

## 'New' System: FERMO

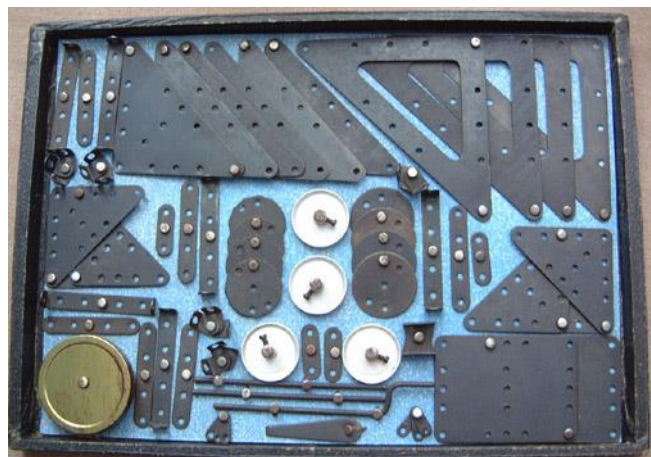
by Jacques Pitrat

### References and History

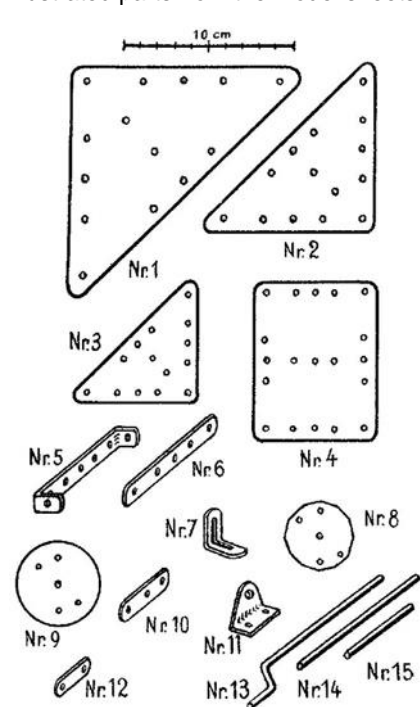
FERMO was made in Germany by an educational supply house, Bäuerle-Dobiasch & Co., Postfach 596, Lübeck. The model sheets are in German & English, and after the name FERMO (below) is 'D.R.P.h. Patent rights reserved'. The only indication of date is '12. 46. 10000.' after the name of the printer on the model sheets. If they are using the same convention as Meccano, it would mean that 10000 copies were printed in December 1946. This would be a very large number, only 7500 copies were printed in 1937 for the N° 4 French Meccano outfit. It does not seem that this system was widely sold, so it is likely that it was made only in 1946 and 1947.

„FERMO“

**The Box** The size of the box is 43\*30\*3cm. The lid is covered with a black crocodile like paper with nothing on it, not even the name of the set, and no sign that there was ever a label. In the box (below) the parts are clipped to a blue card insert. The small parts are in a cylindrical brass coloured box; a centre hole in its lid and bottom allow it to be fastened to the insert.



**The Parts** The parts are all blackened steel, except the aluminium Pulleys with boss, and some of the Bolts. The illustrated parts from the model sheets is shown below.



The holes are 4.3mm diameter. In the notes below the numbers of parts found in the Set are given in curly brackets. The three sizes of **Triangular Plate** have short sides of 13.5, 10, and 7 cm {4,6,6}. The hole in the Large Triangle, not shown in the manual, is the size of the Small Triangle. The three center holes on the short side of the rectangular **Plate** {2} are at 12.5mm pitch, while the outer ones are at 17.5mm. This pattern matches that on the Small Triangle.

On the long side the center holes are again at 12.5mm but the outer ones are at 30mm pitch. The two **Strips** are called struts and the 3h {4} has holes at 12.5mm pitch; those in the 5h {6} match the short edges of the Plate and Small Triangle. Likewise the holes in the base of the

