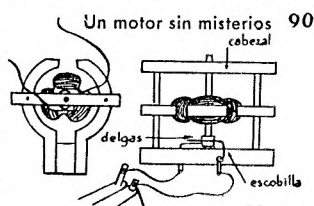


A fair range of experiments are shown, with permanent and electromagnets, bulbs and resistors, made up cells, and an electric motor. A No.3 Outfit is mentioned, to be ready shortly. Although certain specialised parts have to be assembled for the experiments, this isn't exactly a constructional system I think, so I won't go into more detail here. A box, from the manual cover, and one experiment are shown opposite. There's no indication of date except that it is said to be a toy of the atomic age. There's nothing on the manufacturer either - MECANO is included in the name of the small Spanish system MICRO-MECANO "GUINA" but there's nothing else to link the two.



Josep also sent a copy of the 12 page manual of another Spanish set, made by the well known firm Payá in 1962, called **CONSTRUCCIONES ELECTRONICAS**. It falls into the same broad category with electronic parts (transistors, capacitors, a coil, etc.) wired together on a chassis using special spring connectors. Details of 7 different simple morse and radio (I think) transmitters and receivers are given.

3. Ted Van Klink mentioned that there is a good, albeit slightly pricey, supplier of **TEMSI** in Toronto.

4. Sven-Ulrich Glage from Hamburg sent a list of his sets and the following names were new to me: - **DER JUNGE BAUMEISTER**; **EIFEL** (seems to be a Danish system of MECCANO or MÄRKLIN style, with the name on the Brackets); **FERMO** (German, the models are mostly built of triangular plates); **GA** (German, very simple with unusual parts); **GORDON** (most parts including Strips and Plates are brass plated, possibly an early East German system); **HERSA** (simple system, of small scale, made in Berlin immediately after WW2); **HW MAS-BAUKASTEN** (from the DDR firm that made DER JUNGE KONSTRUKTEUR); **LEICHTMETALL-KONSTRUKTIONS-BAUKASTEN** (aluminium parts similar to MÄRKLIN); **METABA** (German); **PICO ELEKTRIK** (looks like a 1970/80s version of ELEKTRO in MCS); **STUDIO ELEKTRIK**; **SV INGENØR**. He hopes to send more details in due course.

Other points: • On **AWS** (11/294), a later version of the set was sold with an updated manual containing additional models, and included in the set as new parts were 4 rubber Tyres. As far as is known none of the parts were coloured but there was an AWS clockwork motor which isn't mentioned in the manuals. • A **CONSTRUCTION JEEP** set that is different to the one in MCS and 14/373 - it is complete with a nice little tinplate Jeep, and the parts to build a Trailer and other models differ. It was made in Japan by Daiya. • An **INVENTRIX** outfit that was made in Germany in 1947/48 and has a clear resemblance to the Liverpool INVENTRIX in MCS. • A postwar **KONSTRUKTION** set which seems to be an earlier version of the system in MCS [and that in turn is thought to be earlier than the set described in 8/181]. • A **METALLO** set that seems to be pre-WW2 and Danish perhaps. It may be a 'new' system. • There was a German version of the **PHILIPS ME 1200** set described in MCS. • Two 1930s model plans for **HELLER MECHANIKUS** (15/415) are for model sailplanes made of aluminium that could really fly!

5. Photocopying tubular containers is always a problem and Kendrick Bisset has tried rolling the tube along to keep it above the moving light during copying. Rubber bands were put at either end to minimise slipping. The example he sent, of a GIRDER BILT tube, is very good indeed.

6. Don Redmond sent a note about research that he and

John Wapshott had done into the history of the Canadian **CASTLE BUILDER** system. The firm who made it, Castle Manufacturing Co. of Toronto, and its manager, Percy V. Jermyn, are listed in the city directory for 1917-18, but not before or after. A Jermyn family lived in Mimico, then a Toronto suburb, both before and after those years. The company's address was 69 Richmond St. East in 1917 and then at 80 Duchess St. As a working hypothesis Don suggests that Percy enlisted in 1914, was invalided home and founded the business in 1917, and died of Spanish influenza late in 1918 or early 1919, whereupon the business ceased. The resemblance to certain U.S. systems of the time has still to be explained.

Don also wrote that a MECCANO enthusiast of his acquaintance saw a metal construction set in a carton marked **BARUM CHEZ** (or similar) in an antique shop in Marmora (north of Kingston, Canada). It had gone when Don rang but was apparently made in Eastern Europe and had E984 on the box. Contents may have included 2x2" & 4x1½" Pulleys with Tires, 4 Rubber Tracks, Plates, N&B, and a small manual. Don wonders if it was repackaged MERKUR.

