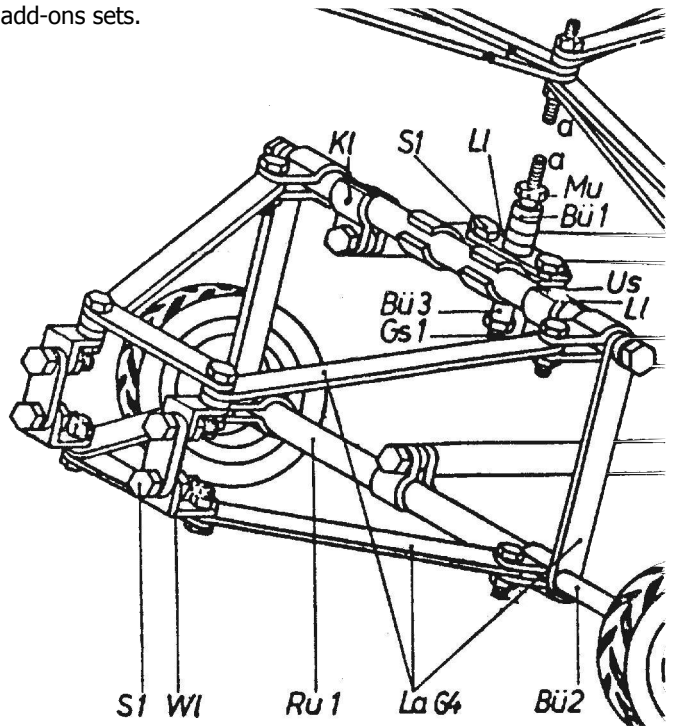
Screwed Rod (though this method isn't shown in the models). Other parts in the MCS models include 60 & 120mm Screwed Rods; 6 & 8mm Ø Bushes, Bü1-3, which seem to be used as spacers; a Bearing, L1, which looks like a short Strip with no doubt some form of bush in the centre - said bush can't be seen but the part could be like a Double Arm Crank; and a Wheel Hub, perhaps a pulley, with a Tyre to fit it. Parts which are not used in the models include a Wheel, a Drehscheibe (Turntable?), a Sitzkissen (Seat Cushion?), a Wrench, and a Socket Wrench.

That then is STAHL-KLEMM. Looking carefully at the parts in the original Ebay photo of the STAHL-KLEMM set, the lighter long thin parts have square ends and are probably Rods, while the darker ones have rounded ends and are probably Strips. If so there are many more Rods than Strips, whereas in the MCS models many more Strips than Rods are used. The models on the lid would need a great many parts and most likely the bracing would be made of Strips. If the Rods are the length given in MCS their diameter scales at, very roughly, 8mm. The grey shiny part in the top left corner looks circular and so possibly it is the Turntable. What may be the Socket Wrench is in the bottom square compartment, second in from the right.

Baukästen mentions 4 basic and some add-on outfits, including one with a Motor & Gears. The Ebay ad described the item as a 'K.5 Set', so conceivably it might be one of the add-ons sets.



Stahl means steel of course and Klemm is nearly Klemme which can mean clamp. This and the 'K' in the logos gives a clue to the nature of the system. The main parts, per MCS, are 5 Narrow Strips with just a hole at each end (16 to 120mm centres), and 2 Rods, 98 & 196mm long, with internally threaded ends. These together with an A/B and Clamps used in pairs around the Rods, allow frameworks to be constructed, as shown right (part of the Helicopter in MCS). The Strips can be bolted to each other, or onto the end of a Rod, or attached to a Rod between a pair of Clamps. Rods can be joined to each other at right-angles using the Clamps with a Washer (or a Strip) between the bolted ends, or in-line using a 20mm



STAHL(O)-KLEMM: S1

OSN 34/1030

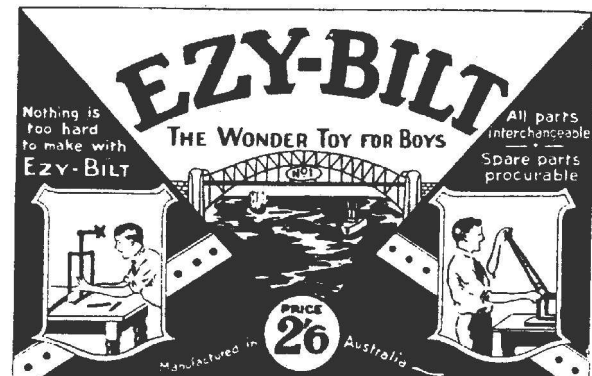
**Australian Systems** Jack Little has kindly sent notes on his new discoveries about EZY-BILT, BILD-A-KIT, & MODEL-IT.

