

MORE STABA. This is about the STABA that is called STABA (1) in MCS/NZ and (2) in /FB. The NZ Data Sheet mentions that STABA Sets A, B and C date back to the 1920s, made by Gebr. Ehrlich, and gives for the 1960s, Sets A, B, C, F, G, H, O, R1, R2, and R3, made by Otto Honseljau; Frank Beadle lists Sets A and B for the 1950s and also mentions the earlier phase, calling it STABA (3), with 4 sets, one of which was B, made by Ehrlich in the same factory that was used in the later period, in Erfurt [East Germany]. In fact one of the models he shows for the Ehrlich phase is marked Set C. No information is given in either edition of MCS on the parts or set contents.

Recently 4 STABA manuals came my way and these allow some of the gaps to be filled. Their covers all have the same format and colouring and their printers' reference nos end in /67 or -66, so they may be from the 1960s. They are for Sets A, B, C, and F; all but the A use the circular STABA logo shown in MCS on the inside pages, but on the covers, and throughout A, a different, perhaps more modern, chevron type motif is used (right). The name on the back cover of all the manuals, in large letters, presumably that of the manufacturer, is KARL TEUTEBERG KG - 59 EISENACH, so it will be assumed that these manuals belong to a STABA phase later than any mentioned in MCS, and that the A manual with the 'chevrons' throughout, and with a Ref No ending in /67, is the last of the 4.



There may not have been many changes in the Sets, or at least not in Sets A-C, down the years. The 2 models shown in MCS/FB made from Ehrlich Sets B and C are still shown in my B and C manuals, and Set B is much the same size - it is said in the /FB p7 to contain 492 parts and the Karl T one contains 437. Reverting to the manuals, none of the models for the sets are particularly modern looking and all could have graced an up to date prewar manual, but one of the covers shows a helicopter of for sure, postwar design.

In the back of each manual there is a list of sets as follows:

- Staba A. Basic set. Staba B and C. Add on sets.
- Staba F. Vehicle set. [F stands for Fahrzeugbaukasten].
- In two of the manuals: Staba G. Gear set [Getriebebaukasten, perhaps Gearbox set] with electric motor. Staba G1. Flanschgetriebe [Flanged Gearbox?] with 4,5v electric motor and reversing switch. Staba G2. Flanschgetriebe with 4,5v electric motor for Fernsteuerung [remote control?]. In the other two, including the A: Staba I. Small Gear[box] set with 4,5v electric motor. Staba K. Large Gear[box] set with 4,5v electric motor.
- Staba Liliput. For the small beginner.
- Staba R1. 4 Auto wheels fitted with rubber tyres. Staba R2. 2 Tractor wheels fitted with rubber tyres. Staba R3. Wheel set for various large tyres [Räderbaukasten für verschiedene Reifengrößen]. [R3 is not in the manuals that list I and K].
- Staba V. 'Covering' Plates set. [In the I/K manuals: Coloured PVC Covering Plates and Strips]. [V for Verkleidungsplattenkasten].

So those are the sets, now for some details of Sets A,B,C and F from their manuals. The illustrated parts list/set contents will be included in Extra MCS Sheets, listed overleaf. Set A has only 32 N&B but includes 28 Strips from 3 to 20 holes long, 17 Brackets/DAS, a 5x11 hole Flanged Plate, 6 30mm Pulleys, and 2 60mm Discs. The Pulleys have 2 holes in them and can be bolted to the Discs to provide a hub; they can also be bolted together to allow 2 Axles to be joined. All the PNs have the prefix A, up to A23; in Set B there are 13 new parts which continue the numbering but start with B, so the last is B36. Set B includes more A parts as well as the B variety; the latter include 4 each of 11 and 20 hole A/Gs, 2 Flanged Sector Plates, 8 each of 2 sizes of Half Pulley (TRIX like), 12 42mm Discs, and 4 different lengths of Screwed Rod. There are also 130 Bolts and 170 Nuts, the extra Nuts because the Screwed Rods are used extensively in the models as Axles with Pulleys etc bolted on to them; the Set A models use normal Axles. Discs can be bolted to the larger Half Pulleys to form Flanged wheels, again like TRIX, and many of the Basic Constructions at the front of the manual look very TRIX like, including gears made from Bolts around the periphery of the Discs. Another use for one of these 'toothed' discs is as a ratchet wheel, I don't remember that in the TRIX manual. It would be interesting to know if STABA came before TRIX or vice-versa. The Set B models are mostly quite attractive but generally quite simple, although the Racing Car shown in MCS/FB does have proper steering.

Set C has extra A and B parts including 80/50 N/B, and 10 new ones with the prefix C, all but one of which (Spring Cord) are akin to Trix. There are 3 'plate' Gears, up to 36mm dia, and similar size ones fitted with bosses. The smallest is composed of 3 of the plates held together by the boss, and the middle size has 2 layers, (cf some of the small ERECTOR gears). There is a TRIX style Worm, Rods with Screwed Ends, and a Screw Coupling. The 8 models in the manual are of medium size and the use of gears in most of them allows a degree of mechanical complexity. None are motorised and although one or two would be improved if fitted with some plating, they seem to me generally good of their type.

[Cont >]

Set F is a complete set in its own right and includes nearly all the prefix A and B parts; plus a few of C, not Gears, but Rods with Screwed Ends and the Coupling; and Parts F1 to F5, Formed Strips for mudguards and front bumper, a formed Seat, a small Windshield for the racing cars, and a pair of parallel jaw Pliers. And for wheels, 4xR1, Autorad, and 2xR2 Traktorrads; R1 is a fat rubber ring on a 30mm Pulley, and R2, a fat ring on a much larger Pulley, its size isn't given but it might be say, 75mm. There are 160/125 N/B and 66 Strips in the set, with 12 models in the manual including the Motorcycle and Sidecar shown in MCS. One or two light commercial vehicles are included but most of the models are similar in essence to the one shown opposite, with the shape suggested by suitable curved strips. That is why pliers are supplied, to help bend the Strips into the sometimes tortuous curves needed. The shapes needed for each model are drawn out, full scale in the back of the manual. The only models more or less fully 'clothed' are a nice Tractor and a Luggage Truck; and there's a late 1950s looking car on the front cover. Steering gear is provided where appropriate, the front and back wheels of the Luggage Truck are linked to move in opposite directions, and leaf springs are modelled on one or two models, but no other mechanical detail is included.

Now a few comments on the parts:

- The Strips and Brackets are shown with fully rounded ends; A/Gs and the Flanged Plates have square corners. There are elongated holes in the sides of the DAS and Flanged Plates.
- The hole spacing isn't stated and scaling from some of the drawings gave 11.5, 12.1, 12.5 and 12.7mm, take your pick. By the same method the hole diameter was between $3\frac{1}{2}$ and 4mm.
- Many of the circular parts have 2 diametrically opposite holes near the centre hole/boss.
- Hex Nuts are shown and the Bolts have cheeseheads, sometimes with a slight taper.
- The Gear teeth look normal, not the TRIX type. As shown the 3 gears have 14, 27, 41 teeth, which gives a DP of about 30, or Mod .84. The gears are shown meshing at right angles but there are no slots for meshing in the face of the largest Gear, as in the 40t TRIX Wheel, which has of course a much larger diameter. The two smaller Gears without boss are shown with one hole in their face, about halfway out from the centre hole.
- No motor is mentioned in any of the manuals but one can just be seen in the Helicopter on the front of the B manual. It will be reproduced as an Extra MCS Sheet.