7. Dennis Snowdon mentioned that he bought a new **No.0 ERECTOR Set**, just like the one shown in 15/411, with 1" Pulleys and the FO Plate, etc, from a shop in Stanhope in 1943 or 1944. It cost 2/6, the amount he got from a local lady for digging her garden. He later swapped it for some MECCANO parts and now wishes he hadn't.

8. A friend of Tony Matthewman has pointed out that the text in the MCS pages for **RODOPI** is not Russian but may be Bulgarian. Could well be because a map shows some Rodopi mountains in the south of Bulgaria, and though I couldn't find Bratsighovo, the manufacturer's town in MCS, there are several names thereabouts that end in 'ovo'.

9. Last year Richard Bartlett found some sets called **MECHANIC** on sale in Malta, and they are probably akin to WISDOM (see 10/238), though some of the colours of the parts are different, with air force blue Strips and white (plastic) Flexible Plates. The Flanged Plates are still metallic red. 3 sets were available, and the largest included the special Cab with the motor built into the lower part, as in the WISDOM No.6 outfit. [Roger Baker has also reported sets on sale in Kuwait for the equivalent of £4 up to £15.]

Richard has also found the remains of what was probably a **SCHEFFLERS** set (see 12/324). There was no box and as would be expected the manual didn't have a name on it. However its cover, Illustrated Parts, and Set Contents agree exactly with those in MCS/FB, and the maker, VEB Metallspielwaren of 9112 Burgstädt, is the same too. Another clue is the Windmill Sail which is parallel rather than the later tapered one shown in OSN 12. The 7 sets available are shown on the back cover and though they retain the unusual SCHEFFLERS set numbering, their prices are identical with those for the Sets 1-7 in the BURGSTÄDTER manual described in OSN 12 (and included in MCS pt.5). So that would seem to put its date at near the point the name changed, although prices may not have changed as quickly in East Germany as they did in the West. The manual's PR of KE 51 76 III-8-9 690 might indicate a date of the 51st week of 1976. That at least puts it earlier than either of the 2 possible analogous dates from the BURGSTÄDTER manual.

The major parts in the set have a dark grey, nearly black finish with a sheen to it, except that the Flanged Plates are dark blue and the 5h Ø MÄRKLIN-type (metal) Pulley is a dark red.

10. To add to what was in 15/424, Kendrick Bisset sent the following notes on the **STRUCTO** parts in his #2, 2A and 3 sets. • The A/Gs have round holes in one flange and 4.7*7.6mm slotted holes in the other. • Wagon Wheels are 1½" Ø, and have a very smooth tread, ⅜" wide. The ones in the #2 set have 6 spokes and are painted black; the others

MECHANIC, from CHINA This development of WISDOM was mentioned in 16/458, and Roger Baker has since brought 2 sets back from Kuwait, a No.192 for me (thank you very much Roger) and a No.196. David Hobson kindly passed me photos of the latter so I can give some details of that as well.

The main changes compared to WISDOM (see 10/238) are the range of sets, and the Strips which are now painted instead of being nickel. The quality of the parts isn't quite as good - there's © 1993 UPRIGHT MANUFACTURERS INC on the back of the 192 Model Leaflet.

The PARTS The design of all the parts seen is as before, and that includes nearly all those used in the WISDOM Sets except the C/W Motor. The pitch of the holes is still 12.5mm of course, and the slightly quirky features are still there - the additional 2.6mm Axles and Road Wheels that push onto them, the extra long bosses, and the Crank Handle with the handle part that isn't quite parallel to the shaft.

The only differences are that the Plastic Plates are white instead of yellow, and all Strips, including the Curved and Formed ones, and DAS, are painted a medium blue. I wonder if it's the same shade as that used for the MECOTECH Strips (11/284).

And having said that the design hasn't changed I now notice that the new DAS are 2mm wider than the old ones, and are the same width between lugs as the MECOTECH ones. Were there ever nickel DAS with 63mm between the lugs?

As in later WISDOM Sets crosshead Bolts are included, but, as before, with an ordinary Screwdriver. (The Bolt head diameter at 6.2mm is smaller than seen before, but WISDOM sizes vary considerably.)

The quality of the parts has noticeably deteriorated in some respects. The bore of the bosses is oversize, anything from 4.3 to 4.5mm; slight burr can be felt around some of the holes and edges, and on some of the Axle ends; the flanges of the Sector Plate are bent at nowhere near 90°, and one is at a different angle to the other; and on some Strips the blue paint is slightly chipped off in places. The red metallic paint on the Flanged Plates and Trunnions is still good and so is the nickel plating on the Brackets, Wheels, etc, except for a quite rusty Flat Bracket. (And I've only 3½ Flat Brackets instead of 4.)

