clude the letters F and R.1

GORDON EZ mentions constructional and electrical sets made in the DDR by Gordon-Apparatebau KG, Schmalkalden/Thüringen between about 1960 to 1972, but without any further details.

HELLER From what I can gather from EZ there was never a MECHANIKUS set in Germany (see 12/321). The tool was called 'Mechanikus' and was included in HELLER'S STAHLBAU outfits there. These sets were sold in France under the name HELLER-MECANICUS (HELLER-MECHANICUS in 12/321 was an error), and contained the same tool called 'Mécanicus'.

The tool described in OSN, and included in the MECO set, was called the 'Constructor' and with its interchangeable heads was more versatile than the 'Mechanikus'.

The period for STAHLBAU is from 1933 to at least 1938 but the French version seems to have been available after WW2 (13/360). MECO dates from about the same time, perhaps from 1934.

HOHA Jeannot listed 2 versions, the first with a hole pitch/ diameter of 13.2/4.1, and the second, 13.0/4.6. Both had nickel plated parts and the first at least, rubber Tyres and Pulleys. MCS gives 13.1/4.4, and mentions brightly polished plating with some red and possibly, blue parts. It also mentions the early '30s whereas in EZ a small box is shown among early post-WW2 outfits.

Frank Beadle has some HOHA parts and among them is the 11*5 Flanged Plate (flanged on the long sides) with no holes in the centre 7*3 area, that can be seen in the MCS models. But Frank also has another which, from a photo, seems to be the last 5*5 holes of the 11h long one.

HW Metallbaukasten A photo of a box lid in EZ has METALLBAUKASTEN diagonally across it and the triangular HW logo of Hans Wünsch, the East German toymaker from Niederwiesa/Sachsen. The firm started in 1949 and this was probably one of the early products. The simple Windmill on the lid includes Strips up to about 11h long, a 9h long Flanged Plate, flanged on the long sides, and a 4h Bush Wheel or Wheel Disc.

IMPERATOR See 10/260. EZ gives the Axle diameter as 3.5mm and by scaling, the Strips seem to be about 5mm wide, and the octagonal Hub 3/4" A/F.

INDUSTRIE EZ shows an open box with the parts in it, similar to the set shown in MCS. The Strips though don't look as narrow as they appear in MCS and based on the 5mm hole, their width scales at 1/2". The 8-spoked Pulley Wheels are about 30mm diameter. All the parts have a black metallic finish. Two periods are quoted - 1919 to at least 1931, and 1925 to at least 1935.

INGENIEUR This name is listed in EZ but without any details except that it was made by Ihag GmbH of Nürnberg around 1919.

JOLEI This little system from c1950 had only some 12 different parts, all in plain aluminium except for the steel N&B. The holes were 4.4mm Ø, spaced at 11.0mm. EZ has a photo of a backing card with some parts on it - I think I can see 3,4,5,7,9&11h Strips, 1*3*1 & 1*5*1 DAS, an Angle Bracket, and a Screwdriver rather like the MECCANO #36.

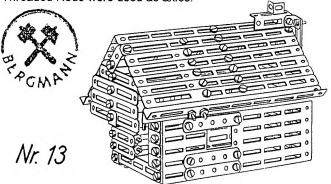
KEIM EZ gives only the maker, Keim & Co., A.G., für Blechindustrie, Nürnberg, and the period, c1923 to c1928. A graphic from 1923 shows panels falling off a skyscraper in a strong wind (or so it seems). Perhaps it was an architectural system.

KINEMA EZ confirms much of what appeared in 12/306. The Tubes are 6mm Ø and the holes 10mm apart, though

their size is given as KONSTRUKTOR 2mm. The dates are BAUVORLAGEN c1946 to 1950. KONSTRUKTOR An East German set. but apart from that all I have on it is a copy of the manual cover with the model opposite on it. KONSTRUKTOR 0 **KONSTRUX** Metall-Baukaster

A small sys-

tem of some 30 parts, made in West Berlin by the firm E.P.Damaschke, from about 1946 to 1950. The parts though, painted black, are unusual and, as can be seen in the model below, most have long slots in them with square ends. The holes are 4.1mm Ø and are spaced at multiples of 12mm. Other parts can be seen in a nice, good sized multi-jib Crane shown in EZ, and include DAS, Flanged Plates, small Pulleys, and Discs of several sizes up to about 60mm Ø. The larger Discs have a centre holes, 4 long radial slots, and radial holes between them. These slots are the only ones to have rounded ends. The corners of most parts are slightly chamfered as in the House, but a few on Plates and A/Gs are square - none have the large radius of the 5h Strip in the House. An ordinary Double Bracket is shown in EZ with a similar one alongside except that it has large hexagonal holes in its sides. Its purpose isn't clear but there is a hexagonal section Threaded Coupling that might be about the same size. It looks as if Threaded Rods were used as axles.



