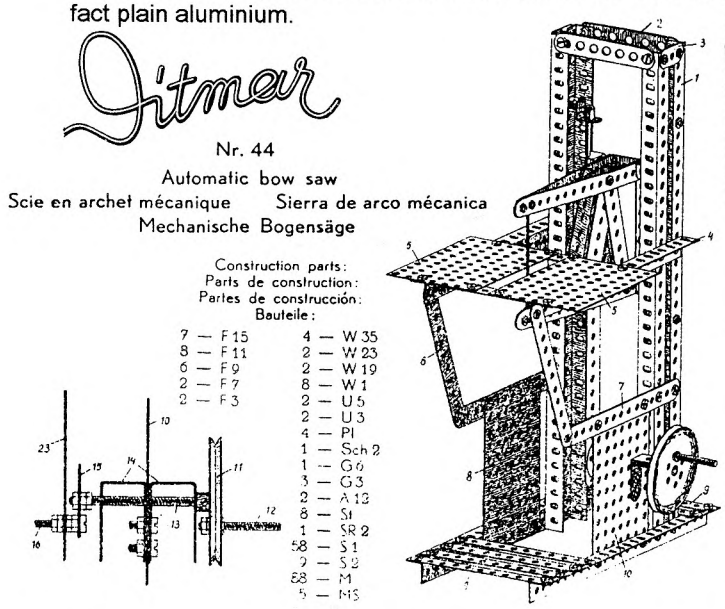
double-decker bus - it's made of short Strips and 3h Ø Wheel Discs, the latter probably nutted to Screwed Rods as axles.

DITMAR This system from the late 1940s has small parts with 3.7mm holes at 8.5mm pitch. The Manual has only the name and Metallbaukasten on its cover; inside the text is in English, French and Spanish as well as German. The model below includes Strips from 3 to 15 holes; A/Gs 19, 23 & 35 holes long; a 3*1*3 Double Bracket; a 7*11h Perforated Plate, and a Pulley of about 50mm Ø with 6 holes in its face near the centre. The Plate and A/Gs have square corners. Again Threaded Rods seem to be used as axles although the Pulley is shown with a tapped boss. A larger model is featured on the box lid in Pl.60 of EZ and some red Circular Plates or Pulleys of perhaps 70mm Ø can be seen. The other parts shown are black but some were in fact plain aluminium.



DÖCO EZ says that this system was made by Döhle & Co., Berlin-Stralau around 1920, but no details are given.

DORANDO An architectural set from 1926 made by Mosbacher & Schönfeld of Frankfurt am Main. A photo in EZ shows black metal strips and channels bolted together to form a framework, with stone blocks as infill. They are mostly fawn with some blue uprights, and the window blocks are black with white frames and green shutters. A red tiled hipped roof sits on top - it's made from thinnish material and though it looks to be in one piece, some joints would have been needed if it fitted into the box shown.

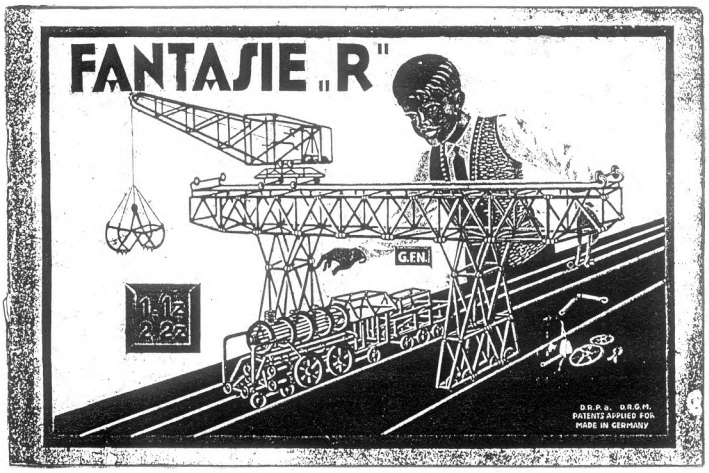
DUX AERO EZ says that this system came on the market in 1932, the probable date of the manual in 11/287.

DUX-UNIVERSAL This rather unusual system is well covered in MCS and I hope to write some notes on it in a future issue. EZ mentions a February 1939 Patent No. 705732 but I'm not sure whether it was actually made before WW2. Production ceased around 1958.

EIFFEL EZ gives specific dates (see 10/247), with production between 1940 and 1948.