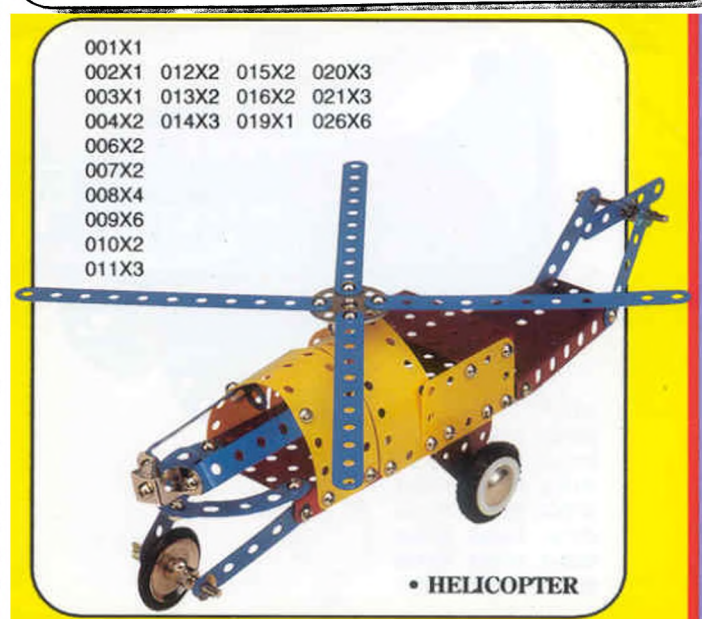
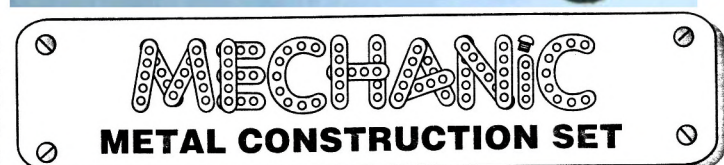
The SETS The WISDOM range was 5 sets, 0-4, which were more or less progressive, plus the non-progressive No.5 with the C/W Motor, and the No.6 with the Cab and Friction Motor. There are 9 known MECHANIC sets with 3 small sets about the size of the 192, 3 bigger sets, and 3 larger still, similar in size to the 196. In each group the 3 sets, although about the same size, each have a different range of parts. There are no Set Nos. but a small Item No. appears in one corner of the boxes - at a guess they run from 190 to 198.

The content of the 192 is identical with the WISDOM No.2. (In MCS X1.4a/6a, the version with the ½" Pulley but not the ⅝", and with no 2¼" Axles. In my Set there are 44 Bolts and 43 Nuts.) The 196 corresponds to the WISDOM No.6, certainly all the different parts are present, including the 2x1½" Rubber-tyred Wheels, and for the parts that can be seen the quantities correspond. See later for comments on the Set Contents given in the Instruction Leaflet.

The boxes open at the ends and are yellow with a large colour picture of one of the models from the Set on the top, and one each of all the parts in the Set to one side and below it. These parts are also on the bottom together with several other manual models. The 192 box measures 12½"×9¾"×1¼". On both the boxes the Flexible Plates are shown in the old yellow colour. The parts fit tightly into the recesses of a clear plastic moulded tray, and indents in the matching cover (with 'UPRIGHT' pressed into it) holds them in place.

The MODELS The 192 Instruction Leaflet is a single full colour sheet, folded over to give a page size of 193×277mm deep. The background is yellow, like the box, but edged with violet & red, and the main model on the front is the Bulldozer on the box. The cover has '192' on it, each of the other pages a '2', and on the back, '© 1993 UPRIGHT MANUFACTURERS INC' again. The cover also shows the various parts in the Set and the quantity of each. 20 models are featured with a single photo & a List of Parts for each. 2 are on the cover and 6 on each of the other pages, and again the Flexible Plates are shown yellow. The models are old favourites, and one CONSTRUCTION MODELS Leaflet, (with red and green parts in the models) has the same 20 models, though the photos have been retaken and one or two very minor changes made. Compare the Helicopter below with the one shown in 10/239. The models aren't numbered but each is named, in English only, though the (limited) text on the box is in also in German, French, Spanish, Dutch and Swedish.

From photos of the front and back of it, the 196 Leaflet looks to be similar. Apart from '196' on the front & '6' on the back, there's only one model on the cover, the same Tip-ping Truck (my name) as on the box, and 3 models on the back page (including the Tanker below). Again the Contents of the Set are shown on the cover and the quantities of a few of the parts don't agree with the reported Contents of the WISDOM No.6, with fewer 3 & 5h Strips, & N&B, for example. Another instance is the two 1" Pulleys & Rubber Rings listed against the 4 in the No.6, and against the 4 needed in at least one of the 196 models. I haven't a No.6 WISDOM manual to see if any of the models are new or have been redesigned.