The words Konstrux Deuteron appear on the manual cover under the main KONSTRUX name, but what this signifies I don't know. Also in addition to a logo based on the initials EPD of the manufacturer, there's another (above left) with the name Bergmann, and what might be crossed hammers

MABA EZ has a photo of the #4 Set described in 12/306. The dates given are c1946 to 1950.

MAFELL From EZ. This system was made by Maschinenfabrik Fellbach GmbH, Stuttgart-Fellbach/Württ., around 1930. It consisted of relatively few, large steel parts, including strong wheels with suitable axles. In many ways it was comparable to the GILBERT WHEEL TOY.

MECANIC/MEKANIK In answer to the point about which came first (13/361), EZ provides the answer. The original name (in 1948) was MECANIC and the original maker. Dörken & Mankel KG, Ennepetal-Voerde/Westfalen. Later (c1959 to c1963) the system was made by Adrian & Rode. Velbert/Rheinland and by that time the name had changed to MEKANIK. Jeannot wrote that the change was made in

More on GERMAN SYSTEMS Following the notes in 15/412, Jeannot Buteux, Sven-Ulrich Glage and Don Redmond have been good enough to sent comments, additional information, and the names of yet more German systems. For reference purposes the initials JB, SG or DR after each contribution indicates its origin. [The illustrations from Jeannot are courtesy of the

Constructorama archive.]

 The form of AKRON parts is as sketched opposite, and some contain as many as 17 segments. (JB)



logue references, but No.2 can be seen on the one set illustrated. It's the middle sized of the 5 main sets and it's the same as the No.2 in MCS, and with the same numbers of parts. So it's likely that the main sets listed are Nos.00, 0, 1, 2 & 3.

Also included is a Kanonen-Baukasten with 227 parts in a box 34*18cm. A model is shown (right) and with a geared drive for elevation at least, it is more sophisticated than the 1930s STABIL Kanonen models. (SG)



00000

• Is AUTO-CONSTRUKTOR (15/412) a printing error? [Probably yes, it is spelt that way in Eisenzeit, p177, but if it's the same as the Dutch AUTO-CONSTRUCTEUR, which seems likely, the name on the pages still in German in the Dutch manual is AUTO-CONSTRUCTOR.] (JB)

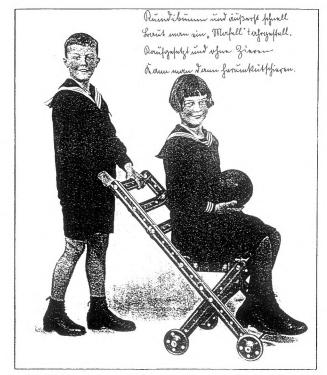
• BURGER has 4.1mm diameter holes at 12.5mm pitch, Bolts are M4 with hex Nuts, and Axles are 4mm Ø. The parts are painted red, blue, green & cream, and are poorly finished. (SG)

• The lid from a photo of a small DER KLEINE INGENIEUR Outfit is shown opposite, and the parts in the box include various Strips, an 8-hole Wheel Disc, a STABILpattern Flanged Sector



Plate, and 2 of what appear to be Screwdrivers, with large tapering wooden handles. (JB)

- On DORANDO. Unlike INGÉNIO (16/430) for example. the metal frame is on the inside and is hidden in the finished model. (JB)
- The initials F.D.K.K. stand for FÜR DEN KLEINE KONSTRUKTEUR. (JB)
- There was a connection between INDUSTRIE and PHANTASIE (15/417) in that the models in the manuals owned by Constuctorama are identical: the PHANTASIE Crane in 15/417 is Model 33 on p10, and the same model. but reversed right to left, is in the INDUSTRIE manual, again on p10, but it is No.24. Also the parts in it are held together by snap fasteners. Those are the only differences as far as the manuals are concerned, but the parts in the 2 systems aren't compatible, with a different hole size and pitch. [N&B are shown for INDUSTRIE in MCS and snap fasteners were used in an earlier period] (JB)
- KONSTRUX is larger than stated in OSN 15 and there were 5 sets called MIKROS, DEUTERON, MEGA, MAKROS, REX - Greek or Latin names all relating to size in some way. (JB)
- The French patent (No.707915) for MAFELL (15/415) was granted in 1930. A model is shown at the top of the next column. (JB)



• MECANIC/MEKANIK. The change of name occurred in 1949 when the system was still being made by Dörken & Mankel. (The company still exists under the name Dorma and is now a leading manufacturer of door closing systems.) According to information from the firm, production of constructional toys ceased in the mid 50s [a catalogue from 1957 is known] because of problems of distribution in the toy market. A manufacturer has to be listed by VEDES, the powerful organisation of German toy retailers, to be able to sell products nationwide. D&M, (and also the firm who made MIGNON) were apparently not on good terms with VEDES. As a matter of interest it is said that VEDES played an important role in the confiscation of Meccano's rights during WW1 and their sale to Märklin.