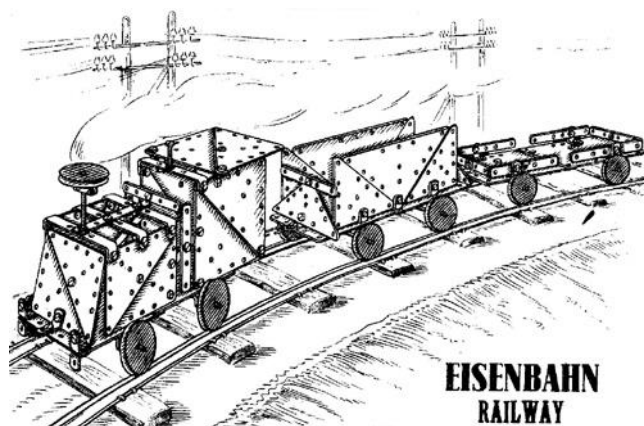
1\*5\*1h **DAS** {6}. Contrary to the manual, the **Angle Bracket** {15} has a hole and a slot as in the MECCANO one. The **Wheel** {4}, 44mm Ø, is like a MECCANO Wheel Disc, but with only 5 holes, one at the center and the others on two diameters at an angle of 45 degrees. The **Multi-Cornered Wheel**, #8, is similar but its perimeter is a dodecagon, 39.5mm across peaks {4}. It can be used with the Wheel to build a pulley, as in MOBILO: several are put between two Wheels, which are the flanges of the pulley. The dodecagonal form makes cord less liable to slip. The **Clamp**, #12, is a 2h Narrow Strip {6}, and two, with two Nuts and Bolts, can make a kind of collar (right). The **Connection Part**, #11, is like a small Trunnion {2}. One can be used with a 3h Strip to fasten a Wheel to an Axle (right). Fixing a Triangle to an Axle is also shown using 3h Strips and an Angle Bracket. The two **Axles** are 6 and 13 cm long {2,1}, and there is also a **Crank Handle** {1}. All are 3.6mm diameter, considerably smaller than the holes.

Some parts are not illustrated. There are two kinds of **Bolts**, both cheese-headed and 10mm u/h {63}.

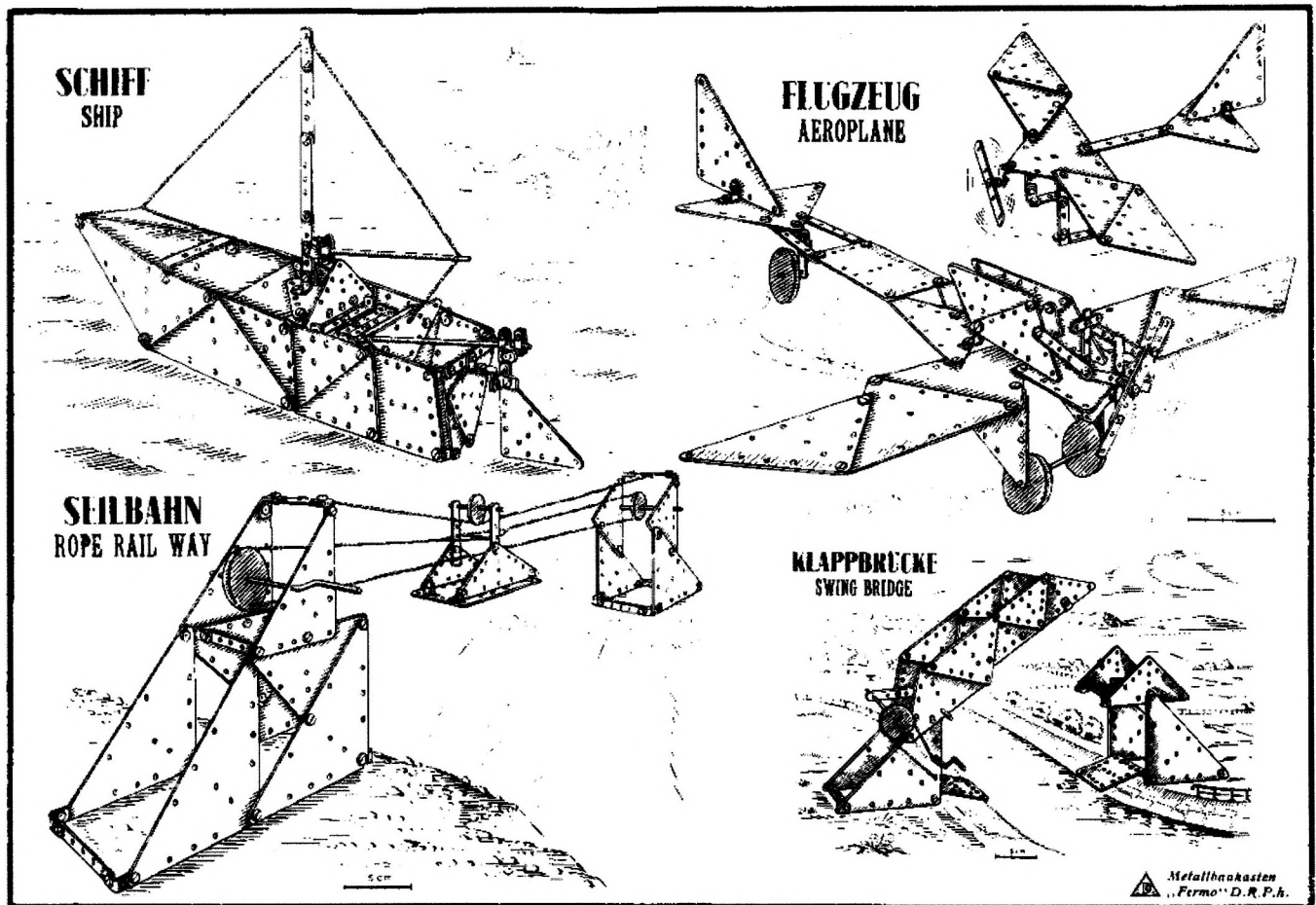
One is blackened steel and the other aluminium with a larger head. All the **Nuts** {63} are blackened steel, square, 7mm A/F, and 3.8mm thick – on one side they are smooth but the other has ridges, probably so that the Nut does not move when it has been tightened. The thread is M4. The **Screwdriver** (at the bottom of the photo) is a flat plate, pear shaped, and 65 mm in length {1}. The 4cm aluminium **Pulley** {4} has a 9.3mm Ø boss and a black Bolt as set screw. This part was probably a late addition to the system and does not appear in the models.

