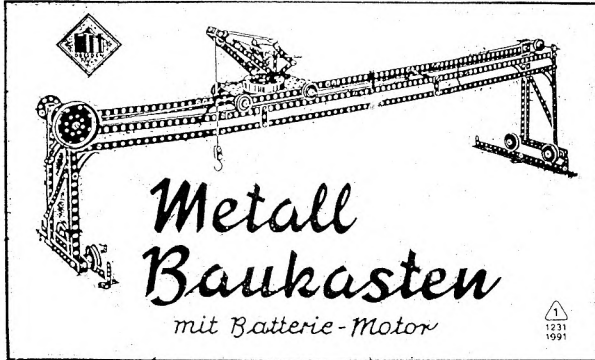


about 1950. The Sets 18-24 in MCS were preceded by a series 1,1A...3. MCS doesn't mention that Strips, A/Gs, and small parts were nickel plated.

METALL BAUKASTEN A system from the 1930s with over 50 different black parts. Holes are 4.1mm Ø at 12.7mm spacing.

METALL BAUKASTEN mit Batterie-Motor The manual cover of this East German set is shown below - the logo on it was reproduced in 13/337. EZ says that the parts were packed in a plastic box, and that they were strong and well made, with a black finish. They included 2 sizes of Tyres, rectangular and trapezoidal Plates, and circular parts up to 7h Ø. 4mm Bolts were used, and the pitch of the holes was 12mm.



METALLO-TRIGON This 'geometrical' system was discussed in 5/93. EZ gives the period as 1913 to c1926 and lists the firms who made it during that time: Metallo-Trigon GmbH, Offenbach; from 1916, Stanzwerke GmbH, Eisenach; from 1919, Stanzwerke u. Schloßfabriken GmbH, Bad Liebenstein and Sachsendorf bei Eisfeld; from 1920, Stanzwerke GmbH at Sachsendorf and from 1923 at Eisenach again. A photo of a 1916 No.2 Set shows several types of spoked Pulleys with 3, 4 and 6 spokes, all straight, and a pair of the smaller (6-spoked) ones are fitted with Tyres, as shown in the original sketches of the parts in MCS.

MEWEKA From EZ: this DIY system (see 12/321) was made until c1960.

MIKRONO Konstruktionsspiel EZ lists this system as being made by M. Löffler of Altona/Elbe from 1918 to ?, but no details of it are given. If I've understood correctly it already existed in 1916 under the name **ROSETTA Konstruktionsspiel**, and also mentioned is **PYTHAGORAS Konstruktionsspiel** in connection with the words 'objection/Patent/renaming', but I can't sort out exactly who did what to whom.

M K A Probably from East Germany in the 1950s, this system had about 40 parts, all plain aluminium except for steel Axles, and included both TRIX-style and MECCANO-

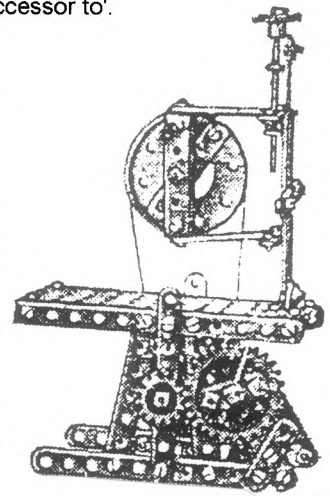
style Strips. The hole pitch at 11.2mm was larger than TRIX but smaller than MECCANO, and the holes were 4.1 and 4.3mm respectively. Mystery Part #3 from 2/25 may be a M K A part, or if not it's very similar. The model at the foot of the last column gives an idea of some of the parts. There are 3 sizes of Pulley with Tyres to fit the middle one. All of them, and the 5h Ø Disc, have tapped bosses.

M K A may well be connected to **M F C**, already in MCS - the parts look the same, the same range of PNs are used, and those for the N&B, the only parts that can be positively identified by PN, are identical.

MODELLO On the logos (12/312), Jeannot wrote that the JB one was that of the first manufacturer, Johann Brandner of Regensburg (1919-20). Ernst Plank at Nürnberg then continued (EP-MODELLO) until at least 1928. EZ confirms the hole pitch as 10mm with an Axle diameter of 4mm.