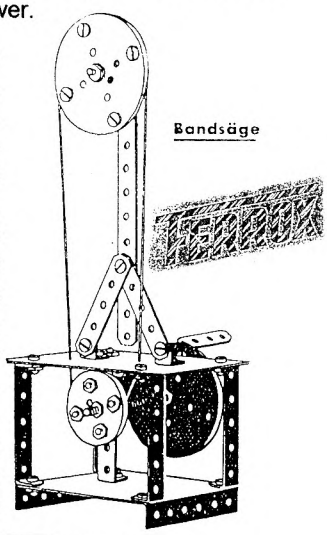
ELECTRIC There's an MCS entry for this system and a few further details were given in 8/183. The only mention in EZ is the dates (c1932-c1970), and the various makers after the one in MCS, as follows: from c1940, Böhmer & Helm, Meißen; in the DDR, Mewa Mesco-Werk VEB Meißen Sa.

FANTASIE "R" This simple system was made by Gebr. Fleischmann of Nürnberg, and was introduced in 1932. It was also sold under the name **ROBA**. It cost 50 Pfennig a pack and consisted of Tubes connected by (rubber?) Couplings. As can be seen, the Manual cover below boasts a quite large Crane and Loco, and has 1,1z,2 & 2z on it, presumably set numbers. EZ says there were only 29 different parts but that the Manual contained 168 models on the theme of the technical world.



F.D.K.K. Another small? system from the WW2-early '50s period. Two widths of Strips were used, 9mm and 12mm. Holes were 5mm Ø and the spacing 11.9mm. The parts were of steel with a black finish. A small photo of a box lid in EZ shows the top of a large Tower.

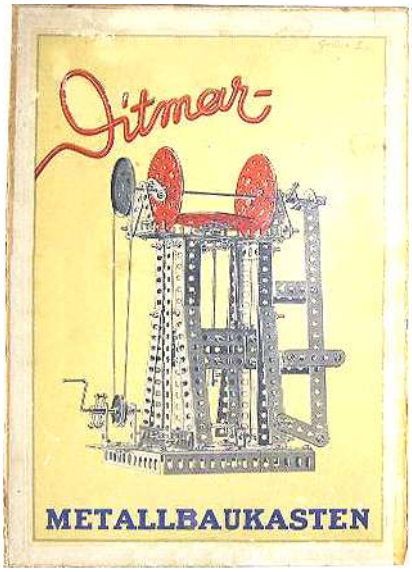
FERROX Another small system from the late 40s to early 50s, with 4.1mm holes at 12mm pitch. There were about 20 parts including Strips of 2,3,5,7,11 & 14 holes; 1*3*1 & 1*5*1 DAS; 1*1, 1*3, & 2*1*2 Brackets; 17,36 & 69 mm Discs; and 2 Plates, one flat and one flanged. The flanges are always shown with 6 holes in them, but otherwise only a few holes are indicated, and their position varies in the different models. Note the 'extra' hole that can be seen near the centre of both the large and small Discs in the Bandsaw opposite; also the ends of the Strips, Brackets, etc with angled corners, like VOGUE. Again Threaded Rods were used as axles. Some parts were aluminium and the others were red, green, or black.

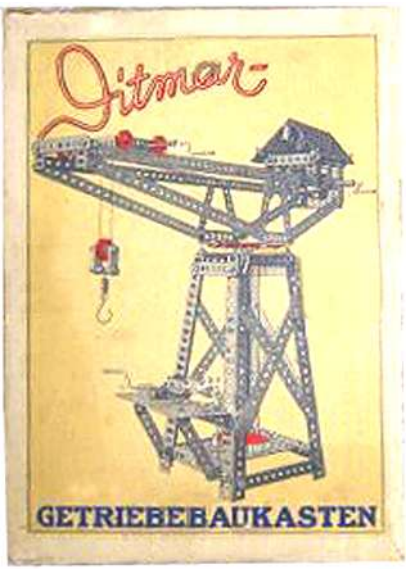


FIX Another little system, in this case made by MWK of Kitzingen/Main. A date of 1948 is known, and EZ gives production as around 1940. There were less than 30 parts but they were rather unusual. There were 2 types of Strips. One that I'll call a Linked Strip had 2,3 or 4 strips joined together with eyelets, so that the elements could rotate relative to one another. The elements were equivalent in length to strips 3,4,5 & 8 holes long but each had only the end and one centre holes. The ends of the strips are shown rounded. There were 12 different Linked Strips, as shown - they ranged from 2x3h strips to a 3+4+5 which can be seen forming the triangular frame at the lefthand end of the Signal in the next column.

The 'ordinary' type of Strip again had only a centre hole plus rectagular end holes that extended out to the square

DITMAR This system, said to be from the late 1940s, is listed in MCS as German but is in fact Austrian. A brief note on it appeared in 15/413 and Baukästen gives the maker as a Viennese company called 'Ditmar-Brunner-Austria Email' (Email means enamel). There seem to have been two basic sets plus an add-on Gears outfit. The present account is mainly based on the near complete parts from the larger basic set, a manual for it from a separate source, and various Ebay photos. The parts are a little unusual in having Strips about ½" wide but with holes at only 8.5mm pitch.