**EZY-BILT Early Days** That E-B dates from 1933 or earlier was mentioned in 31/911 and now the acceptance of a trade mark application dated 1st May 1931 has been found. It is in the name of Arthur Harry Cooper, trading as A.H.Cooper, of 326 Flinders-lane, Melbourne. This is an indication that Arthur Cooper started the company and ran it until George Irving joined him in about 1936. Apart from being in B&W, the illustration accompanying the application, right, is very similar to the lid in 22/636.

A mail order catalogue, date unknown but possibly before 1931, contains an advert for a set price 3/3 including postage, so quite likely the 2/6 basic outfit. It isn't illustrated but the logo used, left, is a form of the name that I don't think I've seen before.



Jack sent photos of a cardboard boxed No.4



set from the Melbourne period. It is very similar to the 1941 metal boxed No.4 described in 22/637 but the

EZY-BILT: S4

OSN 34/1030

box is darkish green and the yellow banding outside each side of the label extends out to the edges of the box. The parts match in the two cases; the N&B in the cardboard set are in a brass looking tin, about 2½" square.



Also from the Melbourne period, two plain cardboard boxes, 11\*5½\*4" deep & 2½\*2½\*1" deep, with the label left on them. The small lettering reads Part No. & Quantity. It is probable that these boxes were used to send spare parts to shops & wholesalers.

**The Colton, Palmer & Preston Time** More has been found out about the 8 sets mentioned in 31/908. The company advertising claimed that all the sets would be packed in metal boxes but no actual No.5 or 6 sets so boxed have been found so far. Metal boxes for Sets 1-3 are very rare and are smaller than those used for the larger sets. Also they had holes punched in them to allow their use in models, and these can be seen in the sides of the lid and base parts below (with the top of the lid above



them). Atop the next column is a label found stuck to an Illustrated Parts List of the period and there is an additional hole in the end wall. The metal packaging for the small sets was most probably a marketing failure, and Jack has been given some tops and sides from the lids which, it is said, were used in shop and exhibition display material. The metal boxes for Sets 6-8 were a success and were used into the 1960s.

A No.6 box made from heavy waxed cardboard is also known and is the same size as the corresponding metal version. Its lid design is the same as the metal No.7 shown in 28/837.

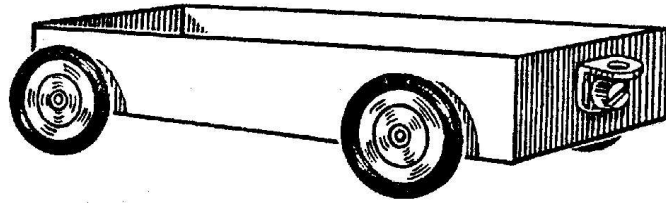
**OSN 34/1031**

**BILD-A-KIT** Further to the notes in 31/912 the system's name was listed as an Accepted Application in the 23 January 1947 issue of the Official Journal of Patents, Trade Marks & Designs - the logo left appeared above '85,717. Toys. William Kerr, Henry Lawson White, & Violet Amy White (trading as Rec Radio & Electrical Hardware Company), of 25 Queen-street, Melbourne, Victoria, Australia, manufacturers. - 9th January 1946. Address for service in Australia - C/o Herman & Coltman, 456 Little Collins-street, Melbourne, Victoria.'

**OSN 34/1031**

**EZY-BILT**

This is your new EZY-BILT in an up to date streamlined handy size package, so that you can keep your parts safely in a strong metal box. The new package contains just as many parts as in the big cardboard box of the same set number. You can use the parts of the box to make extra toys.



Photos of an unused No.8 show its metal box to be as expected with the parts strung to 5 cards with yellow cord. The 'halves' of two of these above give a general impression, and the only difference in any of them that can be seen, compared to the notes in OSN 22 & 28, is the shape of the Screwdriver. The Set contains 2 of the Assembly Parts boxes and two hanks of red Cord.

**EZY-BILT: S5**

Another reference to the company is its advert in the September 1949 *The Retailer* for solid drawn containers used to send small portions of wedding cake to distant friends. The address given is 419 Elizabeth Street, Melbourne, Phone: FJ 5553.