Sven continued that he has some 25 MECANIC/ MEKANIK sets in his collection but not one made by Adrian & Rode, and so he would like to know more about their period. In a mid 50s Leaflet a new Gears Set is shown but was it ever introduced? The parts were included in Parts Lists (see 3/33) but he has never seen any of them. (SG)

- MIKRONO, ROSETTA, & PYTHAGORAS were different names for the same system, and their parts may be wooden, but this isn't sure yet. (JB)
- On MÖWE (15/416) the original firm would have been Möninghoff & Weiß, the brand name coming from the first 2 letters of each. (DR)

Sven's MÖWE set is packed in a nickel plated box with a sliding lid and hazardous sharp edges. It measures 28.5* 8.3*2.3cm and the lettering on it is stamped into the metal. Holes are 4.3mm Ø at 13.0mm pitch, and the Bolts are M4 with (unusually for German systems) square Nuts. Strips, Plates and Brackets are nickel plated steel of various thicknesses around 1mm. Pulleys have a brown finish like thin brass plating. [Sven kindly sent an 8h Strip and it is 13.2mm wide by 1.18mm thick, with 4.4mm Ø holes. Its end radius is 7mm. And in a photo of the Set can be seen a 12*5h Perforated Plate, the Flat Sector Plate mentioned in OSN 15 (with straight ends and all holes parallel to them), and 2 of the STABIL-type Flanged Pulley Discs. The manual has landscape pages almost the size of the box, against the near A5 size of the page the model in OSN 15 was taken from.] (SG)

- The EMB4 PLASTICON set includes a motor and other electrical parts, with some plastic parts, and others of nickel plated steel. (JB)
- The parts shown in a photo of a RECORD Set include some short Strips and Brackets with semi-radiused ends.

476 **OSN 17** **KONSTRUX** A few words about this West German system appeared in 15/415, and the names of the 5 sets in the KONSTRUX range were given in 17/476. Holes are 4.1mm at 12mm pitch, and most long slots scale at a little over a 2 'hole' span. KONSTRUX material seems quite rare and since OSN 15 only a manual for the smallest, Mikros, set, and the photos of 3 Ebay sets have been seen. Also 2 sets are shown on p221 of Baukästen.

First **the manual**. It has 40 pages, 206* 144mm, plus covers. The

front, right, has the name of the set at the bottom. The EPD in the logo top right are the maker's initials but the significance of the Bergmann hammers on the left isn't known. C2 is the title page, p1 has a Vorwort, dated 'Berlin, im Juli 1947', and p2 has 7 constructional hints. p3 has the names & page numbers of the



66 models in the manual. p4 has the Contents of the set, as right, and p5 the Illustrated Parts below. pp6-8 show the parts needed for each model. The models are on pp9-31, from Abb.1 Sägebock (Saw-horse) to Abb.66 Abraumrutsche (Wheeled Rubble Chute), with the names from p3 and my English ones. There is a line drawing for each, with extra views in 2 cases. pp32-40 have written building instruction for the models. C3 lists the 5 sets in the range and says that linking sets were available, each with the name of the set to be converted plus an 'E'. The manuals for the converted sets were not included in the 'E' sets, but could be bought separately. C4 has the maker's name: E.P.Damaschke, Apparate- und Werkzeugbau, Berlin SW 29, Dieffenbachstrasse 37, and the printer: Schapke & Anders, Berlin SW 29.

Einzelteile des KONSTRUX-Mikros 0 60 WT2 WUT3 USe1 0 0 0 **WUT 23** T21 WS 01 0 T23d T23g WS 46 **GB32** 0 0 WS 410 T25 **GB 68** (•) RO 18 SL1 0 **RG 38 RS46** P1010 P 1421

The numerals in the **PNs** give the length of the Screwed Rods, and the diameter of the circular parts, both in millimetres of course. For the other pieces the first digit (or 2 digits) are the number of holes in the part and the next digit(s) the number of slots.