The manual indicates that there are 286 parts in the set, but even with the 61 clips and the four set screws, that makes only 265 parts. However, I doubt if any parts are missing, there is no room for them.

**The Manual** As already mentioned the manual is in German & English. It consists of only 3 sheets (about 14½\*20½cm) glued together at one corner. One page describes the parts and presents the system; another indicates how to use the Wheels, Clamps & Connecting Parts. No mention is made anywhere of outfits other than the one described here. There are 20 models in the last four pages, all rather clumsy looking. The triangular parts remind one of those in METALLO TRIGON & TRIANGLE, but they were used more skilfully in those systems. Below and on the next page are some typical models. The others include two Cranes, a House, a Snow Plough, & a Roundabout. The Train below would obviously need more wheels than are in the Set.







**'New' System: BOYCRAFT** The name was mentioned in 26/756 as a possible, if unlikely metal construction system, but now Kendrick Bisset has found a 'genuine' BOYCRAFT outfit, and has kindly sent details. It seems to



be a repackaged version of GIRDER BILT (see 17/467) and, as shown left, it is packed in a similar type of container (NB the BOYCRAFT tube lacked a lid and the one shown on it, to hold the top together, is in fact the G B one). Both tubes are blue with large red panels front & back, and white lettering. The words in the circles at the bottom are: FUN FOR

ALL, EASY TO BUILD, EDUCATIONAL, & cover much the same ground as the G B ones (which are shown more clearly in OSN 17). The address on the BOYCRAFT tube is Exclusive Products Co. Inc., New York 35, N.Y.

The set isn't quite complete but with some minor exceptions seems to correspond exactly to the OSN 17 G B outfit. The differences are • There was no 6\*4h 'Plate' among the parts found. • The thread is 4-40, as in the 19/555 set, with hex Nuts to fit the Spanner, & pan-headed

Bolts. • If original, the Screwdriver is of bent wire, as right. The Spanner is the OSN 19 type with the parallel handle.



No Model Sheet was with the Set but 9 models are shown on the tube between the red panels (including the Chair twice). They are all on the OSN 19 Model Leaflet, and all but one are among the models of the OSN 17 G B tube.

**And More GIRDER BILT** This is plain GIRDER BILT, no 'Super', and no hyphen. Two set have been seen on Ebay in the packaging shown left – a lightish blue tube with the top & bottom bands, the diagonal flashes, and the name, in red. In the small circle at the bottom is No.1, and in the flashes: FUN TO BUILD, EDUCATIONAL, LIGHT IN WEIGHT. The maker is as given in OSN 17. With each Set was a Model Leaflet with GIRDER-BILT on the cover, like the one in MCS/OSN.