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(4.3 in the 5h). • 4 **Curved Strips**, M90a type with 4.2mm holes. • A 1*5*1h **DAS** with 4.3mm holes. • 2 each of **Trunnions & Flat Trunnions**, both with 7 (4.3mm) holes. • A **Double Bracket** (4.2mm holes), & a **Reversed Angle Bracket** with 4.1mm holes, all round. • 4 **'Radiator' Plates**, 2 of which were probably once curved. Corners are square and the holes in 2 (1 Flat & 1 Curved) are 4.1mm, and in the other pair, 4.3mm.

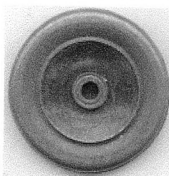
Aside from the quality of the parts, the light green ones do not generally match well with the BET parts, particularly the ends of the Strips, the corners of the Radiator Plates, & the Trunnions. They, and the rectangular Flanged Plates, are a good match with the illustrations of the YES parts in the Manual, except (a) for the different holes in the Flat Trunnion, and (b) the Curved Strip, if the YES part isn't stepped. Perhaps by coincidence the quantities of the light green parts largely correspond to those in a YES No.3 set. There is no Flanged Sector Plate among the YES parts and the two in the lot are actually very similar to the EYZ-BILT pattern although the bends are a little less sharp.

MYSTERY PARTS No.44

Jim also sent these - they were found with the No.4 EYZ-BILT described already, and they are probably the best part of a decent small set. Nearly all have a chemical black finish, not seen on any other Australian parts, and the Road Wheels are unusual. There's nothing to prove that these parts, or the r/g ones above, are actually Australian but it seems very likely. Not many small sets have 15h Strips and small, rigid Flat & Curved Plates.

• **DATA** (in mm) **Strip** (11-hole): •Hole pitch/dia, 12.7/4.3 •width, 12.9; •thickness, .83 but see below; •ends fully radiused. **Boss**: •o/d, 9.6; •i/d, 4.29; •brass; •double tapped. **Thread**: 5/32" BSW. **Axle Dia**: 4.06. **DP**: N/A. **Nut**: hex 7.9 A/F; **Bolt**: cheesehead 5.5 dia; both brass steel.

The parts are listed below: they are black & MECCANO pattern unless stated otherwise. The numbers found are in curly brackets. • 5,11,15h **Strips** {10,4,2}. All are about the same thickness as the 11h above, but 2 of the 11h are 1.07mm thick. The ends of the 15h are semi-radiused. • 4 **Curved Strips**, like M90a. • 1*5*1h **DAS** {2}. 7h pattern **Trunnions & Flat Trunnions** {2,2}. **Angle, Flat & Double Brackets** {8,1,2}, and a **Reversed A/B** with all round holes. • A red 5*11h **Flanged Plate** with a 1/2" cross slot. .73mm thick, rigid **Plates**, 5*6h with only edge holes, & slightly rounded corners {2 Flat, 2 Curved}. • A **Bush Wheel**. Red 1" **Loose Pulleys** {2}, 4mm across the 'V',



with centre brass eyelets. 1 1/2" Ø **Road Wheels** {4} (left) - tinplate (now dark grey) balloon wheel but only 6.8mm wide, and with a 24mm red concave disc held in the recess of the outer face by the peening of the boss. The **peening**, of near rectangular section, is unusual.

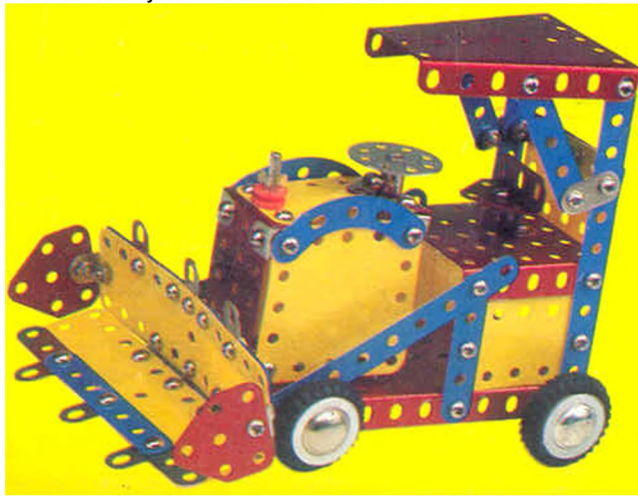
• 1 1/2, 2, 3 1/2" plain steel **Axles** with slightly rounded square ends {1,1,2?3}. A **Crank Handle** 5" o/a, also plain steel, but it may not have been with these parts. • About 50 **N&B**. The Nuts are machined, 2.6mm thick, & the Bolts 1/4" u/h. • **Finish**. The parts are well made, though the hole size varies between the different parts - usually it is 4.2 or 4.3mm, but the holes in the 15h Strips are 4.6mm. The black parts still look smart, even though the painted ones are well used.