MÖWE The name is sometimes spelt **MOEWE**. This system was made from about 1946 until perhaps the early 1950s. A leaflet shows what looks like a metal box, and has at the bottom 'Made in German - Brit. Zone - N. Rh. W.' The only mention of a maker is 'Möwe Metall-Baukasten-Fabrik'; in EZ it is given as 'Möninghoff & Weiß Nachfolger' - the last word seems to mean 'successor to'.

A page from a manual shows 2 models which can be built from Sets 1 and 2, and for which about 20 different parts are listed. These include Strips 3,5,7, 8,11,12 & 20 holes long; Achsenträger which may be Double Bent Strips; a Baseplate which looks as if it is 5*11 or 12h, and may have flanges on its long sides; 2h Ø Loose Pulleys; 5h Ø Flanged Discs with a pulley groove and a large centre hole, like STABIL; 25 & 85mm Axles which are probably Threaded Rods; a Crank of some sort; and the large and small Gears that you may be able to see in the Bandsaw above, and which look as if they might be similar to the STABIL patented gears.

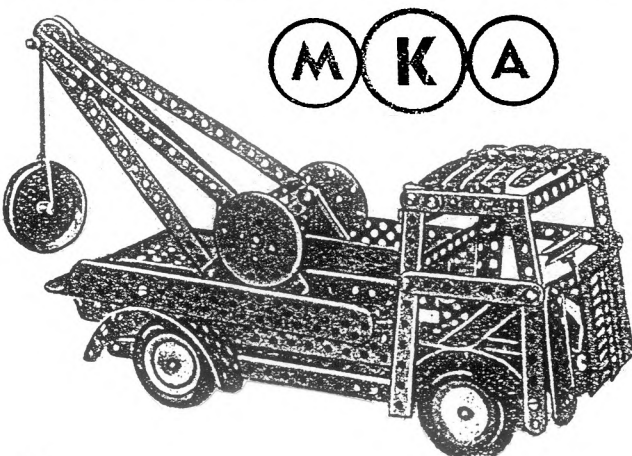


Some of the parts in a set differ from those in the models. The Baseplate is flat and has 12*5 holes, while the 5h Ø Flanged Discs appear not to have a centre hole but instead a boss, fitted to the recessed side, with 6 holes at 1h radius around it. There's also a Double Bent Strip and two 8h long Flat Sector Plates with a 5+7*3 hole pattern. They, like the Baseplate, have sharp corners.

To give an idea of the size of the sets the other model, a Double Swing, uses 57 parts plus 20 Angle Brackets, 8 Pulleys, 80 Bolts and 100 Nuts.

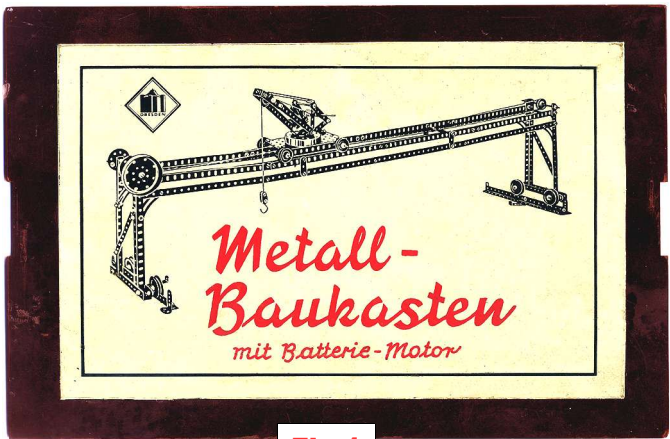
Nothing is known of the hole spacing or diameter but my impression is that the pitch is nearer ½" than 10mm, and in that case the holes scale at between 3½ and 4mm.

MWK This was an East German system from between WW2 and the early 1950s, with plain aluminium parts that had 4.1mm holes at 12.1mm pitch. In all there were about 36 but the models I have seen show only the following: 2,3,5,7,11h Strips; 1*5*1, 1*3*1, 2*1*2 DAS; 1h Angle and Reverse Angle Brackets; Double Bent Strip; 7*11, 3*11, 3*7 Perf. Plates; a Tapered Plate (see model at top of next column), & a 2h Triangular Plate (perhaps with a centre hole); 28mm and 62mm Ø (pulley?) Wheels, and a Handle, all of which are nipped onto 50 and 90mm Threaded Rods; N&B.