One Set had the expected 16,16,8 of 4,8, & 16h Strips, 4 black Wheels, and an OSN19 type Spanner with a parallel handle. The other had 6 black Wheels, 6x 16h, and many more than 16x 4h Strips, so probably it included parts from more than one outfit. The Spanner had the OSN 17 curvy handle, and a wire Screwdriver with a MECCANO-shaped handle could be seen.

**EDITORIAL** First, my thanks to everyone who sent comments on the proposed changes to the N/L. I've tried to incorporate as many as possible of your suggestions but the result is inevitably something of a compromise, especially as it is often a question of trying to get a quart into a pint pot. Let me know your reactions.

On 'admin' matters - details of subscription rates, etc, and your credit balance, are now given overleaf. Please note that for simplicity all prices are now per Issue, and that in future the next N/L will not be sent unless the credit balance is sufficient to cover its cost. To make this clear the minimum you need to send to receive the next Issue is given, but as before you can send more to avoid having to make frequent payments.

With the experience gained from printing this Issue I can give an indication of the prices likely due to the use of colour, and printing single-sided. For the usual postal zones the price per Issue will probably be about £6.50/£7/£8. The final figures will be given in OSN 29. As explained in OSN 27 this Issue and the next (OSN 29) will be at the existing rates (given overleaf) for current subscribers, and the new rates will apply to OSN 30 and thereafter.

A note on the page numbering. As well as the normal page numbers each item has an 'S' number for those who want to file OSN material in MCS. For each system the first item about it will be 'S1', the second 'S2', and so on.

### FROM READERS

1. **FERMO** (see 27/784) came from the British Zone of Germany rather than from East Germany, as stated in the Extra MCS Sheet. Thank you to Jacques Pitrat for this correction.

#### FERMO: S1

[28/813]

2. The **MERKUR M8** was mentioned as possibly the largest general purpose set now available, but Alan Blake & other readers have drawn attention to the **METALLUS** Berlin outfit. According to the Metallus web site (now much improved & much faster) it costs €599 and has 2462 parts (the old **MÄRKLIN** No.1015, see below, has 990 + 558 N&B). By my count the M8 has 1384 parts (652 + 366 N&B), plus a Motor.

In passing, Metallus has a range of 12 outfits including 5 Gear sets. The 7 constructional outfits are said to be equivalent to the old **MÄRKLIN** Sets 1009-1015, & each is named after a German town, from Berchtesgaden to Berlin. Details of the **MÄRKLIN** sets are in MCS (the 1015 is the 1014+1034), and they all seem to have slightly fewer parts than the **METALLUS** ones. From the web photos the latter still include a few **TEMSI** parts. A **TEMSI** manual is included but it is suggested that the old **MÄRKLIN** manuals be used.

At the time of writing, October 2002, Dave Taylor has the Berlin listed at £329.95. The Dutch site mentioned in 27/790 has the M8 at €140.50.

#### METALLUS: S1

[28/813]

3. Thomas Morzinck wrote that Karl Debik has opened his

**building toy museum** in Germany. The address is Baukasten-Museum, Hartmannstraße 4, Löbau/Saxonia.

[28/813]

4. From Alan Blake. The Maplin catalogue includes 17 **CONSTRUCTION** sets, from a set with 116 parts at £3.99 to a 1482 part outfit at £49.99. No Set Nos. are given. Maplin shops have very few, if any, of them, but one shop had two sets that weren't in the catalogue.

#### CONSTRUCTION: S1

[28/813]

5. From Jacques Pitrat. 'On **BUILD** (27/798) I have an unused #400 set and the lid is the one with 'Standard' under Buildo. The contents are almost the same than those of the #45 set, but there only 6x 5h Strips, 6 DAS, no 5\*9h Plate, & 3x 98mm Shafts. The Flat Plates are not fully perforated. There is a plate Screwdriver with a centre cutout in the handle. The Eccentric Strap is anodised red, and the upper two Pulley Discs are anodised orange. The disposition of the parts is slightly different from the photo in the manual. On page 1 of the manual there is the address of the maker and the description and the price of the four sets: 400, 600, 900, 1500.' [Jacques also sent a photo of his open box, showing all the parts and their layout.]