I thought the black finish attractive, and also the Road Wheels, so I used the parts to make a Shovel Excavator based on the 1948-53 MECCANO Model 3.18. It worked out well, and the extra holes in the Plates compared with the Radiator Plates were invaluable. However for the bucket I had to bend a Curved Plate 'the other way', which was easy enough using bending rollers but would have been impossible by hand. That would have been the case with the Radiator Plates too and one wonders why they were made of such heavy gauge metal in both systems. A thinner fairly

soft steel would have given adequate stiffness and still allowed bending over a broom handle or the like. I could go on about the folly of having Radiator Plates in a system like BETTAFIT with only 34 parts in all, but it would simply be stating the obvious.

Another MECHANIC Outfit Sets #192 & 196 were described in 17/471 and now David Hobson has kindly lent me his #193 Set. A label on the box shows that it was imported into Belgium by N.V. Nicotoy S.A, Stasegemsesteenweg 72, 8500 Kortrijk/Courtrai. The Model Leaflet and many of the parts are missing but it is clear that whereas the #192 was similar to the WISDOM No.2, this is the equivalent of the WISDOM No.3.

The Set is in the same style as the 192 but the box is a little larger, 14 1/4*10 3/4*1 1/4". The large model photo on the top is of a Lathe, and it, and 4 of the 5 models on the bottom, can be seen, with very minor variations, but coloured red & green, in an old CONSTRUCTION MODELS manual. The 'new' model is shown below. The parts remaining in the Set are exactly as those in the #192.



More Trunnions My apologies to whoever kindly sent some notes on Trunnions, because unfortunately I can't find his name. First the 4 below which aren't in the Trunnion Sheet (see 15/427). From left to right they are photocopies of EXACTO & AUTOMAT full size, and MÄRKLIN at 1/2-scale; then a trace-round of MEK-STRUCT. The MÄRKLIN one was also labelled 'AMI LAC', but I can't find the part in the MCS AMI LAC pages. Perhaps it was in earlier (or later) Lists and I'd be glad to hear if anyone has information on this, or any other variations from the MCS material. The PN might be 113, which is the old MÄRKLIN number, and isn't used in the MCS AMI LAC List.

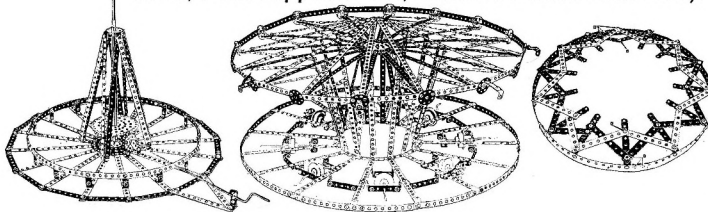


Mr X also noted that there are a number of Trunnions, or similar parts including small Triangular Plates, in MCS which aren't in the Trunnion Sheet. These are from ALPHA [2], CONSTRUCTA, DER JUNGE KONSTRUKTEUR, DUX-UNIVERSAL, EL TECNICO, ERECTOR, IL COSTRUTTORE MECCANICO, KONSTRUKTION, LE CONSTRUCTEUR (should be type (A)4 & not (A)3), MAAKEETS, MAC ET NICK, MEKANIK [1], METEOR, PREMIER, STRUKTIRON, TECC, TECNIC, TEKNO [2].

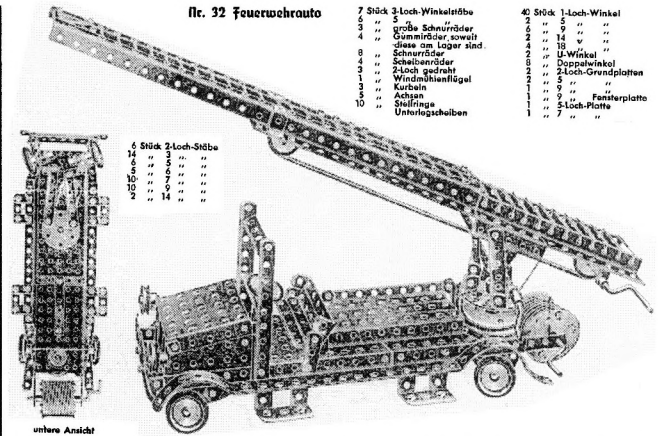
Windmill, with the Large Disc used in some cases to give a reduction ratio. The Bolts shown are quite long, as they would need to be, but would seem to be the standard issue since no extra long ones are listed. The **Chair-O-Planes** is about 18" Ø with 4 aeroplane 'chairs', and among the parts needed are 57x 17h Strips, 33x 7h, & 50 A/Bs. The **Crane** has a jib about 24" long and simple hoist, luff, & travel motions. Slewing is through a pair of the made-up gears with 4 Wheel Discs under the jib, rolling on a Large Disc.