The back cover of the Manual described in OSN 31 has been found. C3 is blank; C4 matches C1 in colour and has a short plug for the System, plus 'Printed by Sampsons Enterprises Pty. Ltd. 481 Kent St., Sydney for the Bild-A-Kit Co.' So if the company was called Bild-A-Kit at that point, was the Rec company still involved?

**BILD-A-KIT: S3**

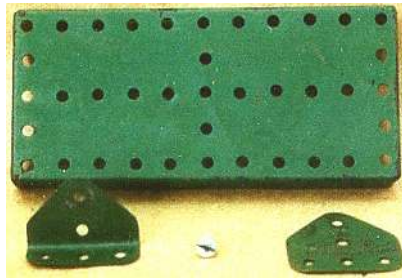
**MODEL-IT** Some notes on this system were given in 31/911 and now Jack has discovered more of its history. It was made in Sydney between 1945 & 1958, and the first sets were produced by G.E.Rose. He applied for a trade mark registration in November, 1945 but the application was never finalised.

The Rose sets were distributed by the Laurence Distributing Co. of 326 Edgecliff Rd., Woolahra, the home address of Laurence C. Jones, and he took over their production. He had formed the Model-It Manufacturing Co. with a factory at 4 Rothschild Avenue, Rosebery.

The next player was the Carvel Manufacturing Co. (Engineers), Little Buckingham St., Surrey Hills, but nothing is known of it. Then, finally, another Jones company, the Lawdex Manufacturing Co. Their trade mark was applied for in January 1955 by Laurence Congrave Jones & Nyna Anne Jones, trading at the time as the Model-It Manufacturing Co. at the address above. It will be recalled that the manual described in OSN 31 has 'Lawdex Manufacturing Company INCORPORATING MODEL-IT MANUFACTURING CO. SYDNEY AUSTRALIA' on the back cover, but 'MANUFACTURED BY MODEL-IT MANUFACTURING CO., SYDNEY, AUSTRALIA - A CARVEL PRODUCT' at the bottom of some of the pages.

**The ROSE PERIOD**

The parts differed from those in MCS in that, as can be seen in the photo left, the top of the Flanged Plate had fewer holes in it, and the Trunnions had 5 holes instead of the

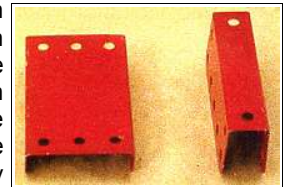


later 7. These parts can be seen in the Scales shown in OSN 31. Also in the photo, the Bolt between the Trunnions had a large diameter flat head. No Rubber Tyres were included in the sets.

The early versions of the parts can be seen in the 34 models in the book of instructions of the time. It had no Parts List but spares were available and the company had plans to improve the sets with new parts. This manual is most likely the Ebay one mentioned on p912 of OSN 31.

**LATER** After the Model-It Mfg. Co. took over production from G.E.Rose five sets were progressively made available with new parts & manuals, and named as in OSN 31. They were unusual in that some commonly used parts were omitted (only 2½ & 5½" Strips were included in any of the sets) while the quantities of others were increased. The first new manual was for the Junior, Senior, & Master sets. It had an Illustrated Parts List and 66 models, some from the Rose manual. The second new manual had 68 models including 6 that could only be made using parts in the de Luxe outfit. The Illustrated Parts List was not revised to include these new parts. At some point after this all the sets are labelled as 'A Carvel Product'

The Model-It Mfg. Co. parts are those in the OSN 31 photos, but now a few more points about them. The Screwdriver wire is 1/8" Ø. The Wheel Disc has a short brass bush. The 18½" A/G was the longest in any Australian set, EZY-BILT made a 24½" but as an extra part. The Gear has 54 teeth and the Pinion 19. Right the Formed Plates made from the 5\*5h Flexible Plate. These Plates, the Braced Girders, the Cranks, & the Gears were never included in any Parts Lists.



**MODEL-IT: S3**

**OSN 34/1032**

**Snippet – New System: MAKSIMKO** As can be seen from the Ebay photos below and right, this system combines metal parts with Lego style pieces. 76 M4 N&B are included, no doubt to join the metal parts, and the 70mm M3 Screwed Rods would be used as axles. The method of joining the metal & 'Lego' parts isn't entirely clear but #1203 and perhaps #723 look to have threaded spigots sticking out of them.

The set is said to have 484 parts and may have originated in Russia. The abbreviations for quantities in the PL have

Cyrillic letters and the manual was said to be in Russian. It includes a Racing Car, an Airplane, 2 Jeeps, & Helicopters.