#### BUILD (1): S1

[28/813]

6. Some notes from Don Redmond on **BUILD** following the article in 27/796. His No.45 includes Flat Brackets with one hole slotted, and A/Bs made from them. The Bolts in the set are steel, mostly mush head but with a few, 6 & 9mm, RH. The 6mm hex Nuts are chamfered on one side. The wire Screwdriver is distinctive with a narrow, 5mm, tip. The Strips are rather inaccurately stamped. The finish appears to be cadmium plate or similar, soft and susceptible to fingermarks, and easily polished with 0000 steel wool.

The glassine tube of N&B in a No.400 set contains chiefly truss head Bolts (very flat round heads tapering to a sharp edge), but with some fillister heads, chiefly on the longer ones. The Nuts are 7.5mm hex brass. The Screwdriver is the flat style, and likewise in a No.600 outfit.

The Gear Quadrants in the 600 are the 13-tooth type, and they mesh well with a 30cm bronze plated, steel Chain - pitch 4.65mm and 4mm wide.

#### BUILD (1): S2

[28/814]

7. From Jacques Pitrat. On **SPIROU** (27/783), the word is the name of a well known hero of a Belgian comic, who has the uniform of a page boy in a hotel. There is still a 'Journal de Spirou' published in Belgium and in France. Temsi chose this name for a metal construction system because many Belgian boys liked his adventures, the same reason that there is a Mickey Mouse set.

#### SPIROU: S1

[28/813]

8. Clive Weston has found a **VOGUE** catalogue dated January 1957. As would be expected, Sets 1, 2, 3, 5 are listed, with B&W photos, and named Junior, Standard, Major, & Super. This is the first positive date for the No.5



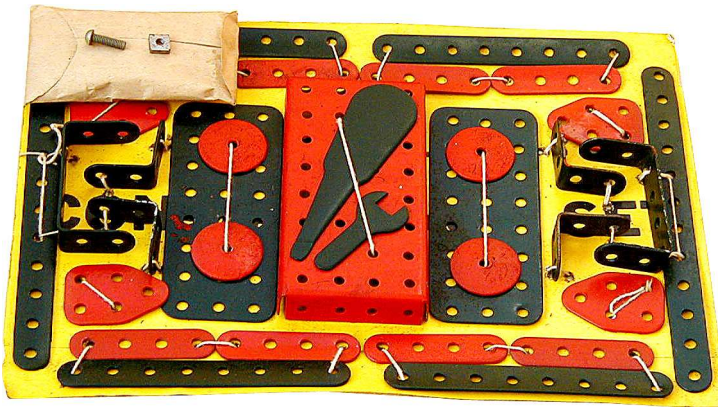


photo above the parts are attached to a yellow card by thin white cord. ARWILL | CONSTRUCTION SET is printed in black on the card but it is mostly hidden by the parts. The N&B are in the light brown envelope, 82\*47mm.

Compared with the parts seen earlier the obvious difference is that those that were green or blue are painted black. Notes on other differences between these parts and those in OSN 29 follow.

- The holes in the 4h Strips are about 4.1mm, those in the 8 & 12h are 3.9mm.
- The 8 & 12h strips are about 12.9mm wide as before but the 4h are only 12.1mm.
- The Nuts are square and the Bolts have a dull greenish finish. Their dimensions are unchanged.
- The Screwdriver is 91mm long and 26mm wide. It and the Spanner are 1¼mm thick.
- The Discs are 25.8mm Ø.

**ARWILL: S3**

[41/1230]

7. **Snippet. A SUNNY TOY Set** Two SUNNY TOY sets, both with BUZ BUILDER parts, but of distinctly different character have been noted previously in OSN. Details of one with coloured parts were given in 36/1069, and a simpler set, probably earlier, with parts shrink wrapped onto a backing card, was mentioned in 19/542. The example below, recently offered on Ebay, seems to be of the second type although the parts probably sit behind a formed cover. It was said that models were shown on the back of the card. Apart from Strips the parts that can be seen are 2 each of the characteristic BUZ Trunnions & Flat Trunnions, 4 Loose Pulleys, a Crank Handle,



and some red parts with the N&B, probably fibre Axle Stops. As can be seen the metal parts look to be nickelled, a finish noted in 40/1208 for those in an early BUZ No.1 outfit.

**SUNNY TOY: S2**

[41/1230]

8. **Snippet. 'New' German System: MIKLA** The Ebay photo is shown in the next column. The slogan under MIKLA 303 means 'The Building Set for Young and Old' The main parts bottom left on the lid are a wooden Rod, and a U-Clamp.