The first model from the **No.3** outfit is a **Big Wheel** of some 30" diameter with 8 cars and a loading platform underneath it. This is the other model in the Extra MCS Sheets. The **Roundabout** at the bottom of the last column is the second model - its 8 cars are on arms pivoted at the centre and follow an undulating outside track. The final model, another **Roundabout** has again 8 pivoted arms but the Wheels at their ends run on a flat track in a plane tilted up from the horizontal.

The last model is the **Roundabout** on the manual cover and needs **Sets 3+3a**. Referring to the small illustrations below, on the left the Centre Post is supported by 8 Strips and its spindle is driven from the Crank Handle via built-up gears. The circular track is made from Strips and is attached to the radial Strips by Brackets. The centre view is the main rotating assembly and part of its weight appears to be taken by the 8 Flanged Wheels, journalled in Strips between the radial Strips, which run on the fixed circular track of the base. The platform ring carries 8 cars, 2 of which rotate about a vertical axis by being geared to the Flanged Wheel axles. The inner platform ring carries 4 cars and is on top of a criss-cross of Strips (below right) with a circle of Rails attached to the outside by A/Bs. The Rails sit on the 8 Flanged Wheels and so the inner & outer platforms rotate in opposite directions. In all there are 5 types of car. The parts count for all this includes 417 Strips, 538 Brackets, & 1196 N&B. So an impressive model but some care might be needed in building it, with no A/Gs to give a solid basic structure. The lighting parts are only shown on the cover picture, with alternate 3.5v Bulbs, & 25v Bulbs with reflectors, around the outer edge of the canopy, and a cluster of 3.5v Bulbs in a Multi-Holder above one of the cars (the other, on the opposite car, would be hidden from view).



'New' System: REKORD Werner Sticht also alerted me to an eBay item, a set with REKORD at the bottom of the centre of a blurry lid label below left (it has a red car on a road with a railway bridge behind, set on a blue ground). For several reasons it seems almost certain that the Set comes from the same stable as the ZICK-ZACK system described in 15/420 & 18/518. First the logo at top left of the label looks like the wolf's head with lightning flashes that is on the manual described in OSN 18, and the name under it might even be Zick-Zack. Next, most of the parts in the Set look like ZICK-ZACK. Thirdly, the cover of the manual that was with the Set, is identical to the OSN 18 one (right), with ZICK-ZACK on it, but not REKORD. Also with the Set



was a page, perhaps from a manual, with a Fire Engine on it which is clearly the same as a model in the OSN 18 manual, though there (above) an extra view & parts list is included.

Of course there's nothing to say that the literature and parts went with the box originally, but there must be a good chance they did, especially the parts, and if so REKORD & ZICK-ZACK are probably closely related, as well as coming from the same firm. The REKORD lid label looks more modern than those shown in the OSN 18 manual.

Going back to the Set, its large flat box scales at 50cm wide, and is dark red with the label set in a light red rectangle; the inside is orange and in one compartment is a dark red backing card. All but 4 of the parts that can be seen clearly are like ZICK-ZACK and include Flanged Plates, 5*5h, & 5*9h (with & without centre cutout); 5 & 9h A/Gs; Strips up to 9h long; 4 each of 6h Bush Wheels, 50mm Pulleys with the single face hole, & 2h Ø Pulleys with Tyres. The Pulleys are red but otherwise all the parts look as if they might be nickel. Parts not previously noted as ZICK-ZACK are Tyres for the 50mm Pulleys, a Gear of 36mm Ø, and Contrates of 33 & 14mm Ø (all scaled dimensions). The Gear matches the 'nickel' parts but the Contrates are lighter, more the colour of BZP.

A WISDOM/MECHANIC Set This is a No.1 Outfit, still strung, with WISDOM packaging, but the Strips are blue like the later MECHANIC (see 17/471) and the Model Leaflet is also MECHANIC, with Item No.191 on the front.

The box, 10½*8*¾", has the usual WISDOM top, with a purple & yellow border around a large transparent panel. As well as WISDOM it has the French SAGESSE name on it (see 10/238), also MM191, and a stuck-on label with CE \ E.S.L.MALTA on it. Inside the parts are in a white formed plastic tray, strung with thin white cord, like the Cord of the Set. (I don't recall seeing a strung WISDOM set with this type of tray before.) The contents are exactly the same as the WISDOM No.1 in MCS, with 30 N&B (not in MCS).

Apart from their colours the only notable features of the parts are that the Spanner doesn't have its centre hexagonal piercing, and the DAS are the wider MECHANIC type. The Spring Clips are too wide at the neck to grip the Axles.

The colours are a bit of a mixture with the Strips & DAS blue; the Flanged Plate & Trunnions red, but a plain light red, not the usual WISDOM/MECHANIC darker metallic shade; the Flexible Plates yellow; and the usual parts in nickel. (In fact this is a MECHANIX colour scheme, see 24/710). The Bolts are cross-headed, and the flat end of the usual green plastic handled Screwdriver just fits them.