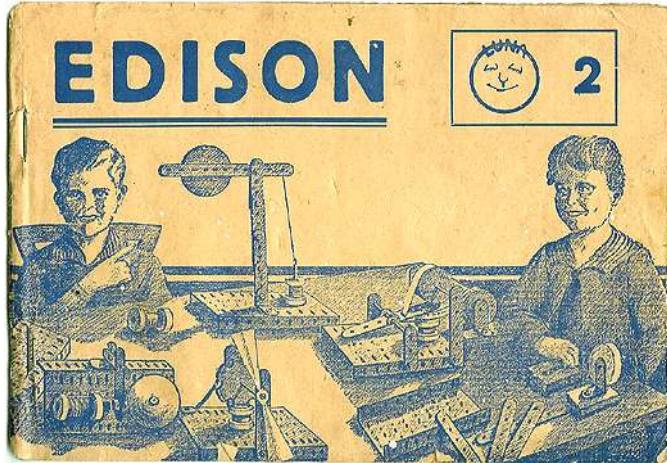
1020	4	M4x7	76	M3	49
1021	WT	M3x70	4	401	8
1022	WT	103	1	402	32
a207	7	703	1	1203	4
2207	4	1303-56	3	1203	4
2307	9	1303	1	1204	8
2107	12	801	4	102+	2
2205	7	721	1	1301	8
2215	9	шафта	2	1001	7
2127	9	721	1	601	4
722	1	603	2	602	WT
723	1	702	1	2201	4
604	1	1002	2	2103	8
104	1	105k	WT	2102	6
M3x22	9		WT	2202	6
M4	WT		WT		6
	WT		24	2211	WT
	WT		WT	2111	16
	WT		WT	701	4
	WT		WT	1304	12
	WT		WT	1305	12
	WT		WT	1209	1

**MAKSIMKO: S1**

**OSN 34/1032**

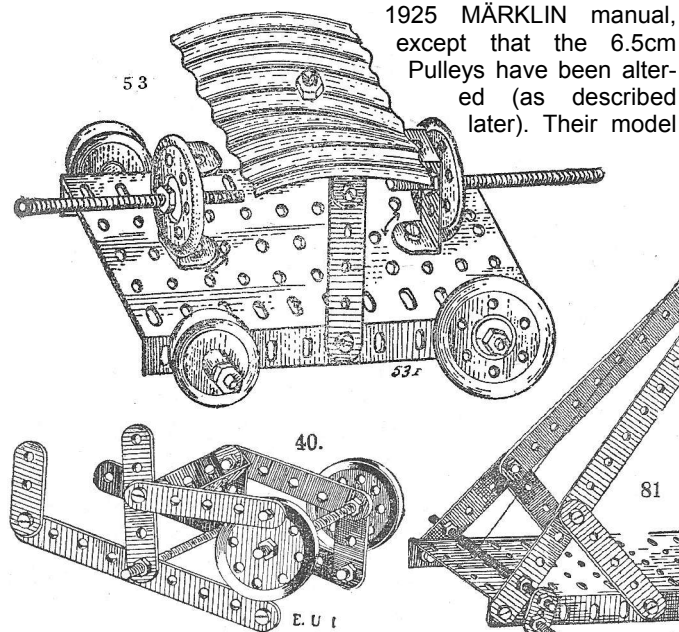
**EDISON** A few items of interest have come along since the short note in 16/444 about this little known Czech system with a MÄRKLIN look to it. They are a manual, the booklet with it, and 2 sets seen on Ebay. The latter seem rather unrelated to the literature items, and to each other. None contain anything to indicate when EDISON was made or who made it.

First a **No.2 Set Manual**. The cover, below, is similar to the No.3 in MCS, with the LUNA trademark in the top right corner. All the models on it look 'electrical' but all inside are from the standard 'mechanical' outfits, with no reference to Electrical Sets at all. The other MCS pages (Illustrated Parts & Set Contents) are part of the 8 page booklet with the Manual, & though mainly about the standard sets, one page is devoted to ELEKTRO Outfits. The Manual & Booklet are both in Czech.