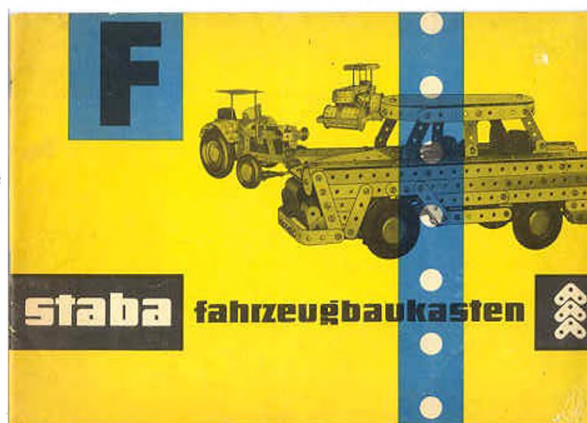
SUMMARY OF MANUAL. #Name: Staba. #Details of maker: KARL TEUTEBERG KG - 59 EISENACH. #Dates &/or Ref Nos: Rc 684/67 V 3/15 - 550. #Page size: 147x210mm wide. #No of pages: 32 plus covers. #Language: German. #Printing: Black line drawings. Cover yellow with blue band; black print except white Staba on black. #Page Nos of Parts List/Set Contents & highest PN: 3-5,A23. #Sets covered: A. #No of models: 30. #Name, Model No, Page No of first & last model: Sackkarre,1,7; Leuchtturm,30,31. [Only changes from above are recorded below]

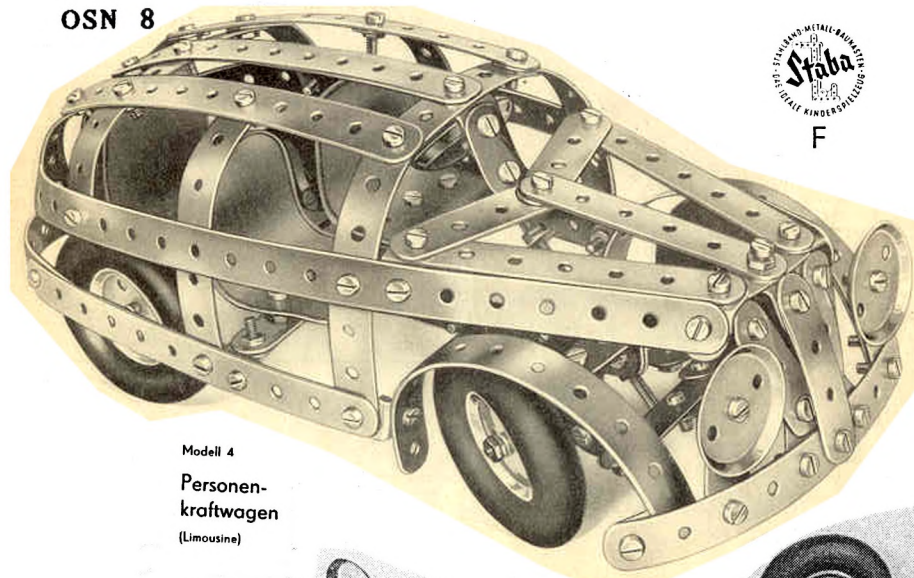
SUMMARY OF MANUAL. #Dates &/or Ref Nos: V 15/17 Ro 402/67. #No of pages: 56 plus covers. #Page Nos of Parts List/Set Contents & highest PN: 8-10,B36. #Sets covered: B. #No of models: 22. #Name, Model No, Page No of first & last model: Roller,31,11; Turmdrehkran,52,53.

SUMMARY OF MANUAL. #Dates &/or Ref Nos: V15-3 Rc 210-66. #No of pages: 48 plus covers [1-32 numbered]. #Printing: As above but also photos of models. #Page Nos of Parts List/Set Contents & highest PN: 1-2,C44. #Sets covered: C. #No of models: 10. #Name, Model No, Page No of first & last model: Riesenrad,53,3; Gattersäge,62,30.

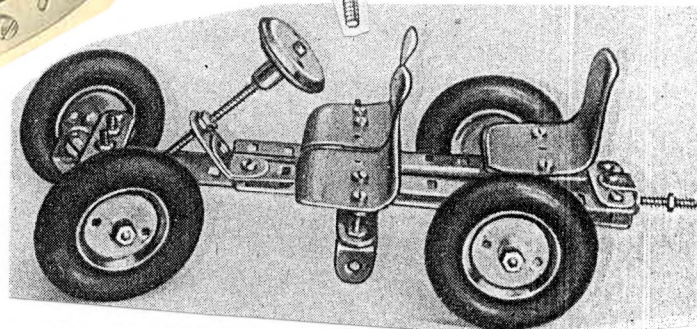
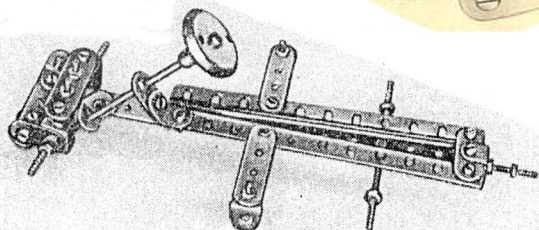
SUMMARY OF MANUAL. #Dates &/or Ref Nos: V-14-7 67. #Page size: 210x298mm wide. #No of pages: 44 plus covers. #Printing: As above but all illustrations are photos. #Page Nos of Parts List/Set Contents & highest PN: 4-6,F5. #Sets covered: F. #No of models: 12. #Name, Model No, Page No of first & last model: Motorrad,1,7; Großer Rennwagen,12,34.

EXTRA PAGES FOR MCS: STABA (2): X1.1,2a,3/4-b,5-a,6. [4 Sheets]. NB. STABA (1) for MCS/NZ.



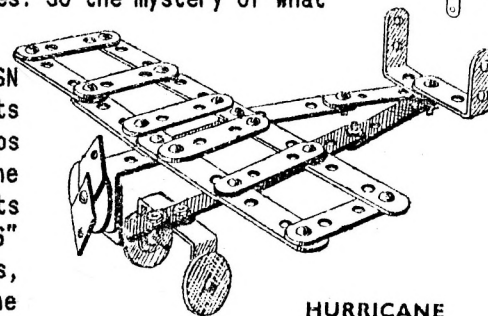
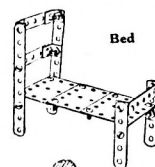


Modell 4

Personen-
kraftwagen
(Limousine)

MYSTERY PART No 1. Remember that ERECTOR 5x4 hole Plate [OSN 3/47], Brian Johnson kindly sent photocopies of what I take to be a leaflet about it - the cover, with reference Form M973 on it, mentions no specific set, just 'Make Your Own Toys With ERECTOR'; inside are 'A Few Models Made With One Erector Set', and others that need 2 or 3 Sets. I've chosen one [right] that needs 3 of the Plates. So the mystery of what the Set was called remains, if indeed it ever had a name.

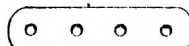
MYSTERY PARTS NO 18. Those Strips with 3/8" spaced holes (OSN 7/156) have been identified from a manual and some LYNX parts with it, as being almost certainly LYNX. All the short Strips shown in the manual models (as in the one opposite), are the type with no centre hole, although in the Illustrated Parts List (see below), normal pitch is shown. As can be seen the 6" Strip is also shown with 1/2" spacing but the 12" has 32 holes, that is exactly 3/8" pitch. Both the 6" and 12" Strips with the manual have the 3/8" spacing but the holes in 2" Strips are equispaced, 1/2" apart. Also the 3/8" pitch holes are 3.5mm dia but those at 1/2" are the normal, larger LYNX size. So it looks as if all LYNX Strips may well have originally had the shorter spacing/hole dia, with a gradual change to the later standard. No date is shown in the manual but it's probably soon after WW2, with models of a Sherman Tank and a Dakota (UK name for DC3/C47). Actually whoever put the manual together didn't have much idea about aircraft, the Dakota is shown as a biplane with 4-bladed propellers, it looks more like a Vickers Vimy, and that Hurricane has twin fins and a shoulder wing. There was also a LYNX competition entry form with the manual, closing date Jan 1948.