The latter appears to take 2 Rods at right angles, presumably held by friction alone because, as can be seen from the actual parts in the box, there seems no other means of tightening the Rods against one another. Also on the lid what looks like a Bolt, though its purpose is unclear, and a sleeve which, shown dark against the light Rods in the Bridge on the lid, no doubt acts as a Rod Connector.

In some respects MIKLA reminds one of the American MAKUMAL (see 18/519). However the MAKUMAL Clamp has a Set Screw to hold the Rods positively, and it has slotted sides which also allow Rods to be parallel to each other. Unlike MAKUMAL there are no Pulleys in MIKLA, at least not in this set.

No indication was given as to the size of the MIKLA parts, the Ebay ad said only that the Set was from the 1940s.

**MIKLA: S1**

[41/1230]

9. **Snippets. FERMO Parts** Two sets have been seen on Ebay since the account of this German system based on Triangular Plates appeared in 27/784. In both the largest Triangular Plate was like those in the Manual with no cutout and 2 holes between the hole in the centre of the hypotenuse and the one in the apex. In one set the parts had the same colour scheme as those in OSN 27, but in the other the Pulley and the black Screwdriver look black and all the other parts a silvery colour.

**FERMO: S2**

[41/1230]

10. **MULTIMAKE** I have a reference to an item in the 1911 French Printemps department store catalogue for Sets 1 to 6 of a constructional toy called MULTIMAKE. It claimed to allow youngsters to build many different models and to allow them to develop a taste for mechanics. I don't know where the reference came from and I'd be grateful for any more information about it. MULTIMAKE doesn't sound a very French name.

**MULTIMAKE: S1**

[41/1230]

**SMALL AD**

[41/1230]

**For Sale** Mike Rhoades has some MCS volumes available. Contact him for details at 137, Fairfield Avenue, Kirk Ella, Hull, HU10 7UW, or Tel/Fax: 01482 650463/658327.



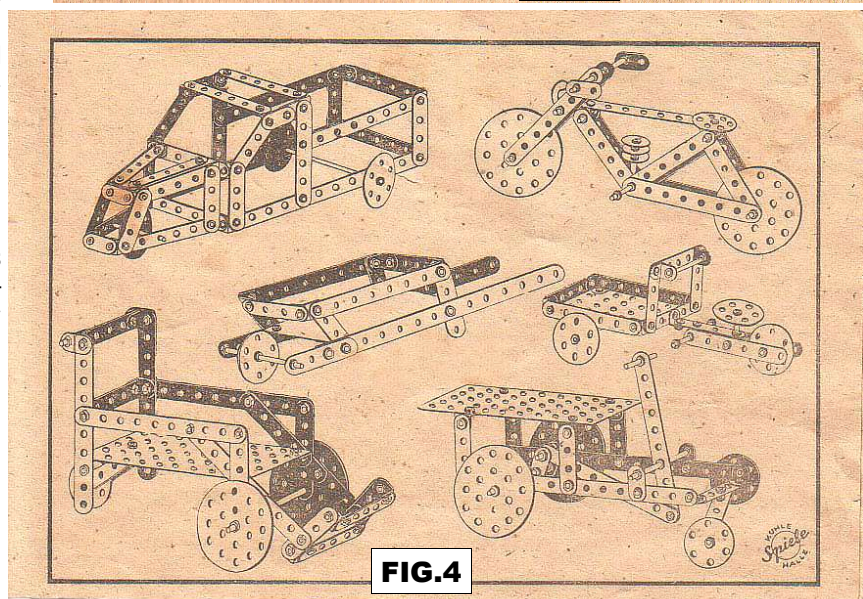
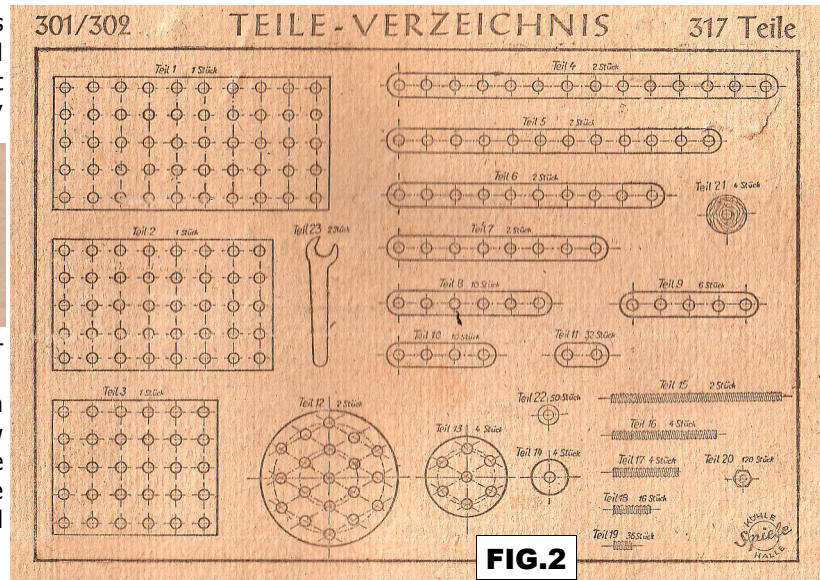
**A METALLBAUKASTEN [6] Set** Snippets about this small system appeared in 43/1300 and earlier, but now Jean-Pierre Guibert has kindly sent photos and notes on his Nr.301/302 set – the only size known.