The Model Leaflet is in the same style as the 193 one of OSN 17, and is the same size. Again, there are 20 models, and with the same colour scheme. They are, with very minor changes in a few cases, the same as those in an old 'red & green' No.1 CONSTRUCTION MODELS/ WISDOM Leaflet.

The box carries no maker's name, just 'Made in China', but there is '©1993 UPRIGHT MANUFACTURERS INC' on the Model Leaflet, so no doubt this was an early set from the new company using old packaging.

Thank you to David Hobson for lending me his Set for these notes.

A.C.Gilbert's First ERECTOR Patent

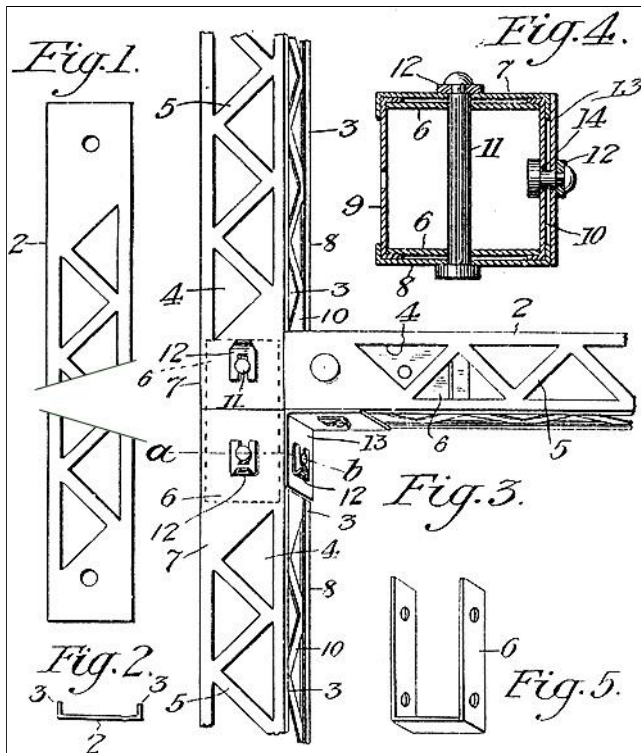
by David Hobson

Gilbert's first ERECTOR patent seems to have been US 1,066,809 of 8 July 1913, and is entitled 'Toy Construction Blocks'. Its specification is quite brief, and outlines how to make his famous box girder units from 4 strips having simple flanged edges, using U-shaped coupling pieces. (Strip is the term used in the patent for the ERECTOR 'braced' Girder.) This version was only marketed for the 1913-14 season, and Gilbert does not seem to have made application for an equivalent UK patent. For the next year the Girders were redesigned to have the familiar V-section channels along their edges, and four could then be made into a box girder without the use of a U-shaped coupling piece. This version was covered by US 1,231,728 issued in 1917, the application having been made on 26 Jan. 1914. The equivalent UK specification is No.1259 of 1915.

The figures from the patent (actually from a clearer, revised version described later) are shown right. The U-shaped coupling piece, 6, acts to hold the side strips 9 & 10 out against the lips of the other side strips 7 & 8, while the bolt, 11, presses 7 & 8 down onto the lips of 9 & 10. As shown the bolt 11 is a smooth pin with a groove near the end for a U-shaped retaining clip 12, but in the text is also '...or the bolt may be threaded and a nut applied thereto.'

In contemplating using the pin and clip method instead of bolts Gilbert may have thought it would be cheaper and offer an advantage over his competitors already established in the market – MECCANO, AMERICAN MODEL BUILDER, & STRUKTIRON. However the length of the pin had to be quite specific for the combination of strips & couplings to be joined and it could not be tightened to make a really firm joint. Packing washers might have helped in both cases but are not mentioned in the patent. Gilbert seems to have abandoned the idea of using this method of fastening and ordinary nuts & bolts were supplied in the 1913 sets. Bolts with nuts are shown holding the redesigned strips in US 1,231,728.

As already mentioned the first patent was quite brief, running to only 1 page of text. It seems to have been badly drafted, and included some obvious mistakes in the drawings. Although Gilbert soon abandoned the principles it covered, it was redrafted for some reason, with 3 pages of



text, and with the drawings amended to clarify the invention. This version was published as US Reissued Patent 14,250 of 16 Jan. 1917, the application for reissue having been filed on 29 Jan. 1914. Interestingly, although the U-shaped clip method of securing the pins is mentioned in the text as before, and is illustrated in the drawings, it is omitted from the Claims Section. By Jan. 1914 Gilbert must have abandoned the simple flanged strips covered by the patent, and had indeed just filed for patent protection of his redesigned version. Presumably therefore the reissue was for legal reasons, either at the instigation of the US Patent Office to correct mistakes, or because there might be a need to establish proper priority of the original patent in case it were to be used later, or in case of any disputes which might arise.