HURRICANE
(Model No. 7)

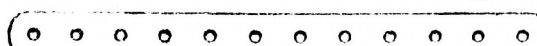
20 2 in. Strips 4 1/2 in. Bolts
6 Brackets 19 1/2 in. ...
2 Diamonds 24 Nuts
3 Washers

Prize-winning model, constructed with
No. 2 Outfit, by Master T. Fynes,
Belfast

"LYNX" PARTS

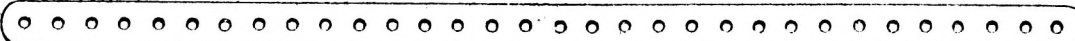


2 in. STRIP No. 21



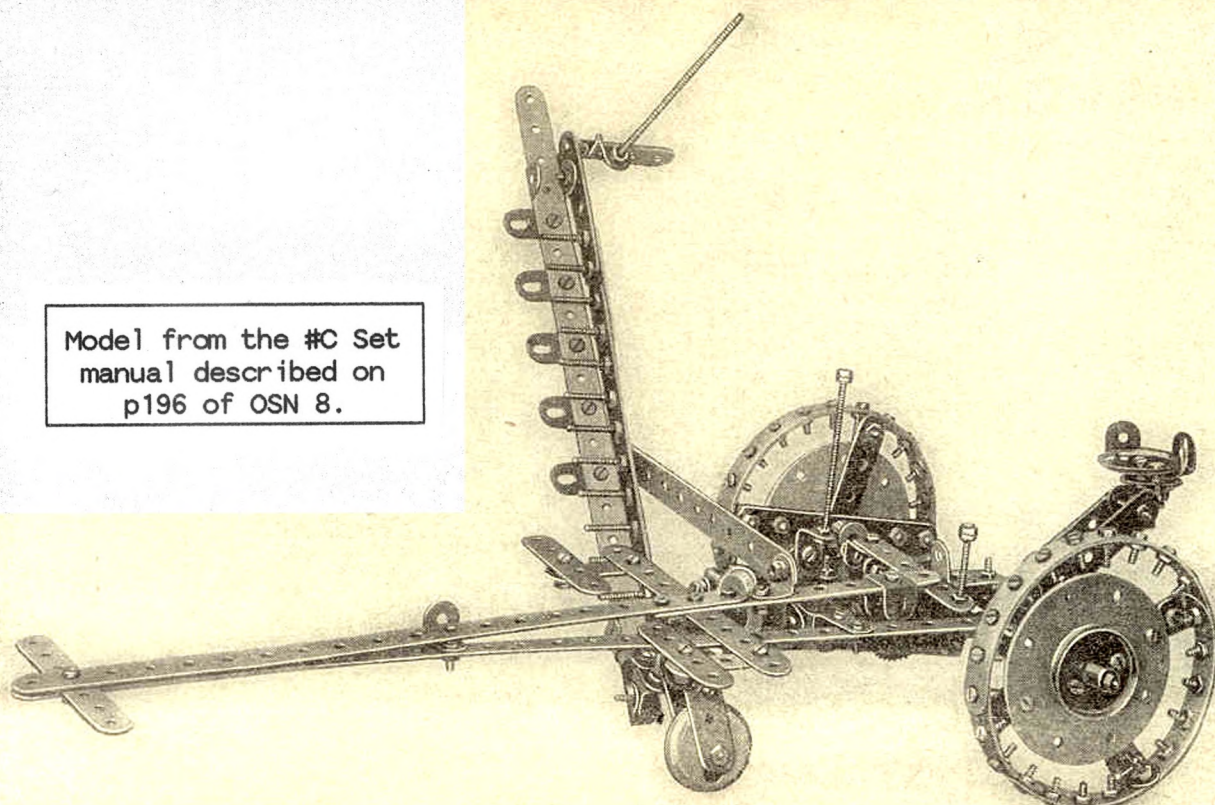
6 in. STRIP No. 22

12 in. STRIP No. 23



AN EARLYISH STOKYS No.1 SET. This Set, more or less complete, included a 0-2 Manual with an earlier cover than one bought about 1972. The Set Contents are the same in the two but the early one does not show such a wide range of parts in the Illustrated Parts section, no large diameter or helical gears for example. The Chimney, #108, (see OSN 3/31) is there though. On the box lid is a label saying 'New, increased contents' so this set was certainly not one of the earliest outfits. Many of the models in the manual are different to those in the later one. The most interesting difference is in the parts, compared to some dating from, again, about 1972. The web of the Strips is .021", much thinner than the .036" of the later parts; many of the Brackets are unfinished aluminium, not anodised; and the (green) Flexible Plates are made of fibre (like the 1934 MECCANO ones), instead of plastic.

Model from the #C Set
manual described on
p196 of OSN 8.



Modell 60 **Grasmäher**

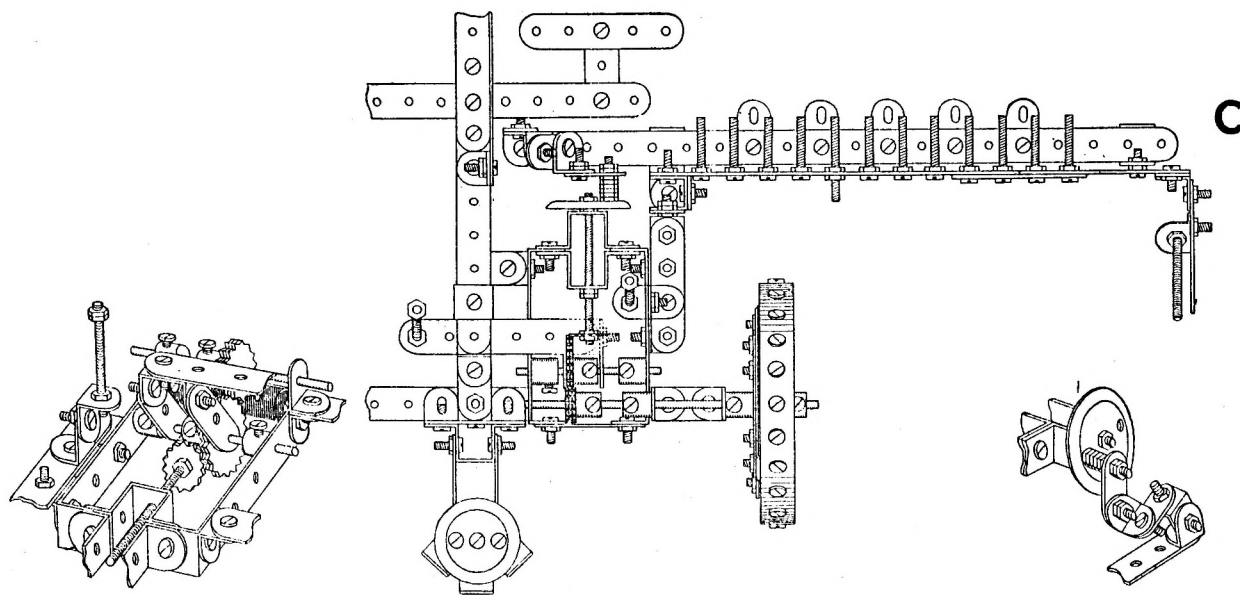


Fig. 60 a

Fig. 60 b

Fig. 60 c

Bauteile:

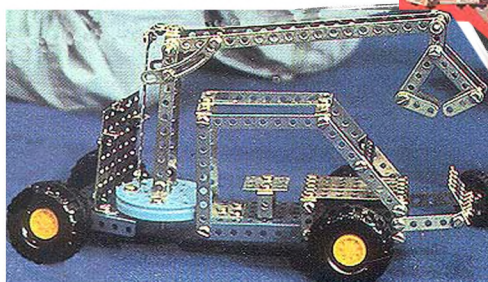
5 Lohbänder	— 20 Loch	—	Nr. A 1
5 "	— 11 "	—	" A 2
5 "	— 7 "	—	" A 3
2 "	— 6 "	—	" A 4
5 "	— 5 "	—	" A 5
5 "	— 4 "	—	" A 6
7 "	— 3 "	—	" A 7
15 Laschen			" A 8
35 Winkel			" A 9
2 Brücken			" A10
2 Schnurräder			" A12
2 Lochscheiben			" A13
4 Stellringe			" A15
1 Welle 110 mm			" A16

1 Welle 50 mm		Nr. A17
145 Schrauben		" A20
210 Muttern		" A21
3 Lagerböcke		" B26
6 Bügel		" B27
4 Radscheiben 30 mm Ø		" B30
15 Schrauben		" B32
1 Gewindewelle 95 mm		" B33
1 Gewindewelle 60 mm		" B34
1 Gewindewelle 50 mm		" B35
3 Gewindewellen 30 mm		" B36
1 Zahnrad 12 mm Ø		" C37
1 Zahnrad 12 mm Ø		" C37 N
1 Zahnrad 24 mm Ø		" C38 N

PITT EZ gives the dates as 1948 into the 1950s; MCS has the end point as 1965. The Flanged Plate was blue and the Pulleys red. The Spanner shown in MCS has 'Pitt' on it but one found in an unused set has DUX - both systems were made by Markes.

PLASTICON Another East German system, made by VEB Plasticart at Annaberg-Buchholz. The date it was introduced isn't known but the boy on the manual cover looks later than the 50s; it continued until around 1987. A B&W copy

plasticon
Bauanleitung



of the manual cover is all that's available but it shows several models and is for Sets GB1, GB2, EMB3, & EMB4. VEB Plasticart also made BURGSTÄDTER (12/324) and nearly all the parts in the models look like BURGSTÄDTER ones, including the Slotted Curved Strip that can be seen in the Big Wheel above. Its hub is probably the large Flanged Disc Pulley that's used in the Grab model, and again it appears similar to the BURGSTÄDTER one. The large Road Wheels look rather like the plastic CONSTRUCTION type with the push-in hub.

RECORD Another small set from sometime in the period 1945 to the early 50s. A photo of a box lid is shown in EZ but with no details. The logo on the lid has a 'W' in it and perhaps an 'R'.

ROBO EZ says the maker of this little set isn't known but the logo is 'EFFEM'. The set was also known as BAUKERL ROBO and dates from the 1950s. The models (see MCS) are made from wooden Blocks and 4mm diameter Rods held together with 'J' Clamps. MCS also includes the Spanish system EL INGENIERO MECANICO which appears to be identical, and is said to date from 1940.

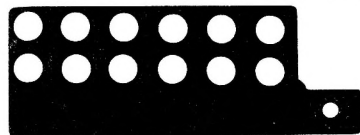
SACHSENMEISTER This East German system had small parts with 3.3mm Ø holes at 7.5mm spacing. Some were bare aluminium and some steel with a metallic black finish. There was also a theme set with special parts to make Tractors/Trailers. From EZ. The system was made from 1948 to at least 1955 by Sachsenmeister Metalbau Kurt Müller of Markneukirchen/Vogtland. The Nr.1 Outfit allowed various electric and steam powered models to be built, and the theme set models are described as attractive in red, green and silver.

SATURN A system from the early 1950s with brown, nickel and bare aluminium parts. The pitch of the holes is 12.0mm, their diameter 4.1mm. The lid of a (quite small) No.2 Set is shown in EZ and I can see that the model on it has 4 wheels. No other details are available.

SCHEFFLERS This system was mentioned in the piece on BURGSTÄDTER in 12/324 and EZ confirms that BUR followed on from SCHEFFLERS. The start date was probably 1955 and the original maker, Artur Scheffler of Burg-

städt/Sachsen. The change of name occurred when the company became VEB Metallspielwaren Burgstädt around 1960. In a set the Strips and the like are black, small parts including Pulleys nickel, the 5h Ø MÄRKLIN-style Pulleys red, 5*11 Flanged Plates blue and Flanged Sector Plates green. The hole spacing is said to be 'ca. 12.8mm'.

SCHWERKA Another small system in EZ from the early post-WW2 years. It was packed in a small wooden box and the parts were bare aluminium. By chance I recently came across a very similar set to the one shown in EZ, in a box 11*8*1" with wooden sides and partitions, and the bottom and sliding lid made of cardboard. The latter is orange with a boy and a Crane on it, and METALL-BAUKASTEN NR.1 plus MECHANICAL CONSTRUCTION BOX NO.1. Among the various parts in it were a few Strips that are probably original. They are bare aluminium and have 4.1mm holes at 12.7mm pitch. One is a MÄRKLIN-style 5h slotted Curved Strip and it can be seen in the Crane on the lid, along with some 20 other parts including Strips up to 15h long, a MÄRKLIN pattern 5*11h Flanged Plate, and a similar Plate but only 7 holes long. Among the other parts found in the box were 3 black Windmill Sails which look just like the STRUCTOMODE ones in MCS except that the fillet in the inside corner is convex instead of concave. Their length overall is 95mm, width 35mm, and the large holes are about 7½mm Ø. If anyone has a Canadian one I'd be interested to know if it matches.



SICO EZ lists this as a set from Keim & Co. of Nürnberg, first made in 1932, but with no other details.

SIEMENS A system from 1933 with wooden and nicked steel pieces. The only information available is that there were about 78 different parts and the hole spacing was 50.0mm.

SONNEBERGER EZ fills in some of the details missing from MCS. This system was first made by Schoenfeld & Boetsch of Sonneberg in 1948. From 1955 it was produced by VEB Injecta Steinach, and then from 1971 by VEB (K) Metallwaren Schmerbach. The end date isn't known. The hole spacing is 10.0mm and the Axles and Threaded Rods are 4mm Ø. Apart from the pieces in MCS, Sprockets and Chain came later. The parts were made of anodised aluminium and in the sets shown most have their natural colour, but some Strips are red or yellow, A/Gs are light blue, and some Plates yellow. Jeannot mentioned white and gold coloured parts as well, and that the holes are generally 4.1mm Ø but some are larger with in one case, 4.1 and 5mm holes in the same Strip.

SPRANGER This was a system with 24 steel and 16 wooden parts. The former were plated with nickel or tin; Pulleys were of wood with brass plated steel bosses. The holes were 3.9mm Ø at 12.0mm pitch. EZ gives the manufacturer as Gustav Spranger of Klingenthal/Sachsen and the dates as from about 1933 to about 1955.

STABA This is the East German one described in 8/195 and EZ gives some more details. Production was started in 1948 by the Gebr. Ehrlicher of Erfurt: subsequently the company became successively, H.H.Ehrlicher in 1949, Otto Hörseljaun (1953/54), and Karl Teuteberg in 1955. STABA

continued to be made until at least 1966. The hole pitch was 12.0mm and the Axles and N&B were 3mm Ø. All parts were nickel plated. As well as the sets mentioned in OSN 8, there were packs of parts Z1-Z14 available. In a photo of a 1955 F Outfit the only part that isn't in the MCS Extra Sheets is a Circular Plate of 45 or 50mm Ø (slightly larger than B31) with only a centre hole and 4 others on a pcd of 36mm (probably). To give an idea of size, the Pulley which takes the Tractor Tyre scales at 75-80mm diameter.