METALL-BAUKASTEN mit Batterie-Motor This was an East German outfit from the late 1950s, early 1960s, with some parts that remind one of MÄRKLIN. But there are many differences — the thread for example is M4, Screwed Rods are used as axles, and the hole pitch is, by design or otherwise, 12.63±.02mm (and not the 12mm given in the brief note in 15/416). This account is based on a set, near complete, and photos of 6 other sets, all similar, 5 from Ebay and one on p221 of Baukästen.

The SET The parts are tightly packed into 2 black Bakelite trays which sit one on top of the other, with the flat, very dark red Bakelite lid (below) that sits in a shallow recess in the top



tray. The trays are identical except that the lower one has a riveted stud on the outside of each end wall to (presumably) take a strap which holds the trays & lid together. Interlocking aluminium dividers inside the trays give 4 (full length) compartments in one, and 8 in the other (a full width one at each end & 6 in between). Small parts are in 3 round, black Bakelite containers with screw-on lids, 7¼cm Ø & 2¼cm deep. Similar packaging can be seen in the photo of a later set in Fig.4. The complete set weighs about 14lb.

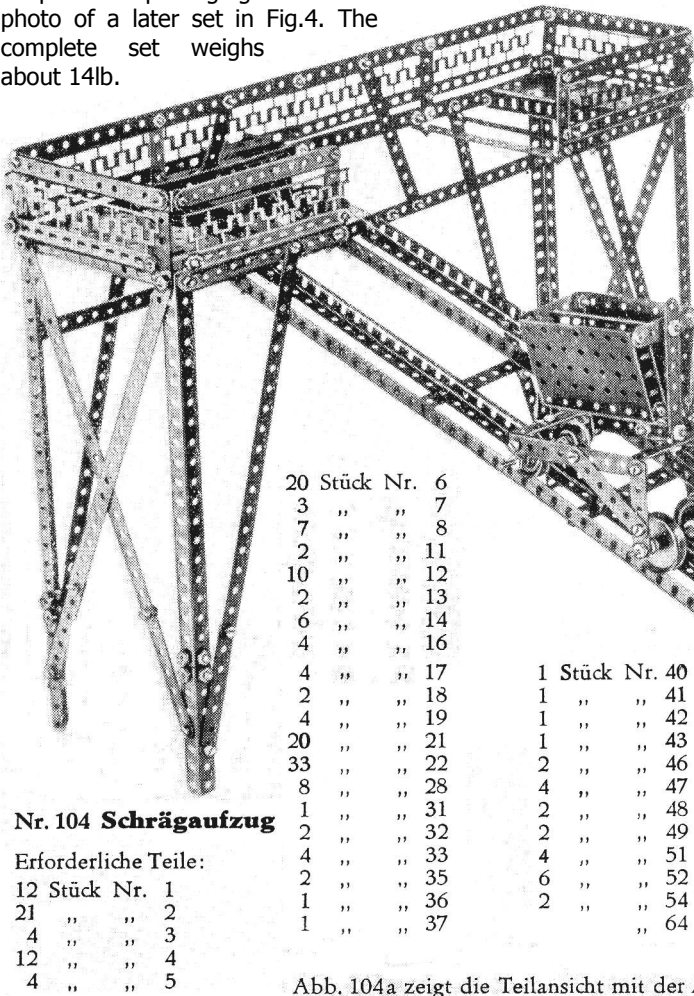


Abb. 104a zeigt die Teilansicht mit der Anordnung des Getriebes

The PARTS in the Set. The manual illustrations of them, which include their quantities, are shown in Fig.3 right. **Holes** are mostly 4.1mm Ø with a few 4.2mm. **Slotted holes** are 8.2-8.3mm long except 7.2-7.3 in the A/Gs, 5*7h & Sector Flanged Plates, Slotted Strips, & Railings. The **width** of Strips & Brackets is generally 12.4-12.6mm but can be from 12.2 to 12.9mm. Their **ends** are fully radiused; the **corners** of the Plates are only slightly rounded. **Bosses** of #51,53,55,56 are steel, 8.0mm o.d., 4.1mm bore, 2½mm deep, with a very narrow ring of almost flush peening (and nearly half of them are loose). **Finish.** All the parts except the N&B, have a uniformly good, black chemical finish. The notes that follow include a few dimensions and differences between the actual parts and those in Fig.3.