The PARTS On the facing page, from the Manual, a compressed version of the Illustrated Parts, and a Parts List/Inventory. Some details of the parts are given in the latter, and in the notes that follow. • **Material/Finish**. The Plate #31 is plain aluminium, all other parts are steel. Axles, threaded parts, & the Spring are plain steel; Pulleys and the 28 & 64mm Discs are red (in different shades from a bright/lightish, to dull red-brown); and all the other parts are painted a semi-matt black. • **Holes** are mostly 3.6-3.7mm Ø but are 3.8mm in the Plate. Slotted holes are 7mm long except in the Slotted D/B #30. • The **thread** is M3.5. • **Strips** & Brackets are 12.5-12.7mm wide. The 2h Strip #12 is a Flat Bracket with one end hole slotted; all the other Strips have both end holes slotted. • The **A/G** is about 13½*13½mm o/a in section. The **A/B** #24 is about 14*14mm o/a and unlike the A/G, has radiused corners. • The **D/Bs** #25-29 are 5 to 1h deep respectively. The 1h is 13mm wide o/a; the others are 18½mm. The **Slotted D/B** #30 is 15mm wide, 14mm deep, and has an 8¾mm slot in one arm. • In one Ebay set the **64mm Disc** #33 matches the Plate in colour and could also be aluminium. • **Axles** & the **Crank Handle** #32 are 3.55mm Ø and have square ends. The latter is 26mm long o/a with a 20mm offset. • The **Collar** & **Coupling** are 8mm Ø, 6 & 13mm long, double-tapped, with a 3.7mm bore. They have a grey metallic finish. • The **Pulleys** have bosses similar to the Collar, again in steel, but are painted & single-tapped. The ring of peening has 4 impressed points. • **N&B**. The **Bolts** have 6.0mm Ø tapered cheeseheads and are 8 & 18mm u/h. The pressed, hexagon **Nut** is 7.0mm A/F, & 2.1mm thick. The **Grub Screw** #56 is 3mm long. • The **Spanner** is 106mm long. • The **Spring** #54 is 3mm Ø & 22mm long. It is intended to tension cord drives but is very stiff. • **Parts not seen**. The **Cord**. The **Hook**. The **Screw-driver**, but from Ebay photos it scales at 149mm long. • **Gear Set Parts**. The only obvious Gear parts that can be seen in the Ebay pictures to hand are 2 MÄRKLIN type **Gear Rings** that probably fit over the 2 Pulleys. Other possible parts seen more than once in various sets are a Crank Handle with an offset about 1½ times that of #32, and a 1*5*1 DAS. But these items may not be DITMAR as the Ebay sets in question also contain some obvious 'foreigners'. • **A Motor?** Included in one Ebay lot, the motor & transformer left. Most of the considerable number of parts in the lot were clearly DITMAR but included a little TRIX.

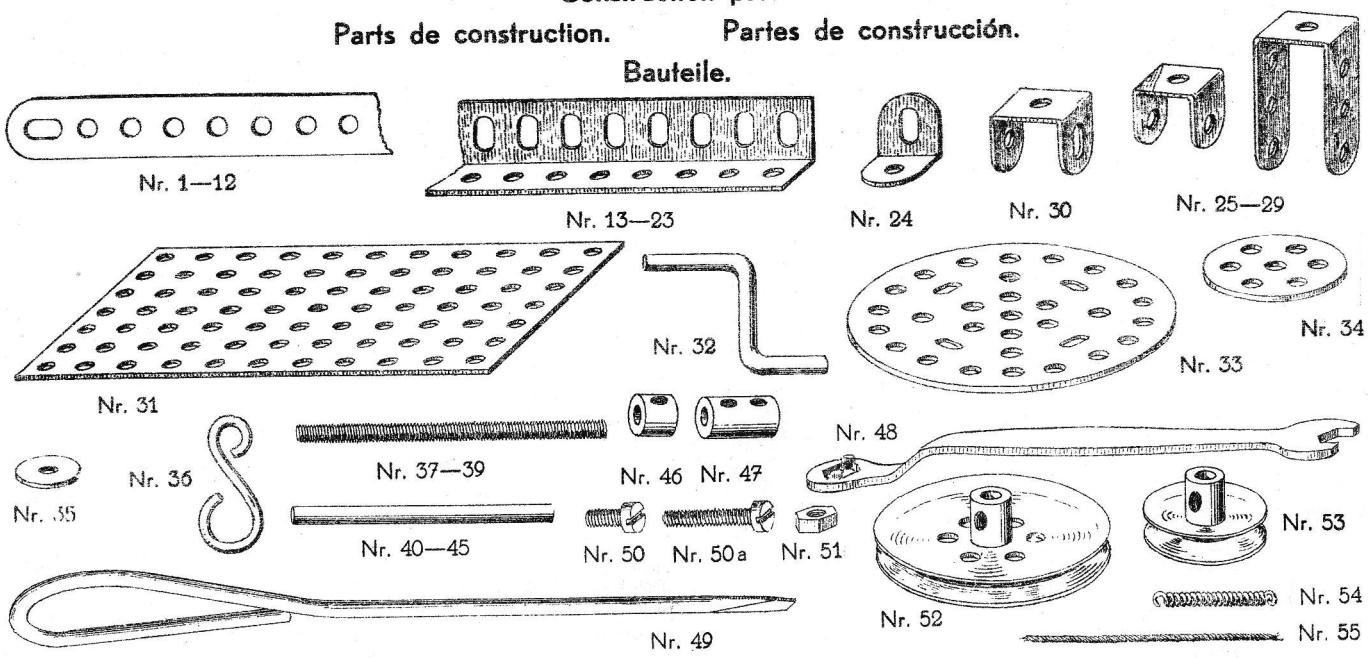
The SETS The set in BK (p218) is the larger basic one and is probably the one referred to in the Gear manual (see later) as Größe 1 (Size 1). Its box is 26½*36½*3½cm. An example of the smaller set seen on Ebay was in a box 22*30cm and was called 'Größe 2'. Both have partitioned boxes with lids similar to the Size 2 one top left. This box is the only one seen which has an indication of size - it has 'GRÖSSE II' in tiny letters in the top righthand corner of the lid. The Set Contents opposite are for Size 1. The Size 2 Ebay ad shows the equivalent manual page and though the individual letters can't be deciphered, the shapes of the words show that the following parts are not in the Set: 3 A/Gs; 1 D/B, probably the 5h; & 2 Axles. Also the Slotted D/B line looks as if it has been blocked out. The lid of the Gear Set is shown above and looks to be about the same size as the No.2. Apart from the Gear Rings, the parts in the one set seen on Ebay all look to be from the basic range.