STRUCTATOR From EZ. This system was made by Bing between 1913 and c1917. Then, if I've understood correctly, from 1919 to 1921 it was produced by 'H.Huck, Inh. Adolf Huck' of Nürnberg as '**TECHNIKO/TECHNICO**'. A firm called J.Kleiner of Houndsditch advertised STRUCTATOR in G&T from May 1922 until April 1924, but I suppose it's possible that they were selling old stock. As shown in MCS, the original sets were advertised here in December 1913.

The German patent was Nr.282410 of 14 January 1913. The grooved Baseboards were wooden; the Plates (see 6/115) and some of the small parts were aluminium.

TECHNIK Another small set from the WW2-early 1950s period. The parts were made of steel and bare aluminium: some of the former were plated, nickel or brass, and others painted red. Holes were 3.9mm Ø but I don't have the spacing. In EZ the name TECHNIK-METALLBAUKASTEN WESTFALIA is mentioned in passing and it might be the WESTFALIA described later. There's also a small photo of a set in Pl.60 with TECHNIK on it but it's too small to see any of the other wording.

TECHNIKUS I couldn't find anything in EZ on the postwar East German system of that name that's in MCS; the one made by VEB Funkwerk, Leipzig with an 'RFT' logo, and parts that look just like STABIL. There is however mention of an earlier TECHNIKUS made by Menki Zimmer of Fürth from 1914 to ?. No other details are given.

TECHNOFIX From EZ. This was a system in which steel Rods were joined by being pushed into Connectors (rather like the MECCANO Rod and Strip Connector) which were then joined together in some way. No N&B were used and David Hobson has suggested that the method may be that shown in a UK patent from 1924. It is No.230975 in the name of B.Buxbaum, and toy bridges and awning frames are mentioned as possible applications. One Connector has a spigot 'd' which engages in the hole 'c' of the other Connector; and then sliding the Rod 'e' in the second Connector over the holes prevents the joint from falling apart. The ends of the Rods were to be tapered if necessary.

The system lasted from 1928 to at least 1935. The original maker (or agent?) was W.Keller & Co. of Stuttgart, followed in 1930 by Kosmos, also from Stuttgart, and then from 1931, Gebr. Einfeldt of Nürnberg. An ad from 1935 is headed KOSMOS-BAUKASTEN TECHNOFIX.

The ad shows 3 models, a small Trolley with Wheels that have 4 large holes in their faces, an Arch Bridge, and a Crane. The Pulleys in the latter look like the Trolley Wheels but small holes can be seen between the large ones. The Crane has a quite complicated braced structure but no indication of scale is given.

THALE STAHLBAU TECHNIK Some notes on this

East German system were given in 8/174. There are photos of 2 sets in EZ and it's interesting to see that the 5*5h Plates have elongated holes along 2 opposite edges, and not the larger holes in OSN 8. The only other difference is that the shade of the EZ red parts isn't at all orange.

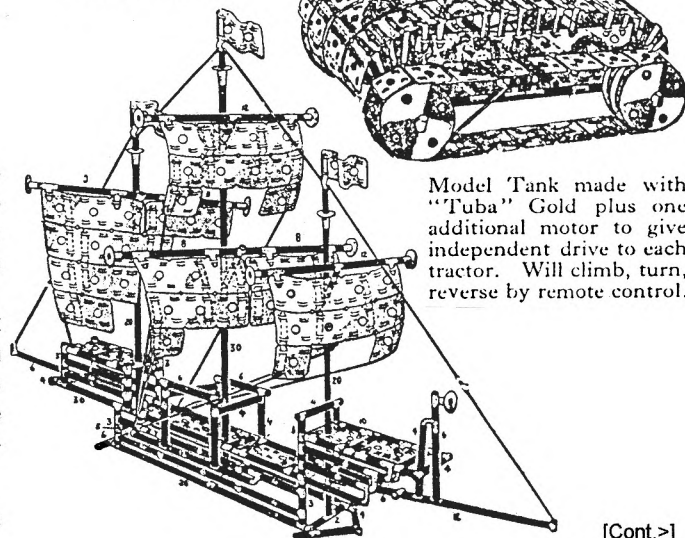
The dates given in EZ are from the 1950s to the 1970s; the maker, Krause & Co., later became VEB Metallspielwaren Thale/Harz.

TITAN EZ gives the period of this 10mm hole pitch system as c1948 to 1960. MCS/FB gives the hole diameter as 3.5mm. The manufacturer was originally Titan GmbH of Ludwigsburg/Württemberg, and later of Schwäbisch Hall, as in MCS/FB. A photo of a set from about 1950 shows the Strips and small parts black, A/Gs green, most Plates red, and most circular parts red, silver or green. The only parts in the rich blue are the 11*7h and 9*7h Plates, and the large Flanged Discs (PNs 64 & 65 can be seen). The model on the box lid is predominantly red and blue with silver wheels, the colour scheme given in MCS/FB. The parts were made from steel 1mm thick.

Jeannot mentioned a TITAN (2) with steel parts painted light grey but I don't know whether this was a colour variant of the above or a different system.

TUBA This is included as a UK system in MCS but the evidence now available indicates that it was German. The original Patent was German, applied for on 31 May 1933 by Josef Szapiro, and it was made in Berlin by the firm Die Tuba Spielwaren GmbH. David Hobson tells me that the UK Patent, 434838, of May 1934 (with a Convention Date of 31 May 1933), was in the name of J.F.Kennedy, a British subject but with a Berlin address of Joachimsthaler str. 38. In ads for TUBA in *Games & Toys* there is no mention of it being British made, and most likely it was imported from Germany. It was originally advertised in Sept 1934 by The Chad Valley Co. Ltd, Harborne, Birmingham 17, but in the last ad, in Oct 1935, Andrew Charles Ltd, 13-16 Wrothesly Street, Birmingham 5, announced that they had taken over sole distribution. Several models were shown in the different ads including the ones below. Under colours Jeannot listed steel, blued and nickel plated, and then later, gold, silver, red, green, blue, and yellow Plates. A photo of a German sets in EZ shows black Tubes, bright Plates, a red large Pulley and yellow small ones - similar colours to those given in MCS. An ad in German for the Motor is also similar to the one in MCS apart from using metric units, but it does show it running from a 4½v battery, and it gives the diameter as 30mm.

Model Galleon made from "Tuba" Silver, 15/-



Model Tank made with "Tuba" Gold plus one additional motor to give independent drive to each tractor. Will climb, turn, reverse by remote control.

[Cont.>]

More on STABA This is about the East German STABA: it follows the details in MCS, and the notes in OSN 8/195 & 15/418. It is based on late examples of 'Teuteberg' Sets A, B, C, & V to hand (with lids similar to the manual covers in OSN 8), an earlier A manual, possibly 1960, and on photos, mostly from Ebay, of various outfits from all periods. During STABA's life the basic parts, and probably the contents of the sets & manuals, did not change a great deal, but the history of its proprietors and where it was made is quite complicated. Some details are given in *Baukästen* & what is known is given later.

The PARTS The contents of the Accessory Packs Z1-14 are listed in the lid of one of the late sets and these include a number of parts from the K, R3, & V sets which are not in MCS. Most of the 'standard' parts are well shown there so the notes that follow only cover points about them which are not clear, and the 'new' parts.

- **Basics** All the metal parts seen, except the bosses & 'brassware' in aluminium, are nicely nickel plated. The ends of the Strips & Brackets are fully radiused, and the corners of the Plates & A/Gs are square or nearly so. Slotted holes are usually 6.0-6.2mm long with large-radiused ends.

- **Strips** are 12.2-12.3mm wide and about .9mm thick. The slots in the lugs of the **DAS** are 6.9mm long.