As can be seen from Fig.1 & the Tractor on the next page, the **Wheel RS 46** is formed and two back to back are used as a pulley. The edge of the **Disc RU 65** also looks to be formed, again as in the Tractor, but the pair in the Set are not used together in any of the models. Most of **the parts** seen in the photos of the Sets correspond to the drawings above

nzahl der Teile	Art	Bemerkungen
8	2-Loch-Laschen	T 2
4	3- ,, ,,	T 3
2	5- 2, 2,	T 5
6	1-Schlitz-Traversen	T 21
4	2- ,, ,,	T 22
4	3- ,, ,,	Т 23 g
2	3- " "	T 23d
3	5- " "	T 25
2	7- ,, ,,	T 27
2	1-Doppel - Winkel - Schien	ne WS 01
2	3- ,, ,, ,,	WS 46
2	5- ,, ,,	WS 410
1	große Grundplatte	P 1421
1	kleine "	P 1010
2	Radscheiben	RU 65
2	22	RG 58
4	Räder , .	RS 46
4	Radscheiben	RG 38
6	Winkel 1×1	WT 2
2	Kubus-Winkel $1\times1\times1$.	WK3
2	U-Winkel	WUT 3
4	U-Winkel $2\times1\times2$	WUT 5
2	U ·Winkel $1\times3\times1$	WUT 5b
2	L-Winkel 2×1	WLT 3
2	U-Winkel	WUT 23
	<u>Drehteile</u>	
4	Schnurrollen 18 mm	RO 18
2	Gewindebolzen M 4×68	GB 68
4	" M 4×32	GB 32
	Schrauben M 4×8	
	" M 4×12	
	Muttern M $4\times2,5$	
50	Unterlegscheiben 7 mm	USe 1
2	Schraubenschlüssel	SL 1
1	Schraubenzieher	
1	Karton ca. 16×22 cm .	

but there are differences in the circular parts. All the actual parts seen are as in the photos below with, along the bottom from the left: RS 46 (probably one on top of another); RG 38; RS 46; & RG 58 with RU 65 above. In all cases there are 4 slotted holes and in some parts an additional 1 or 2 round holes. Some of these holes can be seen more clearly in the Crane on p77 of Eisenzeit.

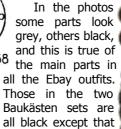






Fig.2

OSN 38/1159 KONSTRUX: S1

in one the circular parts are red. Perhaps a late set, or an enthusiast's paint brush. Most of the small **RO 18 Pulleys** in the sets have an aluminium look to them, like 2 of the 6 in the parts (from 2 sets) in Fig.2. The other 4 look to be brass (and all seem to be fitted with Tyres). Some light grey N&B can be seen in one set: the roundheaded Bolts are at least

000

Abb. 48.

10mm u/h, and the hexagonal Nuts scale at about 8mm A/F, MÄRKLIN size. Some of the other parts in the system were mentioned in OSN 15 and others in the Eisenzeit Crane include a Ladder and a Hook.

Two of the 5 **sets** seen are Mikros in 11 compartment boxes, 28*20cm (larger than 16*22cm in the manual inventory), one brown & one red. The Deuteron set in Baukästen is in a red, 13 compartment box, 36*26cm. One of the other 2 sets has a black/white mottled box which scales at 14*24cm, so it might be a Mikros. The second may be similar but only part of the base can be seen. All the lid labels are like the rectangle in the centre of the manual cover except that the frame is broken to take the name of the set in tiny letters.

Returning to the Manual, most of the wide selection of models are quite small and simple, but towards the end there 6 Machine Tools and one of the better ones is shown left (f-s). Then 6 or so larger models, about the size of the Tractor right (f-s). They are mainly simple vehicles and the Tractor is the only one fitted with steering - it looks highly geared though and with excessive free play, but the latter

Abb. 63 a Abb. 63. could be reduced using the remaining parts in the Set.

KONSTRUX: S2

OSN 38/1160

main parts which can be seen in the Ebay photos of the Set are 22 different parts. below are a 10*6h Flanged Plate with what seem to be two

Snippet: 'New' System, STAHL-BAUKASTEN The the manual below but no details can be seen except that there

arlagen-Heft zan-

Stahl-Baukosten

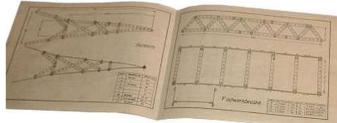
Among the Ebay photos was part of the front of an old

newspaper 'Vorwärds Berliner Zeitung' (published by the SPD - the Social Democratic Party), and a 1945 date for it was implied. However the paper was banned in Germany from 1933 to 1945 and publication did not resume until 1948.





larger holes along one of the long sides; 10h A/Gs; 4, ,5, 6, & 10h Strips; Wheels or Discs; and N&B boxes with M3 on their labels. Also some long Bolts and a few Rods (most likely threaded). The contents of the Set are listed on the front of



Also the main story was 'Berlin's biggest black-marketeers to be charged' and that would fit with a 1948 date, or soon afterwards, rather than 1945.

Two other STAHL-BAUKASTENs have been mentioned previously in OSN. The one in 34/1004 (with no hyphen) looks quite different; the second, in 36/1068, could conceivably be a later version of this Set but the artwork looks very different between the two. Also the OSN 36 set was from an East German company and the newspaper, if it was associated with the Set, points to a West Berlin connection.

My thanks to Thomas Morzinck for the information about Vorwärds Berliner Zeitung.