- **Brackets.** #24 is 21½mm wide o/a, and #25, 15½mm. #26 has round not slotted holes.
- **A/Gs** vary from 14.0* 13.8 to 14.2*13.7mm in section
- The **Spanner** has a slightly angled end and is 100mm long.
- The **Gears** are zinc die-castings with integral bosses and discs about 2mm thick. They are Mod. 1.0 and 20.7, 40.2, 50.0mm o.d. As in the illustrations, all the bosses are different.
- **Pulleys** #51 & #52 are 37.8 & 27.0mm o.d. (the manual dimensions are for the throat, approximately), and 6½ & 8½mm wide respectively. #52 has its discs joined by a rolled sleeve peened over at each end.
- The Bush Wheel is 39mm Ø.
- **Flanged Discs.** Neither has a pulley groove in the flange, which seriously limits their usefulness. #55 is 66mm Ø.
- The **Hook** is made of 1.9mm Ø wire and is 29½mm o/a.
- The **Washer** #59 is 12.1mm o.d.
- **Tyres.** #60 & #61 are 55 & 44mm o.d., and have SWL 55x 11,5 & SWL 40x16 respectively moulded into one wall (but the S may be wrong). #61 is fitted to Pulley #52 and probably isn't removable.
- **N&B.** All are nicked steel. The **Bolts** have