**The Box** The box, **FIG.1** 297\*228\*27mm, is as in 38/1153 with a wooden frame and cardboard bottom and sliding lid. The logo is shown right. Jean-Pierre gave a nice translation on the 'Früh übt sich' slogan on the lid – 'Get a head start'.

**The Parts** with their quantities are shown on the underside of the lid (right) and are listed below with their number in curly brackets. Except for the wooden Wheel and black steel Spanner, all are aluminium. Holes are 5mm Ø at 15mm pitch and the thread is M5 (actually 4.9mm Ø).

- #1-3 Perforated Plates, 5\*10,8,6h. {1,1,1}
- The 5\*9h mentioned in OSN 43 was a mistake.
- #4-11 Strips, 14,12,10,8,6,5,4,2h long and 13mm wide. {2,2,2,2,10,6,10,32}
- #12-14 Discs, 5,3,1h Ø. {2,4,4}
- #15-19 Screwed Rods which scale at approximately 9,6,3½,2,1cm long. {2,4,4,16,36}
- #20 hexagonal Nut. {120}
- #21 Wheel, wooden. {4}
- #22 Washer. {50}
- #23 Spanner. {2}

No A/Bs or Bolts are mentioned. Some A/Bs can be seen in the models and in Ebay sets – the latter have 2 round holes and most likely the (large) quantity of 2h Strips includes A/Bs. No Bolts are apparent in the models either, with the Screwed Rods used to hold the parts



together. That would account for the number of Nuts provided. But some Bolts, about 1cm long, can be seen in the photos of one of the 3 Ebay sets to hand.

**The Manual**, with the Set, 150\*102mm, is the Bauvorlagen type as in 39/1166 and has 8 folded pages including the front left. One of the models pages is shown above.

OSN 44/1349

METALLBAUKASTEN [6]: S4

**Snippet. A No.1 FERMO Set** FERMO was the post-WW2 German system with the main parts triangular, and coloured black in most known sets. The outfit described in 27/784 had no label, or else it had come off without leaving a trace, and lid tops were not shown in the photos for the two Ebay sets mentioned in 41/1230. There was also no indication that any of the sets had a number. But Jacques Pitrat has alerted me to another set on Ebay which had the label right, occupying about 40% of the lid. Its box was black, like the OSN 27 example, and was the same size. The parts too were identical, except that the Pulleys were black instead of aluminium, and they had the same layout on, again, a blue backing card. As can be seen the label shows the set to be a No.1, so was any other size of FERMO ever produced? The front of the present set's manual was shown and appears to be identical to the one in the OSN 27 outfit.



OSN 44/1349

FERMO: S3



**THIS NEWSLETTER IS SUPPLIED ON THE UNDERSTANDING THAT IT IS FOR THE PERSONAL USE OF THE RECIPIENT FOR RESEARCH PURPOSES ONLY**

**EDITORIAL** This Issue has 28 pages instead of the usual 32. This change will also apply to any future issues and, in the face of repeated rises in postal charges, is to avoid having to increase the subscription rates for the printed version of OSN.