ITEMS FROM LETTERS

1. From Thomas Morzinck. 'Tobias Mey has told me that he is going to start a **toy museum** in the town of Calw [between Baden-Baden & Stuttgart] in which all his priceless originals will be shown in special exhibitions in 2003 & the following years. There will be special interest exhibitions for metal sets like Märklin, wooden sets like Record, stone sets like Anker and much more.'

2. From Werner Sticht. 'Bad news from Switzerland, the production & storage areas of **STOKYS** Littau factory burnt down in last March.' Werner also mentioned that he now has a web site, www.stabilbaukasten.de.vu, for STABIL and other Walther products. It's in German but much is easy to follow and the pictures often speak for themselves. As well as STABIL there are sections on MINIATUR, WALTHER'S INGENIEUR, and the wooden sets. Also notes on the pioneers including Lilienthal, Hornby & Korbuly.

3. From Don Redmond. • All the Semi-circular Plates found in two strung **VOGUE** No.1 sets are the type with 2 extra holes, illustrated in 15/421. The extra holes are not shown anywhere in the manuals for the Sets. [Since Don wrote a No.2 set has been sold on eBay, boxed but not strung, and of the 6 Semi-circular Plates that should have been in the Set, 5 could be seen, and all were the type with the 2 extra

holes. The Set was in no other way remarkable: the manual cover was identical to the one shown in 17/466, and the lid label similar, with SET No.2 (STANDARD) at bottom left, just as expected.]

• On the Chinese **MECHANIC** (17/471 & 22/640) I can confirm that the No.190 exists, and that the 190-192 series is not progressive. No maker's name is given on the 190, the only source information is on the (Canadian) bilingual box: 'Imported by/importé par DMD Group, Mississauga (Ontario) L5T 1R2'. There is no French on the model sheet but a copyright date of 1993. The English model names are a little strange, Sailer for a sailboat for instance. Nice try though.

• 3 white Flanged Plates not seen before are sketched 50% full-size in the next column, and all the holes in them are indicated. The large cutout in the one top left is 30*35mm, and it has flanges on its short sides, with 5 holes in each. The top right one has 7h flanges on its long sides. The bottom Plate is 7*14cm and its flanges are at 45°. The long ones are unperforated and only 7mm wide; at the ends they are 20mm wide with 2 slotted holes in each as shown. The large holes on top are 10 & 33mm diameter. The clues to their probable identity came from their unusual hole pitch of 14mm, and the various labels stuck to them - most are 'space' but one is 'Delta-X'. So no doubt the parts are from a **DELTA-X Space Set**, not listed in MCS. [DELTA-X was the name used for the Japanese DELTAX sets when they were sold in the United States, see 11/288.]

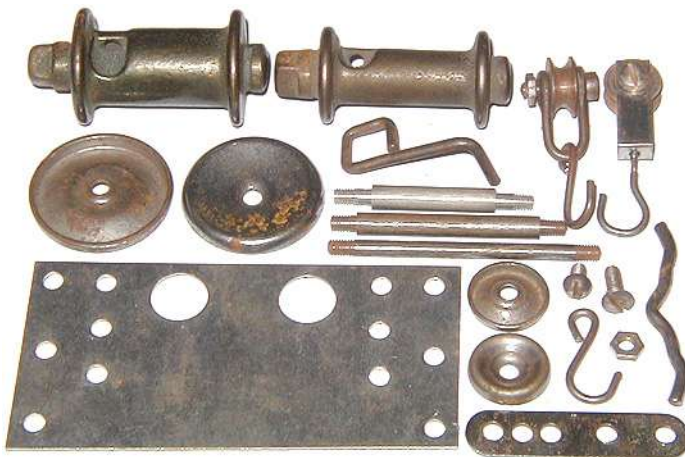
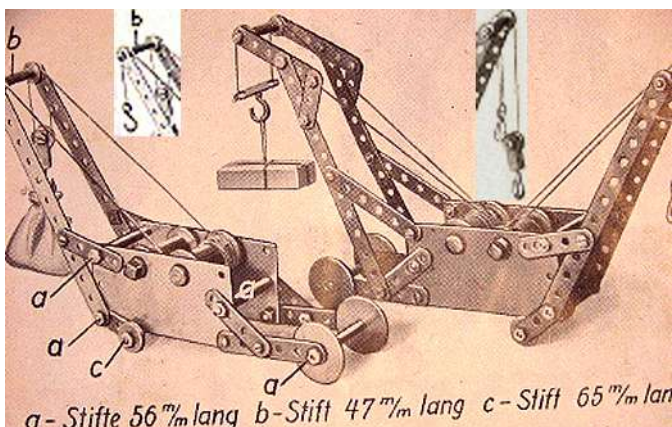
METALL-BAUKASTEN

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.

OSN 34/1035

MECHANIC [1]: S1

This is the last page of OSN 34.