The MANUALS The one for the **Size 1** Set has 48 un-numbered pages, 212*146mm, plus covers. The covers are blank except for the front, right. The manual is basically in German but the names of the models & a few other headings are given in English, French, Spanish & German. No mention of set size is made in it and so it could date from a time when there was only the one basic set. p1 has the Inventory, p2 is blank, pp3-8 have notes on 8 Basic Constructions shown on pp11-12, & building instructions for the larger models, quite extensive for some of them. The Illustrated Parts are on pp9-10. 48 models are shown in the remaining pages, from Nr.1 Chair on p13 to Nr.48 Inclined lift on pp47-48. There is a line drawing for each, with a list of parts needed and a few scrap views for the larger models. The drawings for some of the larger models are too small to see all the details clearly but no doubt the building instructions would explain all.

The models range from simple domestic items to 18 or so larger ones, with a typical selection from the 'strip & rigid plate' era, though there is only one (small) Crane, & only 3 vehicles, a Tram, a Lorry, & a Tipping Trailer. Mechanical features are generally limited to cord drives and a few linkages. The Trailer is shown right, full-size, and it has one novel feature, the tipping mechanism. In it a contrate engages a rack strip, with N&B used for all the teeth (in a 28mm Disc & a formed Strip). Two more models are shown on p1081, again full-size. The tup spindle in the Press is a Screwed Rod running through the double-tapping in a Collar which is clamped between 2 Strips. The building instructions for the Funicular Railway have not been included but it seems that the cars are joined by Cord which runs around the built-up pulleys at 48c & d, but no means of driving them is provided. There is though a brake with a cord attached to the operating lever 6 (a 9h Strip) which passes around the smaller groove of pulley 48d & is then bolted to the frame (at the arrow in 48a). Another model was shown in OSN 15.

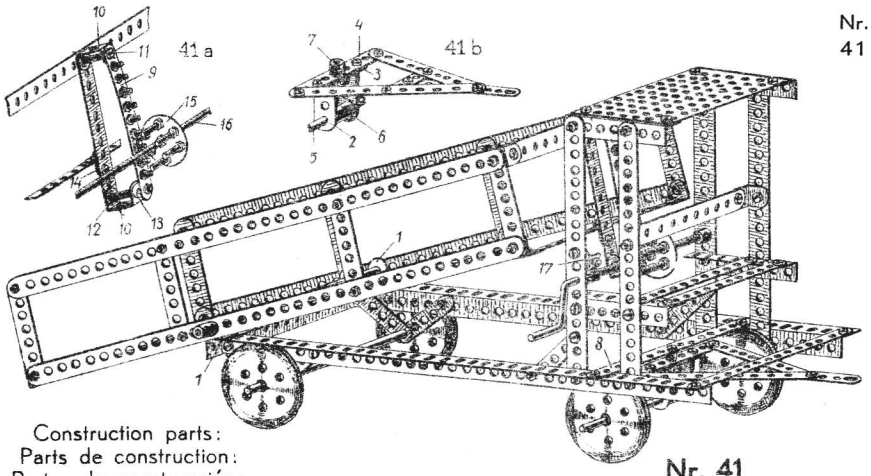
The **Size 2** manual has the same cover & page size as the

Construction parts.
Parts de construction. Partes de construcción.
Bauteile.