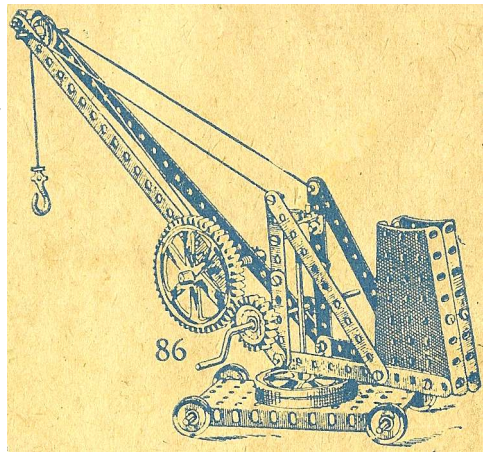


The Manual has 20 pages, 214\*148mm, plus covers. C2 & C3 are blank. There is no introduction. The models are of a simple nature, but with a good selection of them. Each has a line drawing & parts list; the model names are given in the Booklet. The 40 Set 1 models go from 1. abeceda (Alphabet - letter A) on p1, to 40. řezačka na řepa (Beet Cutter) on p7. Set 2 has 51 models from 50. protiletadlové (AA Gun) on p9 to 101a. norimber, nůžky (Lazy Tongs) on p20. (Notes. The Manual contains various errors over the model sequence and numbering. There is no model 56. The reason for the suffix 'a' isn't clear. A No.102a, Freight Vehicle, is listed in the Booklet but isn't in the Manual.) The English names are my best attempts, the Beet Cutter is shown bottom left together with 3 of the better models, but partly chosen because they show the parts clearly. The models don't seem to be copies from other systems, certainly not MERKUR, VASEK, or MÄRKLIN, though I haven't seen the No.0 or No.00 models for the latter. It is noted however that 9 'sample' models, presumably for larger EDISON sets, are shown on pp8 & C4, each with a Model No., and their illustrations are identical to those in a

1925 MÄRKLIN manual, except that the 6.5cm Pulleys have been altered (as described later). Their model



numbers are the same too but don't correspond with any of those in the Booklet for models from the larger sets. One of the models is shown right. All the sample models were still in a 1939 MÄRKLIN manual but with different model numbers.



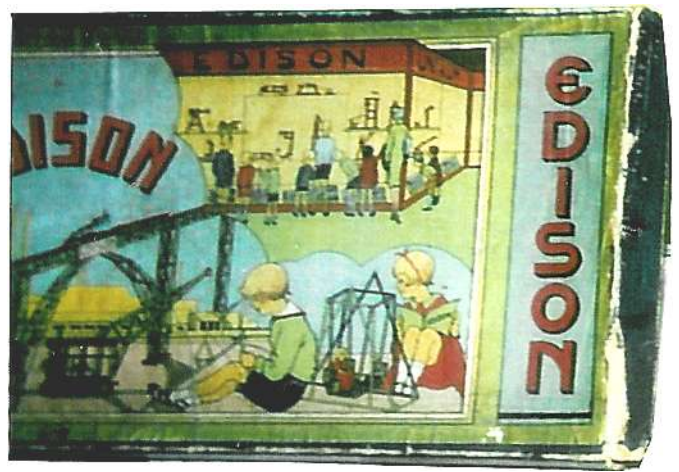
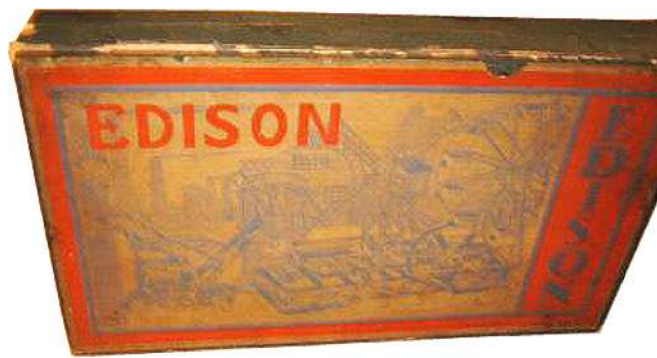
**The Booklet** has the same page size as the Manual. It has the Illustrated Parts on pp1-3; the model names for Sets I-VII on pp4-5 (the Set Nos. are usually in Roman numerals); the Set Contents on pp6-7; and the promotion for the ELEKTRO sets I-VI on p8.

**The Parts** There are 66 in total and all but 7 look like MÄRKLIN, and have the same pre-WW2 PNs. Notes on the new parts follow. • **A Pulley Disc #28**, and **2 Screwed Rods**, 2½ & 7cm long, #29-2½ & #29-7. These provide wheels, pulleys, & axles for the Set 1 & 2 models. • **A corrugated metal Roof #70**, 6½\*6cm. It can be seen in the models below, and in others it is attached through holes in the corners at one end. • The illustration in the Booklet for the **9½ & 6½cm Pulleys**, #66 & 67, looks like the MECCANO 1½" part, but the 6½cm in the 'sample' models, and in a set described later, are rather like MERKUR with 6 spokes. They are described as 'new pattern' in the Booklet. • **A Washer**, #87a, probably fibre, is included as well as the normal metal #87.