- The **Flat Bracket** is 24mm long & the **A/B** is made from it, with equi-length arms. The lower bends of the **Double Bent Strip** are rounded. The **Double Bracket** is 14mm wide o/a.

- The **A/G** is 13*13mm (±.5) in section

- The **Flanged Sector Plate** has straight ends.

- The **Pulley A12** is 30mm o.d. & 5.6-5.8mm wide, with holes at 8½mm radius.

- **Pulley Discs B30** is 30mm Ø with holes at 8½mm radius, and a pair give a 5mm vee. **B29** is 53mm Ø with a belled centre and two give an 8mm vee; the 3 holes at each side are not quite in a straight line - the outer 4 are at 12mm radius and the centre pair at 8½mm.

- **Discs A13** is 61mm Ø with holes at 8½ & 24½mm radii. **A14** is 22.2mm Ø. **B31** is 42½mm Ø and has 6.2 & 10.0mm long slots with large-radiused ends.

- **Wheel R1** 2 were found in a Set B, & 2 in a Set C, presumably they had been bought separately. The centre **Pulley** is like A12 but 6mm long narrow slots, tangential to the circle at the base of the vee, replace the 2 face holes. The tabs on a



Hub Cap, left - a 24mm Ø dome, 7mm deep - are a push fit into them. This part is not mentioned in any of the known literature, and has only been seen in the later Wheel Sets. The **Tyre** is black rubber, 52mm o.d. & 11mm wide; it has STABA moulded into both sidewalls and has an X-pattern tread around the top

face, on each side of the centre line. It may be the Z5 type mentioned later. • The larger **Wheel R2** in MCS has not been seen but the o.d. of its Tyre scales at about 100mm. The R1 Wheel above and a matching 100mm Wheel, both with Hub Caps, can be seen on the cover of the F manual in OSN 8.

- **Gears** The Gears have 16, 32, & 48 teeth (13.4, 25.4, & 37.2mm o.d.) with a slightly coarser pitch than MECCANO. As shown in MCS there are 2 versions of each, with & without a boss. In the late Set C to hand all are one disc thick, not the 2 & 3 discs held together by the boss for the 16 and 12t bossed parts shown in MCS. Also none of the discs are pierced, and in all but the 32t non-bossed part they are yellow plastic, 1.6mm thick. The 32t non-bossed is nicked steel, .95mm thick. No doubt originally all the discs were steel. The **Worm** is not like the TRIX-style wire helix in MCS but is machined steel, nickel plated. It is 9.8mm long (it has no boss) and is only 8.2mm o.d. That means it won't mesh with any of the Gears at standard spacing, and Strips set at an angle, held by one N&B each, are used in the manual models to give the

Leading Particulars

Maker/History Made between 1948 to 1967 by, in turn, the Gebr. Ehrlich, Otto Hörseljaun, & Karl Teuteberg KG. More details are given in this article.

Hole pitch 12.0mm.

Hole dia. Most 3.2mm but some 3.1-3.3mm

Sets Basic Set A, with add-on Sets B & C. Vehicle Set F. Gear/Motor Sets G, G1, & G2, later replaced by Sets I, & K. Wheel Sets R1, R2, R3. Set V with Plastic Plates. A beginner's set, Liliput.

Material/Finish Nickel plated steel with aluminium 'brassware'.

Bosses Aluminium, 8.0mm o.d., 3.1mm bore, 8mm long, s/t M3, with a narrow ring of peening.

Fixing M3 N&B, nicked (but late ones may be BZP). Hex Nuts, 5.5mm A/F. Tapered CH Bolts, 5.4mm Ø, 6, 8, & 20mm u/h.

Axles 2.98-3.05mm Ø with square or domed ends.

DP Mod .75 (34 DP).

Motors At least one 4.5v electric

required spacing. A selection of the Gears is shown below.



Misc. The **Collar** is 8.0mm Ø, 8-8½mm long, and single-tapped. The **Threaded Boss** C43 is 7.9mm Ø, and 8mm long, with no cross tapping. The **Crank Handle** is 132mm long o/a with a 100mm shank and a 22mm handle offset 20mm. The **Hook** is 24mm long. A wire Hook with the same A19 PN is shown in the '1960' manual. Although they look like spring cord loops in MCS the 3 **Driving Bands** C44 seen are made circular section 3.4mm Ø black rubber, scarf jointed. They are about 22, 34, & 47cm in circumference. 3 are listed under the same PR in Pack Z12, as 70, 100, & 150mm.

- **N&B** Although only one short Bolt, A20, is in MCS, sets actually contain 2 lengths, 6 & 8mm u/h, & both are listed for Pack Z5. Most bosses are fitted with a neat **Set Screw**, 5mm Ø CH & 4mm u/h, but some have a 4mm long **Grub Screw**.

- **Tools** The **Spanner** to hand is the type with a tapered body and no centre hole, but it has a ring opening at the 'straight' end. It is 118mm long and each end is cranked by 4mm. Another variant with a blunt 'straight' end can be seen in the first K set shown later. The **Screwdriver** is 116mm long with a 4-grooved black plastic handle. The wooden-handled type can be seen in earlier sets, and the wire one in Set F.

The K, Z, & V 'New' PARTS No illustrations of most of these parts are available but a few of them can be seen in the sets etc shown later.

- **The 'K' Parts** **K8 & K9** are 2 & 3mm Abstandsscheiben, Distance Washers perhaps. **K10** is a Collar (Stelling), and is in the same Pack as the Collar A15. **K20-22** are Axles, 32, 45, & 60mm long. **K23 & 24** are Thread Ended Axles, 110 & 135mm long (C41 is also 110mm long). **K25** is a 15mm Ø

Riemenscheibe (Pulley probably). **K27** is a 30mm Pulley.

• **The 'Z' Parts** **Z1** is a 75mm Ø Radscheiben (Wheel Disc?). **Z2 & 3** are Pulleys, 42 & 75mm Ø. **Z4, 5, & 6** are Tyres, 40, 50, & 100mm Ø. **Z4** is held between a pair of 22mm Discs, **A14**, and **Z5** between 30mm Pulley Discs **B30**. **Z6** is about the same o.d. as the Tractor Wheel **R2** but is much fatter and goes between two 50mm Pulley Discs **B29**.

• **The 'V' Parts** are described in the Sets section below.

The SETS First the **history of the manufacturers**, based on what is in *Baukästen*, and some later information. STABA was made:

• First at Erfurt & Coburg (1948-49) by Gebr. Ehrlich. A known address was Mohrenstraße 10, Coburg, which was in fact that of one of the Ehrlich brothers, Wolfgang. But the system seems to have been the brainchild of the other brother, Hans-Heinz, and he received royalty payments from the later participants, Otto Hörseljau & Karl Teuteberg KG.

• Then at Erfurt (1950 to 1952), by Ehrlich & Hörseljau. The H.H initials before the Ehrlich name on the boxes of this time are those of Wolfgang's brother, Hans-Heinz, but both were still involved. Wolfgang started a new business making scooters in 1952 and Hans-Heinz was also involved in it. Otto Hörseljau had a craft workshop with punching machines at Erfurt in Marstallstraße, and most of the parts were made there. He also made some parts for the scooters.

• Then at Erfurt (1953 to 1960) by Hörseljau. His workshop closed in 1972 on his retirement.

• Then at Eisenach (1961 to 1967), by Karl Teuteberg KG (under licence).

Some details of known sets are given below; exactly when most of them were introduced isn't clear.