Stück	Nr.	Gegenstand	Bezeichnung
6	1	Flacheisen 35 Loch	F 35
2	2	„ 31 „	F 31
3	3	„ 27 „	F 27
4	4	„ 23 „	F 23
8	5	„ 19 „	F 19
8	6	„ 15 „	F 15
8	7	„ 11 „	F 11
8	8	„ 9 „	F 9
8	9	„ 7 „	F 7
12	10	„ 5 „	F 5
8	11	„ 3 „	F 3
4	12	„ 2 „	F 2
4	13	Winkeleisen 35 „	W 35
2	14	„ 31 „	W 31
2	15	„ 27 „	W 27
2	16	„ 23 „	W 23
2	17	„ 19 „	W 19
4	18	„ 15 „	W 15
8	19	„ 11 „	W 11
6	20	„ 9 „	W 9
8	21	„ 7 „	W 7
6	22	„ 5 „	W 5
2	23	„ 3 „	W 3
18	24	„ 1 „	W 1
2	25	U-Eisen 5 „	U 5
3	26	„ 4 „	U 4
2	27	„ 3 „	U 3
2	28	„ 2 „	U 2
3	29	„ 1 „	U 1

Stück	Nr.	Gegenstand	Bezeichnung
1	30	Distanzbügel	D
4	31	Platte 7 x 11 Loch	Pl
2	32	Handkurbel	Hk
4	33	Scheibe 64 mm ∅	Sch 3
4	34	„ 28 mm ∅	Sch 2
7	35	„ 12·5 mm ∅	Sch 1
1	36	Lasthaken	H
1	37	Gewindeachse 11 cm	G 11
2	38	„ 6 „	G 6
4	39	„ 3 „	G 3
1	40	Achse rund 20 „	A 20
1	41	„ „ 15 „	A 15
2	42	„ „ 12 „	A 12
2	43	„ „ 9 „	A 9
2	44	„ „ 7 „	A 7
1	45	„ „ 3 „	A 3
10	46	Stellring	St
6	47	Verbindungshülse	V
1	48	Schraubenschlüssel	SS
1	49	Schraubenzieher	Schz
104	50	Schrauben 3·5 ∅, 8 mm lg.	S 1
10	50a	„ 3·5 ∅, 18 mm lg.	S 2
106	51	Mutter	M
4	52	Schnurrad 2	SR 2
4	53	„ 1	SR 1
2	54	Spiralfeder	Sp
1	55	Rebschnur ca. 2 m lg.	R
20	56	Madenschraube	MS

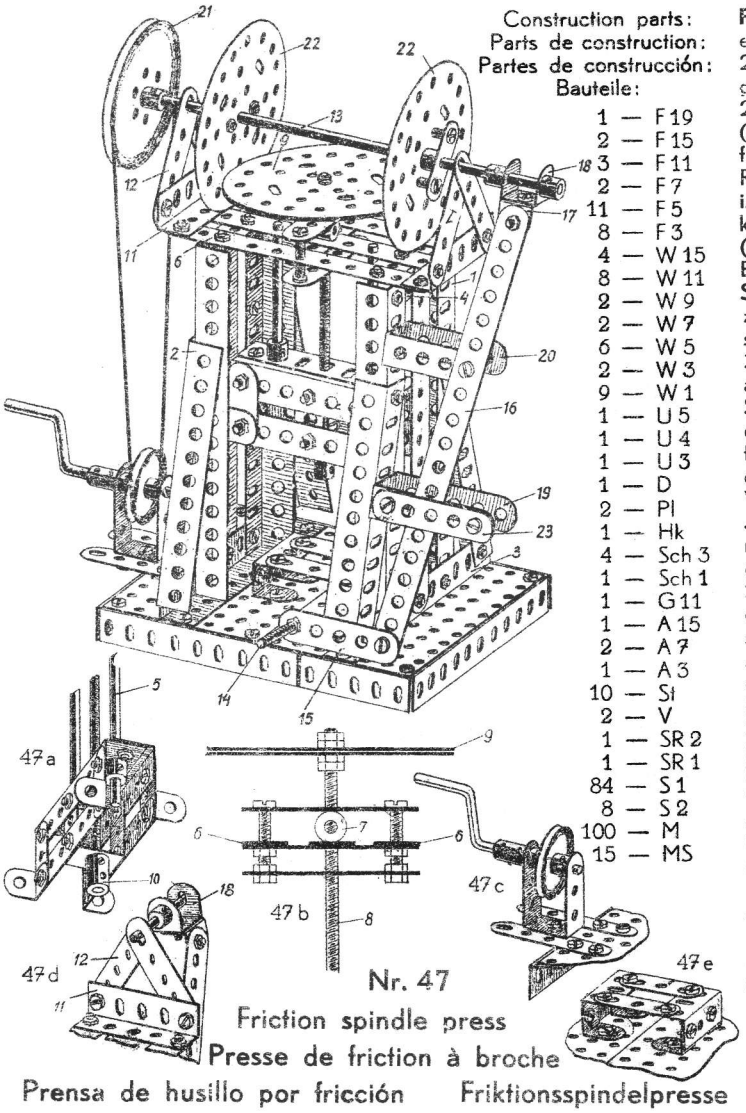


Construction parts:
Parts de construction:
Partes de construcción:
Bauteile:

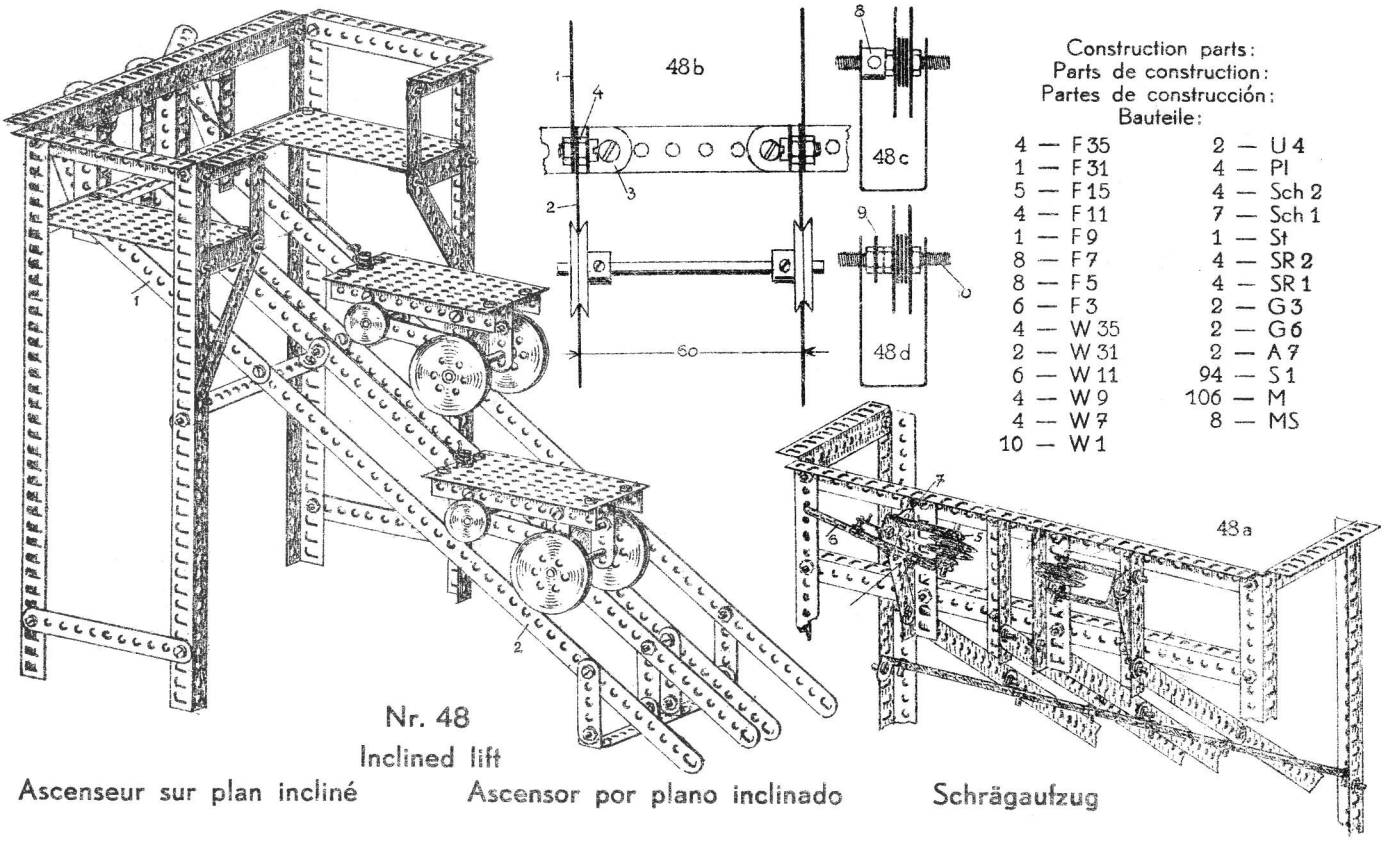
4 — F 35	1 — Sch 2	7 — F 5	1 — Hk
4 — F 19	1 — G 11	2 — W 35	2 — V
7 — F 15	1 — G 3	1 — W 15	5 — St
7 — F 11	1 — A 15	4 — W 7	4 — SR 2
2 — F 9	1 — A 12	18 — W 1	88 — S 1
8 — F 7	1 — A 9	1 — U 3	8 — S 2
		2 — U 2	98 — M
		1 — Pl	9 — MS