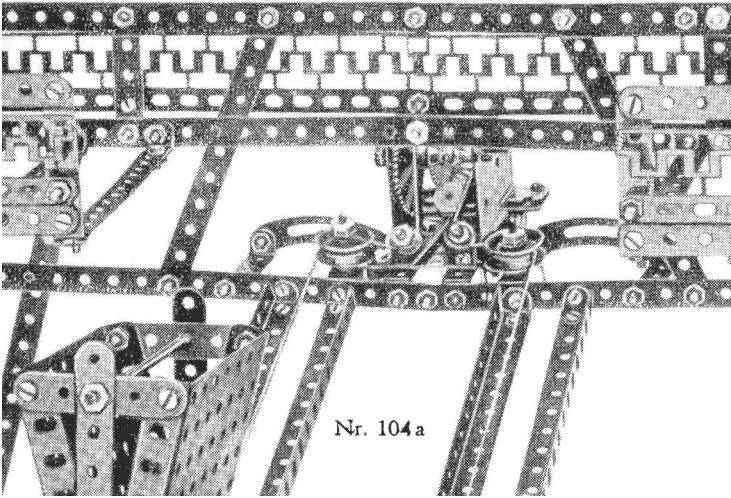


Fig.2

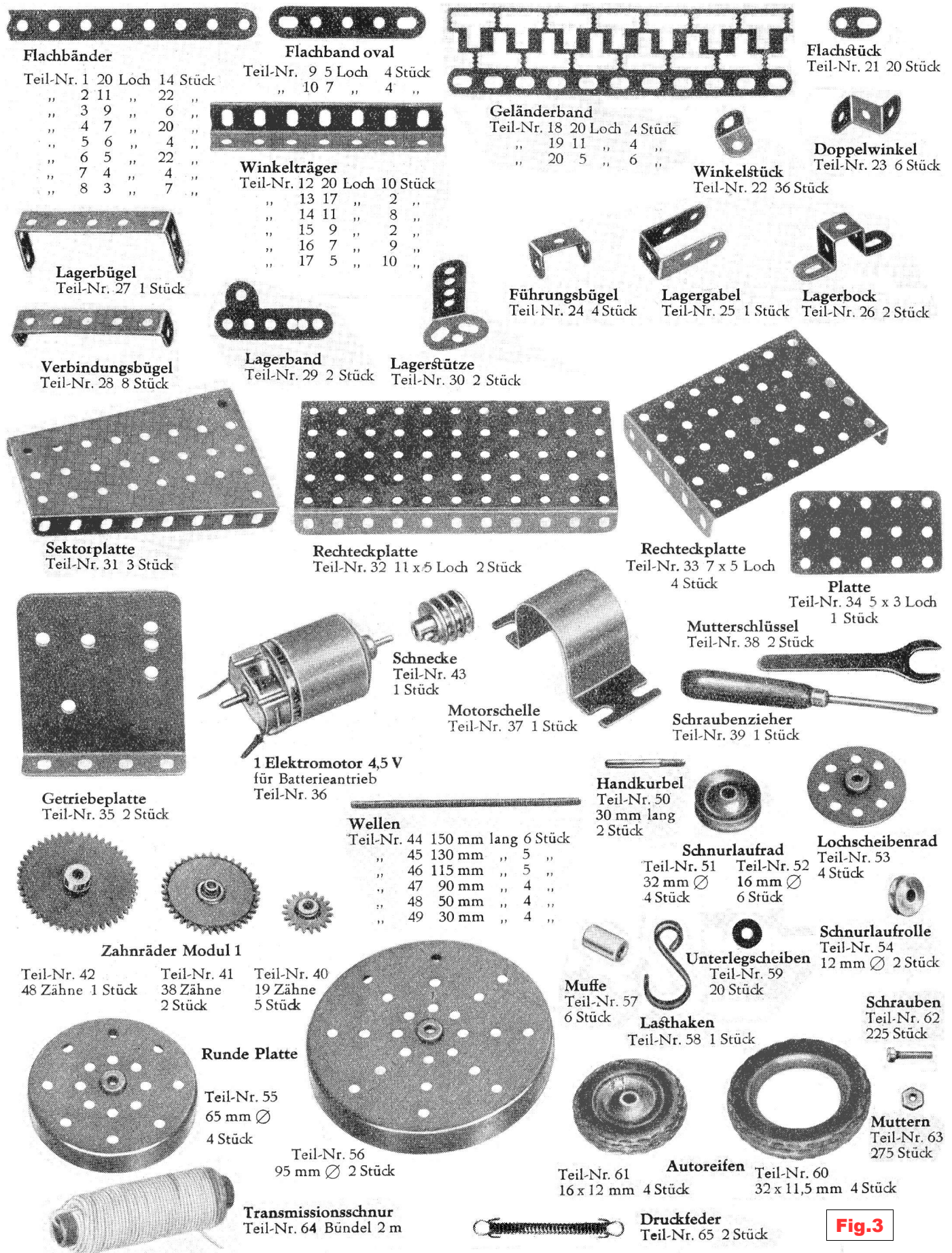


Fig.3

6.8mm Ø cheeseheads, & of those remaining 44 are 8mm u/h; 122, 10mm; & 3, 20mm. The pressed **Nuts** are 9.1-9.2mm A/F & 2.5-3.2mm thick; their size makes for difficulties in model building. • **Tension Spring #65.** The spring is 5.6mm Ø & 46mm long. A long U-shaped wire with an eye at the closed end passes through the coil from each end & hooks formed at

the open end of each 'U' hook over the end of the coil. So pulling the eyes outwards actually compresses the coil. It's a neat arrangement but one disadvantage is that the Spring can't be curved, to wrap round another part for instance. • **Not seen.** • The Motor & Worm, but a similar looking East German motor has a 2.5mm Ø shaft, and the Worm looks

brass in Ebay photos. • The Screwdriver, but there is one in Fig.4. • Pulley #54. • Threaded Coupling #57. Cord #64. • **Remarks.** The Flanged Plates & Flanged Discs are made of 1mm thick steel and are noticeably heavier than is usual.

The MANUAL It has 72 pages, 230*162mm, plus covers. The front is identical to the lid label except that the background colour is pale brown. C2-4 are blank. p1 has an Introduction, much of it about the Motor. p2 is blank & p3 has a photo of a Crane (a halftone, as are all the illustrations) identical to Model 109 on p65. pp4-5 has 19 standard constructions; p6 gives the different gear ratios possible with the Gears, p7 shows 4 gearboxes with the Gears between Side Plates #35, driven by the Motor through the Worm. pp8-10 are the Illustrated Parts. pp11-71 have Models Nr.1-111 from Rollekarré (a #32 running on 4x #61) to Aussichtsturm (Observation Tower). Model 101 is the Gantry Crane on the cover. There is one reasonable photo & a Parts List for each model, with extra views for the larger ones. p72 is blank apart from the PR: Druckerei "Berthold Haupt" Dresden A 17. III-9-89 5673 It 3504 58.

Well over half the models were easily spotted as having been copied or inspired by models (line drawings) in the prewar MÄRKLIN manuals to hand, and many of the others looked as if they might have come from the same source. It had been necessary to adapt most to use the actual parts in the Set, and 7 of the 12 larger ones had been motorised, sometimes using one of the gearboxes on p7. The Funicular Railway in Fig.2 is one of the better examples of those (at the original size but Abb.104a has been cropped). Apart from the Motor drive, few of the models have any mechanical complexity and only one Vehicle is fitted with steering.