The EHRLICH Sets Sets A, B, C, R2 are known from this period, and also the small Liliput outfit. Most boxes seen are red but blue & natural cardboard also exist. The **A to C** labels are similar to the one below except for the colours - the



backgrounds of the B & C are dark green & a yellow-brown respectively. The name(s) in the bottom panel vary. An early form has GEHR. EHRLICH ERFURT, with H. H. EHRLICH & O. HÖRSELJAU in very small letter. Another set has ERFURT-COBURG as the towns and just one (unreadable) name under it. Another, no doubt later, has just H. H. Ehrlich & O. Hörseljau, Erfurt. All the boxes have cardboard partitioning, and Sets B & C have 2 layers of parts.

A Price List of this time bears the names H. H. Ehrlich & O. Hörseljau, & the Marstallstraße, Erfurt address; the sets listed are A, B, C, Liliput, R1, R2, G, T, & F. This is the only known reference to a Set T, it cost 11.85 against 10 for Set A. There is no price given for the Set F, so perhaps it was a new item.

A typical manual cover from the period is shown at the top of the next column - the A version looks more yellow, and the B is pink. Again the wording along bottom varies in a similar way to the lids. The 2 models seen from these manuals are identical to those in the much later OSN 8 manuals, and the number of models in the B manual remained the same.



The **R2** set is shown left, and the Wheels look like the picture in MCS, though it isn't clear if the Tyres are treaded or smooth.

The dimensions of the red, partitioned box of the **Liliput** outfit is 19½*13½*2cm, and its lid is shown below. It was intended for beginners and the main parts in it are 3,5,7,

& 11h Strips, 30mm dia. Pulley Discs, Thread Ended Axles, A/Bs, a parallel pattern Spanner, and a small (plastic?) handled Screw-driver. The model leaflet is a single folded sheet

with the parts in the Set illustrated on the front, together with the number of each in the Set.

The HÖRSELJAU Sets Sets A, B, C, F, R3, & Liliput are known from this time. All the boxes are red and the B, C, & F have 2 layers of parts (though the B in the ad in MCS has only one). Other sets listed in the '1960' A manual (from the end of this period if that date is correct) are G, G1, G2, R1, R2, & V.

The **A to C** labels have models set against real backgrounds, all in rather muted colours, & with no mention of the maker or town.



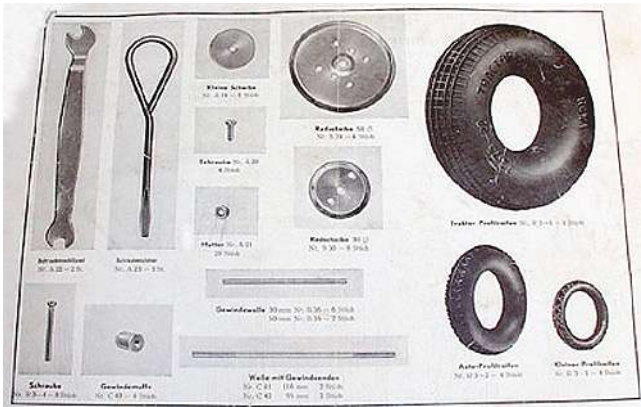
The B is shown left & the Loco is a much elaborated version of a model in the OSN 8 B manual. The A lid has 2 Machine Tools in a factory setting and neither of

them is in any of the OSN 8 manuals. The C has a Tractor, similar to an F manual model, pulling a Mowing Machine similar to the B model of 8/236. Most probably the models are not related to those for the sets in question, and no evidence has been seen of any significant changes to the contents of the sets. The A-C manual covers are like the earlier ones except that the maker & town have disappeared, and the colours vary. For instance, a very pale green B has been seen, as well as several in pink, and the '1960' A is light grey. This A has the same page size and number of pages as the A in OSN 8, and the same models too, but most of them are not in the same order. The first two and last two are the same, and so are Nos. 7-9 & 22, but the rest differ: As an example p12 of the '1960' has Nos.10 & 11, Elektrokarre & Traktor, and p12 of the OSN 8 version has No.9 Tafelwagen. The PR of the '1960' is V-15-3 Rs 304-60 August Jüttner K.-G., Saalfeld (Saale), and C2-4 & pp31-32 are blank.

The lid of the **F set** is rather brighter and has 3 Cars (all in the OSN 8 F manual) going over & under an arched bridge. There is a good photo of it on p222 of *Bk*, but the manual cover (right) is not shown there. The box measures 30*37cm. The 100mm Wheels in the Set are the type shown in MCS, not the type in the R3 Set below with the Z6 Tyres



The **R3** box is red and measures 26*35*4cm. The lid label is yellow and is similar to the earlier C cover already shown except that the wording under STABA is: RÄDER-BAUKASTEN / mit Profilrädern / für Fahrzeuge aller Art / O.HÖRSELJAU – ERFURT [Wheel Set / with treaded wheels /



for vehicles of all types]. The Tyres can be seen on a page from the manual above; they are not shown in MCS and are believed to be the Z4, Z5, & Z6 already mentioned. The Set contains 2 of the large Z6 Tyres and 4 each of the others, with the appropriate numbers of the different Discs. The manual cover is similar to the lid label but has a white ground, the maker's name & town are not included, and the other small print is a little different.

Early TEUTEBERG Sets? Two sets, an A & a C, have been seen with the different lid label shown at the top of the next column. As will appear, it seems likely that they came after the Hörseljau sets and before the yellow-lidded Teuteberg type. Both sets are single layer and are probably the same size. Later A & C yellow boxes are also the same size. The boxes are red as before but the partitioning is white, and this has been seen in a few Hörseljau outfits & a few Teuteberg yellow sets. The manual covers are as before

except that the A is a different colour, blue. Also there are some words bottom left on the C cover (the bottom of the A can't be seen) which could well be KARL TEUTEBERG KG – EISENACH, the same words as on the back covers of the later, OSN 8 manuals. One other point, the Tractor & Trailer on the lid label look as if they have the Hub Caps already mentioned, so they may date from this time.



Another outfit that may be from this period is a Gear/Motor Set K. The lid is shown right and the box is red with white partitioning. Unfortunately the parts in it are all TRIX. None of the 'G' sets have been seen, nor an 'I', nor



any of the Gear manuals. Thus it is difficult to know when the various Sets were available, and what they contained. A '1963' V manual (described later) still lists the G outfit but also an I and a K. In 2 of the OSN 8 '1967' manuals only the I & the K are listed, but one '1967' & the '1966' have only the G, G1, & G2. Perhaps an out-of-date printing block was used in these last cases, or the assumed dates from the PRs are not reliable. Another thing is that the descriptions of the sets are not consistent in the different manuals, so their contents may have changed with time. More evidence is needed from actual sets & manuals.

The Yellow TEUTEBERG Sets All these outfits have yellow lid labels with, usually, a B&W photo of a model on it. The labels on Sets A-C & F are very similar to the manual covers in OSN 8, but have KARL TEUTEBERG KG – EISENACH in small letters along the right edge. Initially red boxes with partitions were used but then the boxes were variously red & blue and the parts were housed in white or yellow formed plastic trays.

The 'partitioned' Sets Those seen are the **A, C, F, K, & Liliput**. All have a single layer of parts except the F with two. The A & C boxes look to be the same size as those of the plastic tray sets, 38*28½cm. Only 2 of the known sets have a manual, one has a cover identical to the 'Early Teuteberg' C above, and the other a yellow OSN 8 type. The 100mm Wheels in the F outfit are still the MCS type and not the 'better' ones in the Hörseljau R3 set.



The **Liliput** box is the same as the Ehrlich one but with the modern lid right. The parts look as though they are the same too except that a 5*5h Flanged Plate can be seen. It may be a foreigner though because the models on the inside of the model sheet are as before. The manual cover is similar to the lid.