**The Set Contents** don't match those of MÄRKLIN outfits at all well but in very general terms the No.7 is about the size of a 1920s MÄRKLIN No.3. The major parts in it include 80 Strips, 3-25h; 14 DAS; 8 Curved Strips; 20 A/Gs, 7-25h; 12 Flanged Plates; 4 Windmill Sails; 4 Roof Plates; 44 Brackets; 5 Gears, 2 Pawls; 6 Gear Rings; 2,8,6,8,4 of 12,25,38,65, 95mm Pulleys; 4 Pulley Discs; 10 Collars; 12 Spring Clips; 110 Nuts for 80x 9mm & 15x 20mm Bolts. Equal numbers of the two types of Washer are included in all the sets, with a relatively generous 40 of each in the No.7. Among the parts illustrated but not in the sets are a Coupling, a 50t Gear, a Worm Housing, & a Slide Piece. One part, the 1½" Pulley, is in the larger sets but isn't listed in the Illustrated Parts (though as noted above its illustration in used for #66 & 67).

**Actual Sets** The Ebay photos of one of the two sets seen are shown at the top of the next column. The lid is quite different to the one described in OSN 16, and all that can really be seen on it are a Crane or Digger bottom left and a Big Wheel on the right. The manual cover too is quite different to the one above, and the words on it are in German. So, an export set perhaps, or one intended for German speaking Czechs (there were some 3 million German speakers in prewar Czechoslovakia but nearly all moved to Germany after the war). If there is a logo on the cover it must be in the top left corner which can't be seen in any of the photos.

Some of the smaller parts in the box, the Brackets for instance, look to be black, but all the Strips were probably green originally. The 6½cm 6-spoke Pulley can be seen clearly. The red and green parts, presum-



its top left corner.

**A few Actual? Parts** These may or may not be EDISON. They were the only 'foreigners' in a MERKUR set, one with brown Strips, so quite old, but post-WW2 as far as I know. In total they consisted of a red 5\*11h Flanged Plate; several green 5 & 9h Strips; 2 chemically blackened 1\*3\*1h DAS; a nickel 1" Pulley; a few N&B, and the light green Pulley Disc right. This last part, with its belled out centre, was what suggested EDISON to me because it matches the illustrations of the part rather well. The Plate, Strips, & DAS are close to MÄRKLIN but differ in small details including the overall dimensions - a few examples and some leading dimensions follow.



The **holes** are 4.3mm Ø at 12.7mm pitch. MÄRKLIN were 4.2mm prewar & 4.3mm postwar. The **thread** is 3.6mm Ø x 32 tpi (or .8mm pitch). It could be undersize 5/32" BSW and MECCANO N&B fit the EDISON parts quite well; but a MECCANO Bolt won't quite screw fully home into the boss, whereas the EDISON Bolts are loose in it. The **boss** is nicked steel, 10mm Ø, 4.3mm bore, & double-tapped. MÄRKLIN bosses have been 10mm Ø at times but their bore is usually between 4.0 & 4.1mm. The centre of the ring of peening is tapered, against the MÄRKLIN recess. The slots in the top & flanges of the **Flanged Plate** are 9mm long (7½ for MÄRKLIN). The **DAS** has no slotted holes. The **Pulley** is 25mm Ø, with a 5mm wide vee. The **Pulley Disc** is 38mm Ø. The **N&B** are brass: the **Bolt** has a 5.1mm Ø CH and is 7mm u/h; the **Nut** is hexagonal, pressed, 8.1mm A/F, and 2½mm thick. The red paint is close to the prewar MÄRKLIN shade, somewhere between the MECCANO reds of the late 1920s and 1950s. The green is darker than prewar MÄRKLIN, very near the late 1920s MECCANO colour.