Nr. 41
Trailer
Remorque bousculante
Remolque basculante
Anhängekippwagen

Nr. 41 **Anhängekippwagen.** Begonnen wird mit dem Bau des Wagenrahmens, der seitlich aus 2 Winkeleisen W 35, vorne aus einem Flacheisen F 15 und hinten aus einem Winkeleisen W 15 gebildet ist. Auf die Enden dieses Winkeleisens wird je ein Winkel **1** (W 1) angeschraubt, um später die Achse für den Kippladeraum anbringen zu können. Hierauf wird das Drehgestell für die Vorderräder nach Detailzeichnung Fig. 41 a angefertigt. Das U-Eisen **2** (U 3) wird mittelst zweier Winkel **3** (W 1) mit dem Flacheisen **4** (F 9) verbunden. Nachdem die Achse **5** (A 9) durch das Verbindungsstück **6** (V) im U-Eisen **2** gelagert ist und die beiden Räder angebracht sind, wird das ganze Drehgestell mit einer Schraube S 2 unter Beifügung eines Stellringes **7** (St) an das Flacheisen **8** (F 15) lose angeschraubt. Es folgt nun der Anbau der Hinterräder und des Sitzes mit dem Dach. Der Bau des Kipp-Laderaumes bietet keine Schwierigkeiten. Dieser besteht nur aus Flacheisen und Winkel u. zw. aus 4 F 35, 5 F 15, 8 F 7 und 10 W 1. Gemäß Fig. 41 b wird die Zahnstange **9** zusammengesetzt und unter Zuhilfenahme von 2 U-Eisen **10** (U 1), einer Schraube **11** (S 2), einer Gewindeachse **12** (G 3) und eines Stellringes **13** (St) sowie eines Winkels **14** (W 1) an den Laderaum angeschraubt, welcher sodann um eine in den Winkeln **1** gelagerten Achse A 15 kippbar angeordnet wird. Das Triebrad **15** besteht aus 6 auf einer Scheibe Sch 2 befestigten Schrauben S 2 und ist auf der Gewindeachse **16** (G 11) mit Muttern so zu befestigen, daß seine Schrauben mit denen der Zahnstange in Eingriff kommen. Zum Schluß wird noch eine Sperrung **17** ähnlich Grundform Nr. 5 eingebaut.



Friktionsspindelpresse. Auf die Grundplatte, welche aus einem aus Winkeleisen gebildeten Rahmen, der mit 2 Platten (Pl) abgedeckt ist, besteht, wird das Ständergerüst aufgebaut. Die beiden Säulen bestehen aus je 2 Winkeleisen **1** (W 15), welche durch je 2 Winkeleisen **2** (W 11) versteift sind. Die Winkeleisen **1** dienen zur Führung für den Stössel und müssen, um den dazu notwendigen Raum schaffen zu können, wie aus der Zeichnung ersichtlich ist, so angeordnet werden, daß die Langlöcher seitlich zu liegen kommen. Unten werden die Winkeleisen **1** mit Winkeleisen **3** (W 11), oben mit Winkeleisen **4** (W 5) zusammengehalten. Bevor jedoch letztere angeschraubt werden, ist der Stössel samt den Führungsstangen **5** (A 7) nach Fig. 47a zusammenzustellen und zwischen die beiden Säulen einzuschieben. Oben werden nun die beiden Säulen mit 3 Flacheisen **6** (F 11) verbunden, worauf der Einbau des als Spindelmutter dienenden Stellringes **7** gemäß dem Seitenriß Fig. 47b erfolgt. Wenn an der Spindel **8** (G 11) das aus 2 Scheiben Sch 3 bestehende Schwungrad **9** befestigt ist, wird die Spindel in die Spindelmutter **7** eingedreht, der Stössel eingehängt und durch Anbringen des Verbindungsstückes **10** (V) am Herabgleiten gehindert. Jetzt wird der Tisch nach Fig. 47c auf der Grundplatte montiert, ebenso das Ständergerüst. Es folgt der Aufbau der Lager, welche aus je 1 Winkeleisen **11** (W 5) und 2 Flacheisen **12** (F 5) bestehen. Diese dienen zur Aufnahme der Welle **13** (A 15). Der Anbau der sogenannten Umsteuerung, bestehend aus dem Handgriff **14** (S 2), dem Arm **15** (F 5), der Stange **16** (F 19) und dem mit ihr durch einen Winkel **17** (W 1) verbundenen Bügel **18** (D), an die beiden U-Eisen **19** (U 5) und **20** (U 4) bietet keine Schwierigkeit. Es ist nur darauf zu achten, daß das Langloch des Bügels **18**, wie Fig. 47d zeigt, nach außen zu liegen kommt. Nun werden das Antriebsrad **21** (SR 2), die 2 nach Grundform 6 gebildeten Friktionsräder **22** und der Bügel **18** auf die Welle **13** geschoben und befestigt. Beim Bügel **18** geschieht dies mittels zweier Stellringe. Die Umsteuerung hat den Zweck, das Schwungrad **9** einmal an die linke und einmal an die rechte Friktionsscheibe **22** zu legen, um dadurch den Umdrehungssinn der Spindel **8** zu ändern und um damit zu erreichen, daß sich der Stössel entweder senkt oder hebt. Die Zeichnung zeigt den Antrieb des Schwungrades mit der linken Friktionsscheibe. Die Klemmleiste **23** (F 5) hält die Umsteuerung in jeder Lage fest. Zum Schluß erfolgt noch der Anbau des Antriebes nach Fig. 47e, an welcher Stelle man sich den Antriebsmotor denken muß. Diese Pressen dienen zum Pressen, Prägen und Biegen von Metallteilen.