For anyone who hasn't come across them there are now two important sources of 'Other Systems' information. The first is that all of Jean-Pierre Guibert's Encyclopédie (see 52/1580) can now be seen at [http://www.mecca-clocks.fr/accueil\\_autres\\_systemes\\_01.htm](http://www.mecca-clocks.fr/accueil_autres_systemes_01.htm). Simply click on the initial letter of the system in question. Jean-Pierre's 'Database' can be downloaded from one of the small mauve panels below the initial letters – it is labelled 'Index de tri des jeux fichiers Excel'. The other mauve panels provide other useful information.

The second source is an extension of Timothy Edwards Meccano website to cover Other Systems. It contains all the information from MCS and my Database, plus scans of manuals, etc, and sometimes photos of sets. The scans can be downloaded. The address is <https://meccanoindex.co.uk/Other/index.php?id=1601635899#>. Access to a system is via its initial letter from the A-Z along the top. Other useful options under 'Other' Systems Home include downloading all the MCS pages, and a search facility of the Database for any combination of 12 parameters. Examples for 1, 2 & 3 parameters are 'Screw Thread'; 'Country' and 'System Type'; 'Material', 'Hole Pitch' & 'Hole Diameter'.

Finally on a sad note, Jacques Pitrat died unexpectedly in October 2019. Over the years he contributed many articles to OSN, often with details of rare or unusual systems. His last article will appear in the next Newsletter. For me Jacques was the ideal correspondent, always patient and helpful with my queries and questions. I'll miss you Jacques.

## Shorter NOTES, with thanks to all contributors.

1. **FERMO**. A set of this German system from 1946-47 was described in 27/784. Its 3 main parts were Triangular Plates, the largest with a centre cutout the size of the smallest. The Manual though showed the largest with no cutout, and also the Pulley with boss was not illustrated (though it was listed as PN 18). Now Angel Rodriguez Palacios has provided details of his outfit dated March 1946. It is without doubt earlier than the OSN 27 set, its large Triangles have no cutout, it has no Pulleys, and there is no mention of the Pulley in its manual. Like the OSN 27 set it contained the 2 sizes of Disc that can be used to make pulleys.

**FERMO: S4**

[54/1644]

2. **Gilbert's MECCANO Products**. Kendrick Bisset showed a display of these recently and 24 photos of them can be seen at <http://www.nzmeccano.com/image-141249>. After the photos is a link to download notes on the various items. These include details of the relationship between the 1928 'Hornby' sets and the 1929 'Gilbert' outfits, as well as notes on all the later Gilbert ones, right through to the 1937-38 blue & gold sets. Also covered are the Liverpool made sets sold by Gilbert in the US, and oddball items such as Puzzles, a Foundry Set, and a model Greenhouse.

Also included, BOLTLESS BUILDER, the set below, said to



be from 1937. Kendrick wrote that it may have been a prototype, though a few examples of it are known to exist. Possibly it was intended to replace MECCANO MORECRAFT when that system left the Gilbert camp. The connections of the parts, using dimples and holes, did not make a secure joint and it is hard to imagine that BOLTLESS BUILDER would have been especially successful.

**GILBERT MECCANO: S4**  
[54/1644]

**BOLTLESS BUILDER: S1**  
[54/1644]

3. **TITAN Phases**. Details of two phases were given in 26/761 & 45/1381. The first had parts with a dull grey metallic finish, the second had nearly twice as many different types of part, and they were painted, with black Strips, green A/Gs, and red & blue Plates. Now Timothy Edwards has pointed out that there was also an in between phase similar to the first but with painted parts.

**TITAN: S3**

[54/1644]

**OSN Subscription Rates, Printed Version** The price per Issue, including postage is £6.50 for UK; £8 by air to Europe & surface anywhere; £9 by air outside Europe. **Back Issues** For the zones above : OSN 1: £1.50/£4/£5; OSN 2,3: £3.50/£5.50/£6.50 each; OSN 4-27: £5/£7/£8.50 each; OSN 28 on: £7/£8.50/£9.50. (All colour & some B&W issues are on loose double-sided sheets.) Postage at cost on multiple orders. **OSN by PDF** The current Issue of OSN is also available as PDF files sent to subscribers as email attachments as pages become available. Their content is identical to the printed version. A £10 subscription covers the current & any later Issues. **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 (£1=€1.1=\$1.3). Payments may also be made using PayPal (in Sterling please). **Small Ads** Short ads are free to subscribers (but repeats may not always be possible, please ask). Ads are sent by email to PDF subscribers.

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