**The ELEKTRO Sets** All I can glean from the Booklet is that there were 6 sets, I to VI, and their number of parts, number of models, & box size were: Set 1: 45,40,20\*29\*2; 2: 105,100,25\* 32\*2; 3: 142,150,25\*32\*3; 4: 180,190,27\*38\*3; 5: 206,230,27\* 38\*4; 6: 410,290,27\*38\*6cm.

ably genuine, look very like pre-war MÄRKLIN in colour, and their Brackets were also black of course. The major parts that can be seen in the Set don't match the contents of any of the sets in the No.2 Booklet, even if it is assumed that some of the Flanged Plates are missing. The nearest are Nos.5 & 6 but the former has only 4x 1" & 2x 6½cm Pulleys, while the No.6 has 2x 9½cm in addition to 4x 6½cm Pulleys, and there doesn't seem any obvious place for them in the box.

The **second set** has a lid like the one in OSN 16, and a photo of most of it is shown in the next column (its left end was unfortunately cut off). Nothing can be seen of the parts but the manual cover is like the one in the Ebay outfit above except that the coloured areas are blue instead of red and the wording is in Czech. Again it can't be seen if there is a logo in

EDISON: S2

OSN 34/1034

**Snippet: MASTER MECHANIC**

All that was said of this item was that it has 20 pages. The words under 'INSTRUCTIONS' are 'An Institution of Education / How Workers may Win / MASTER MECHANIC, Fairport, N.Y.' At the top of the model page is: 'JUVENILE MECHANICAL ENGINEERING'; & below the model: 'This is Gilbert's last effort ..... aeroplanes' - the rest is illegible. But the parts in the Aeroplane don't look like ERECTOR; AMERICAN MODEL BUILDER possibly, but the model isn't in any of my AMB manuals. The purpose of this 'manual' isn't clear but perhaps it is



akin to the *Tin Can Toys* book in 33/973 or *Bauspiele* on p1012.

MASTER MECHANIC: S1

OSN 34/1034

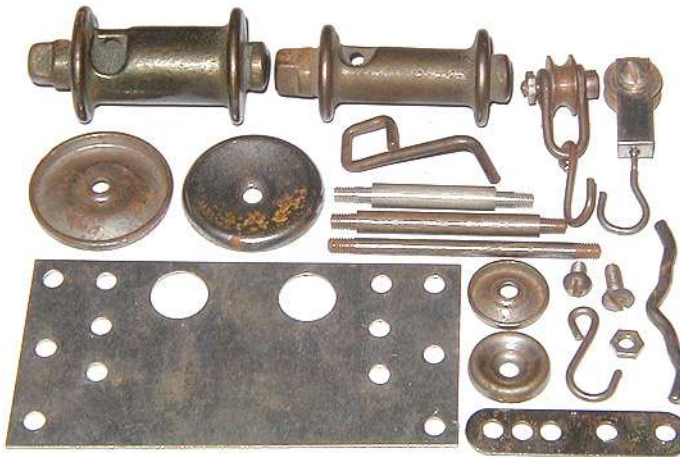
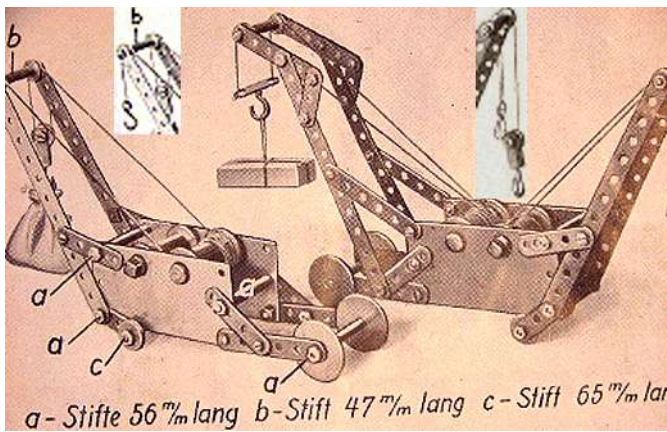
## METALL-BAUKASTEN

A little about 2 sets from this small, rather strange system was given in 28/820 and now 2 more sets, in one lot, are to hand, plus photos of another from Ebay. All the boxes are similar, the contents too though some of the parts in them are likely to be 'foreigners'. My Sets had no manuals but otherwise they seem reasonably complete and contain examples of most of the parts.

The **boxes** to hand are the size given in OSN 28 and have identical lids except that they are printed black on brown cardboard. Inside the parts are in 4 card trays.

The **Parts**. Most can be seen in the photo right, or in the models above it (a manual page from Ebay with insets from another photo to show the missing ends of the jibs). Excluding obvious foreigners (probably STABIL) the parts in the lot are listed below.