Size 1 but nothing else is known of it, apart from the Inventory page already mentioned. The **Gear** set manual seen on Ebay looks to be the same size & has the same cover except that the blue word across the bottom is GETRIEBEBAUKASTEN. Its Intro mentions using the Set with the Size 1 outfit, & the other page shown has a photo of the model on the lid with parts list.

42

OTHER SYSTEMS NEWSLETTER

OSN 42 APRIL 2010

Editor Tony Knowles
7 Potters Way
Laverstock
Salisbury
SP1 1PY
England

Email: tony@osnl.co.uk

EDITORIAL As noted previously PDF files load relatively quickly and are often more convenient to print out. So when I update the Database & Index on the OSN website I shall use this format.

It would also be possible to send the original files to anyone by email and this would allow the recipient to print out with whatever layout was desired, and also to sort and filter the data as required. Let me know if you would like one or both of the files and in which format – OpenOffice .sxc or Microsoft .xls.

Shorter NOTES, with thanks to all contributors.

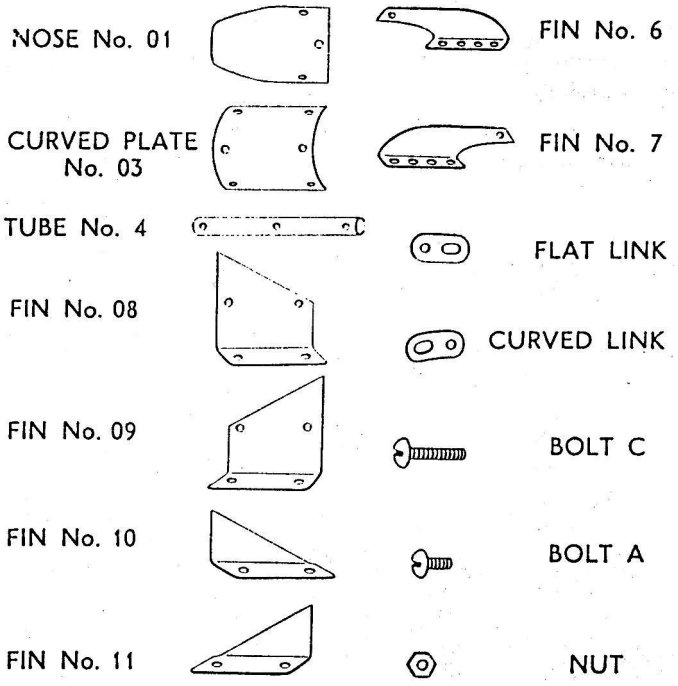
1. **Snippet. The DITMAR Motor** The account of this Austrian system in 36/1079 included a rather poor photo of a motor, and it wasn't certain that it was actually a Ditmar product. Right, a rather clearer image of one definitely sold as Ditmar, and as can be seen the name is on the yellow capacitor. The Ebay offer gave no other details and unfortunately the front end wasn't shown. To give an idea of the Motor's size it will be recalled that the hole pitch is 8.5mm.

DITMAR S4 [42/1260]

2. **Snippet. ARCHITECTOR Clips** This French system (see 39/1194) has card Panels held to metal Brackets by Clips. Below a packet of said Clips labelled 'No.15 Attaches' and the name along the bottom is Fernand Nathan, a Parisian publishing house.

ARCHITECTOR S2 [42/1260]

3. **The DAN DARE Rocket Set** This outfit, with its smaller, 1½" Ø, nickelled body parts, is the least well known of the DD sets (see 14/366), and below photos of it from Gary Higgins.



Above are the parts as in MCS (taken from the manual) and the main ones are individually strung or clipped to the backing card. All the Fins are red and the small triangular pair, #10 & 11, are either side of the 4 black Tubes.

DAN DARE S2 [42/1260]