OTHER SETS & HISTORY Neither the Set's box nor manual mentions a maker but Baukästen gives it as VEB Energieversorgung Dresden, & a date of 1958. That date perhaps corresponds to the last numbers in the Manual's PR.

Various changes can be seen in the Ebay photos and in a

Fig.4



possible date order the present set is an early example followed by: • Sets with the Flanged Plates & Flanged Discs painted green, and the Pulleys #51 & 52, red. • The same colour scheme but with a new lid label & manual. Such a set is shown above and the manual was said to have 71 pages, and to date from 1960. Of the 2 pages of it shown, one has the same 4 models as the '1958' version, though with different model numbers, while the largish 2-car Cable Railway on the other is not in the '1958'. The Tram on the new manual cover/lid label isn't in the '1958' either. • A manual with the same cover but with (if correct) 62 pages and said to date from 1961.

POSTSCRIPT When I came to make a model I discovered (eventually) that the hole pitch of 8 of the 22 11h Strips was 12.45mm. Otherwise both types were identical.

OSN 39/1177

METALL-BAUKASTEN mit Batterie-Motor: S3

MECA An Ebay snippet about a No.2 set from this Mexican system appeared in 36/1070, and now David Hobson has kindly lent me his recently acquired, unused No.2. With one or two very minor differences it looks exactly like the earlier one.

The BOX is 26½*34*2cm and the lid, and pale yellow formed plastic tray, look identical to the Ebay set. Some of the parts are slightly too big to fit into the recesses in the tray.

The PARTS Many of the parts can be seen in OSN 36 and the following notes fill in the gaps, with quantities in curly brackets.

• **Holes** are at 12.7mm pitch; many are 4.7mm Ø but some are smaller, down to 4.2mm, and more than one size of hole can be found in some of the Strips.

• **Finish:** Plates are red; the 5-13h Strips, the Trunnions, and the Wheel Disc are green; the N&B are BZP; and the other parts including the 3h Strip are nicked. The paint has been applied by dipping.

• **Ends & corners** are fully rounded, or for the 5-13h Strips, nearly so.

• **Strips** 13,11,7,5,3h {2,2,4,4,2}. • **DAS** 1*3*1h {2}.

• **Brackets** These are made of quite thick metal (.9-1.3mm) {3x A/B; 4x D/B; 1x Rev. A/B}.

• **Plates** 5*5, 5*11h, and 5*11h Flanged {2,2,2}. All are rigid, made of .8mm thick steel. The pattern of holes is as in OSN 36 with no holes in the centre '5h row' of the 11h long parts, nor in the centre of the flanges.

• **Trunnions** Angled; Flat {4,4}. 5h pattern; the bend point of the Angled version varies considerably.

• **Pulleys:** • 34½mm Ø with a 4mm long, 7.9mm Ø boss, untapped of course, and fitted with a 46mm Ø Rubber Ring {4}. • 25.3mm Ø and 5½mm wide with a 9.4mm Ø boss single tapped 5-40 (the pilot hole goes right through) {1}. • The bosses' bore is 4.1mm.

• **Wheel Disc** 44mm Ø, with the holes on a 33mm pcd, and an eyelet boss {1}.

• **Axles** 100 & 20mm long and 3.88 & 4.08mm Ø respectively {2,1}. • **Crank Handle** 4.08mm Ø and 154mm long o/a, with a 35mm handle offset 17mm. All these parts have sheared ends. • **Axle Stop:** an unclenched eyelet with a 7.7mm Ø head and 5½mm long {14}. It is a push-fit on the 3.9mm Axles and very, very hard to push onto the 4.1mm Ø parts.

• **N&B** The thread is 7-32. **Nut:** square, 8.8*8.7mm, 2¼mm thick, pressed {25}. **Bolt:** 7.1-7.3mm Ø RH, 9¾mm u/h {24}. **Set Screw:** 5.9mm RH, 6½mm u/h {1}.

• **Tools.** • **Spanner**, 75mm long o/a with a cranked end {1}.

• **Screwdriver**, 118mm long o/a, made of 4.06mm wire {1}.

The MANUAL It is in Spanish and has 8 unnumbered landscape pages, 260*186mm, plus covers, all printed on cream art paper. The front cover is identical to the box lid except that the '2' at the end of MECA-No is omitted. C2 has an introduction signed by Los fabricantes (the manufacturers) saying to start with the simpler models. There is a photo of