- **Strips**. 7,2,2,4,7,11,8,3x 13,11,7,6,5,4,3,2h. Ends are near fully rounded. Holes are at 12.5mm pitch and vary from 4.6mm to 4.2mm Ø in the different lengths, with the largest in the 3 & 13h. The 4h has an extra hole between an end pair. • 4 **Sideplates** 10\*5cm. The large holes are 13mm Ø; the end ones are at 19½mm pitch. • **Wheels**. 4x 34mm & 3x 19mm Ø. Both have a concave disc with the hole upstood inwards.
- **Studs**. 1x 65mm o/a with a 4mm Ø centre portion: 8x 56mm & 3x 47mm with 5½ or 6mm Ø centres. The thread is M4. Their use can be seen in the models (at a, b, c). • **M4 N&B**. 7 RH **Bolts**, 6.8mm Ø & 6mm u/h. 10 **Bolts**, 9mm u/h, with 7½mm Ø raised countersunk heads. Hexagon **Nuts**, 7.0mm A/F: 11 machined, 3mm thick; 20 pressed, 2mm thick. • 4 **Winding Drums**. All are solid steel, probably cast, and about 58mm long o/a. Otherwise all are different with drum diameters of 13, 13½, 16, & 19mm and 22, 23½, 25, 28mm Ø flanges. The end spigots are 12mm Ø with a square extension, about 8½ A/F, on one end. 1x **Winding Handle** made from 3mm wire. It is a very tight push fit on the square extension. This part isn't shown in the models but doesn't look



home made. • **Loose Pulleys**. 1x 14mm & 2x 12mm Ø, all 4mm wide & 4.3mm bore. • 1x **Hook**, made from 2mm Ø wire, and 25mm long o/a • **Pulley Blocks**. One each of 2 types. The first has a 26mm long body bent up from an 8mm wide strip. The 14mm Ø pulley, 6mm wide, is held by a bolt with a single nut. The hook is the one above but with a straight end instead of an eye, and flattened above & below the body to keep it in place. The other Block has a 15mm Ø pulley, 6mm wide, again held by a N&B through the eyes of a wire shackle. The latter carries a standard Hook. The first type can be seen hanging from the outer two jibs on the manual page and has been spotted in other sets; the second has not been seen elsewhere. And neither has the Hook hanging from the lefthand jib of the righthand model.

One other part deserves mention, the 5cm long squiggly 3.4mm Ø wire left. One of these can be seen in all the known sets but its use isn't clear. It isn't a Winding Handle opened out.

The parts in the two Sets were mixed together but can largely be separated because some are very rusty while others are generally quite bright and may have been nickel plated. A third group, the 2,5,7,11h Strips, have a dark grey finish and since none of those lengths are used in the models so far seen it may well be that they are not from the system. Some of the Studs, no doubt those from one Set, are aluminium, the only non-steel pieces.

The parts are mostly of reasonable quality though the hole pitch in some of the 13h Strips is nearly 12.6mm, and there is burr around many of the holes in the 4h Strips. Also in making one of the models it was found that washers were sometimes needed where the thread on the 56mm Stud does not go near enough to the shoulder.

With regard to the **set contents**, at the bottom of the page (but not shown here) is 'Das Titelbild kann mittels zwei Metallbaukästen hergestellt werden', and I think this indicates that 2 sets are needed to build both the models. Neglecting the suspect Strips, the parts found in the Sets would broadly be about enough to make them.

## OSN 34/1035

## METALL-BAUKASTEN [2]: S2

**Snippet: MECHANIC** Two sets with the new style of lid right have been seen on German Ebay from time to time since Christmas. Both show models similar or identical to those known for MECHANIC outfits (see 17/471) but with parts that look like STEEL BUILDER in colour (see 32/961). The MECHANIC sets seemed to have been superseded by the MECHANIX range (see 24/710), and with this revival of the MECHANIC name one wonders if the parts are perhaps to the STEEL BUILDER standard with a hole pitch of 12.2mm, against the earlier MECHANIC 12.5mm.

The lid right has '194' in its bottom right



corner and the model appears the same as one seen on an earlier style MECHANIC lid, and further back, in a No.4 CONSTRUCTION MODELS manual.

The smaller of the two sets has '190' in the corner of the lid and is said to have 68 parts for 20 models. Featured on the lid is a Crane like the TECHNO one in 24/712 except that the 11h Strips bracing the jib have been omitted; the curved Flexible Plate at the back has been turned through 90° to form a 'roof'; and the Road Wheels are the new type.

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## MECHANIC [1]: S1

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