The **K set** lid is identical to the one on the next page for the plastic tray set. The box, right, has the same partitioning as the K set



described above. The Motor can be seen in the bottom right corner, and the Plate under it with a semi-circular top is probably part of the Motor mounting. It, and other associated parts (top right & bottom left), can be more clearly seen in the Set I right. The top centre parts are probably Driving Bands, and various Gears & Pulleys can be seen but are not clear enough to identify.

The Plastic Tray Sets Sets **A, B, C, I, K, R2 & V** have been seen, though the R2, shown later, has just 2 Wheels in it, and so might equally be from the 'partitioned' period.

The **A-C** boxes are 38*28½*2½cm, and the N&B are in small plastic tubs with yellow lids. The sets seen are substantially complete and their contents match those on MCS X1.6 except that some mistakes crept into said page. The corrections are as follows. The nearest MECCANO PN for B27 is 11. In Set B: 0x A15; 2x A16; 0x C41; 0x C42. In Set C: 5x B32; 2x C41; 2x C42. In Set F: 1x B33; 1x B34; 1x B35; 2x B36; 1x C41; 1x C42. The manuals are as in OSN 8.

A **Set K** is shown below, with its open manual under it. Underneath again is one half of a similar box with the Gears more clearly shown. To its right is its manual cover (with another manual over it at the top), the only one of this pattern seen. Some details of the parts can be seen in the original photo of the 'half box'. The Gears in the bottom row all have 42 teeth, and in the next, 35. In the row above are 2 Pinions of different sizes (with 2 parts in one recess above them that can't be seen clearly), then the largest yellow part with about 31 teeth, probably a Sprocket, & then what looks like a Pulley. Above the Pulley is a Black Contrate, with a Worm (as shown earlier) to its left. Above again, a Pulley like A12. A red Gear, possibly another Contrate, can be seen in the other box half, in the space next to the Motor. All the toothed parts appear to have bosses, and, apart from the Worm, and perhaps one of the Pinions, none match those in MCS. On the Contrate, a Kronenradgetriebe (crown wheel drive) is mentioned in the description of the K set in the '1963' V manual.

Set I has the same design of lid as K and the open box is



Below the **Set R2** box, with Hub Caps & presumably the



R6 Tyres. The Hub looks recessed & not like the B29 Pulley Disc. No F sets from this period have been seen, but this Wheel & a smaller version of it seem to be fitted to the models on the

cover of the F manual in OSN 8, possible date 1967. The models in the Manual still have the MCS type but this may just mean the illustrations were never updated. So were these 'super' Wheels ever in the F outfit? Another R2 outfit has blue Hub Caps, and one Wheel with a blue Hub Cap is shown on the lid of both sets.

The **Set V** has a red box, 26½* 18½*3½cm, and the lid has a red stripe and 2 Plates, one blue & one white. The parts are in a yellow tray, as follows, with the quantities & colours in curly brackets. 3,5,7,11,20h Strips with fully radiused ends. {4 white, 4 blue, 4 blue, 4 red-brown, 6 white}. Plates: 7*11h Perforated; and the same overall size, 84*132mm, but Unperforated; & a Flat Sector Plate, 5 & 7h wide with edge & centre line holes. All corners are square and the holes on the long edges are slotted – the Rectangular & Sector Plates are just like flattened A11 & B28. {2 red-brown, 2 pale green, 1 blue.} Flexible Plates; 5*5h with fully radiused corners & 5*11h with corner radii of about 4mm. Slots join the 3 centre 'holes' in all sides, and also 'holes' 1-2, 3-4, 8-9, 10-11 along the 11h sides. {4 blue, 4 white.} In another Set the tray is pale green and the colours of the various parts differ, with most of those above, plus some in yellow.

The parts are accurately made. Holes are 3.2-3.3mm. Strips are 12.2-12.4mm wide. At 1mm most parts are too thick to allow much curvature, but some are only .8mm, the 11 & 20h Strips for instance, and the 11h long Flexible Plate – the 20h can be bent into a circle, and the 11h into a semi-circle.

4 of the parts are in Pack Z13: V5-7, Strips with 7, 11, & 20 holes; and V9, the Rectangular Perforated Plate.

The V manual has just 4 unnumbered pages 211*150mm, plus covers, and the front is like the basic yellow one but with 3 Plates on it instead of a model. C2 is blank; p1 has a short introductory paragraph and the PR: V 15-3 Rs 105-63; pp2-3 shown the parts & quantities; pp4-C3 have a list of the different sets (A,B,C,F,G,I,K,R1,R2,V,Liliput, Z1-15, & a pack of 20 N&B) with a short description of each. C4 just has the name of the maker as usual. No model are shown, nor any examples of using the parts.

Thank you to David Hobson for lending me his STABA sets, and to Werner Sticht for his help in translating *Baukästen*, and his research into the history of STABA.



shown at the top of the next column. The manual cover is similar to the K box lid.

The STABA TELEFON Sets Jurgen Kahlfeld has kindly sent some details of the two, hitherto unrecorded, Telefon sets, H1 & H2, including scans of all the manual pages. The H1 has parts to make the Telephone shown on the box label right, and H2 has twice the number of parts to make a pair. The name Ernst Groß o.H.G. (o.H.G. = partnership) on the label (and the manual cover) was not among the various makers listed in the review of STABA sets in 31/925. All those firms were in Erfurt, and Sömmerda is some 20km to its north. Probably Groß just produced the Telefon sets. From the Manual's PR, Jurgen's set dates from 1954, and at that time the other STABA sets were being made by Hörselgau. The range of sets listed in the 'H' manual is: A, B, C, F, G, H1, H2, Liliput, R1, R2, R3, T.

The PARTS These are listed in the Manual with their quantities. There are 25 standard parts (Strips, Brackets, Pulley Discs, N&B, etc) from other STABA Sets (A, B, C, & G), with 3.1mm holes at 12.0mm pitch, and M3 N&B (one of the Bolts listed as #A20, a brass M3x8mm, may be a 'special'). The Strips are 11.95mm wide & 1.2mm thick. In addition the Set contains the 20 special parts shown far right (Fig.2). Most will be obvious from the illustrations but H1-4 are Insulating Strips, H11 is a Springy Contact, H12 a Bell, & H20 a Spacer. Note also the M2 N&B, #H18 & 19. The names and quantities of all the parts are shown on the OSN webpage (click on Other System Material) but the quantities of the 'H' parts in Set H1 are, from H1 to H20: 2,3,8,3,1,1,1,1,1,1,1,1,1,2,2,1,1,4.

SET H2 is in a box 430*310*56mm with 2 layers of parts. The label measures 345*245mm.

The MANUAL, in German, has 16 pages plus covers. The front is shown right and C2 lists the range of sets. pp1-4 have the Illustrated Parts/Set Contents, p5 an explanation of how a telephone works, pp6-13 the building instructions, p14 circuit diagrams, and p15 the symbols used in them. p16 & C3 show the shapes to which some of the Strips have to be bent, and C4 has just the PR: VEB (K) Buch- und Werbedruck, Saalfeld V/15/31 Rs 3839/54.

The instructions include 9 photos & 3 line drawings with lengthy written explanations. Fig.5a shows the 4.5v battery mounted under the bell unit (Fig.5b) in the base, & Fig.5c the handset. Fig.5d is the back of the unit with, at the top between the cradles, 2 Rods headed by Threaded Sleeves. When depressed they operate the switches to ring the bell & bring the handset into circuit. These are RT and HU1 & 2 respectively in the circuit diagram right. RT is shown in Figs.6a & b, and HU1 & 2 in Fig.6c. The solid &

dashed lines in Fig.4 denote different coloured wires, & the chain dotted lines on the right side are wires to link 2 units together (their circuit diagrams are mirror images). As far as I can see the 'dial' on the front is just decoration. A boy given the H1 set might have been disappointed to find that all his Telefon could do was to ring its bell.

