

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.

*Ditmar*

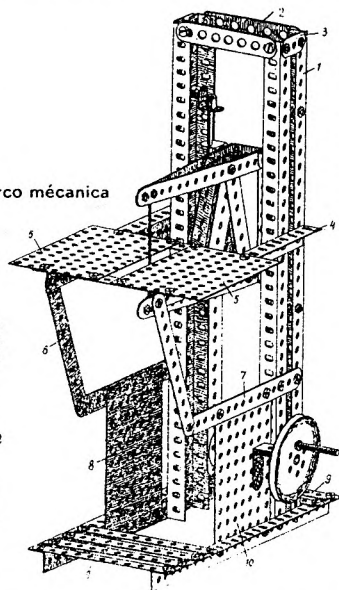
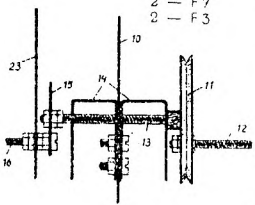
Nr. 44

Automatic bow saw

Scie en archet mécanique Sierra de arco mecánica  
Mechanische Bogensäge

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

|         |           |
|---------|-----------|
| 7 - F15 | 4 - W35   |
| 8 - F11 | 2 - W23   |
| 6 - F9  | 2 - W19   |
| 2 - F7  | 8 - W1    |
| 2 - F3  | 2 - U5    |
|         | 2 - U3    |
|         | 4 - Pl    |
|         | 1 - Sch 2 |
|         | 1 - G6    |
|         | 3 - G3    |
|         | 2 - A13   |
|         | 8 - St    |
|         | 1 - SR 2  |
|         | 58 - S1   |
|         | 2 - S2    |
|         | 58 - M    |
|         | 5 - M5    |



**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.

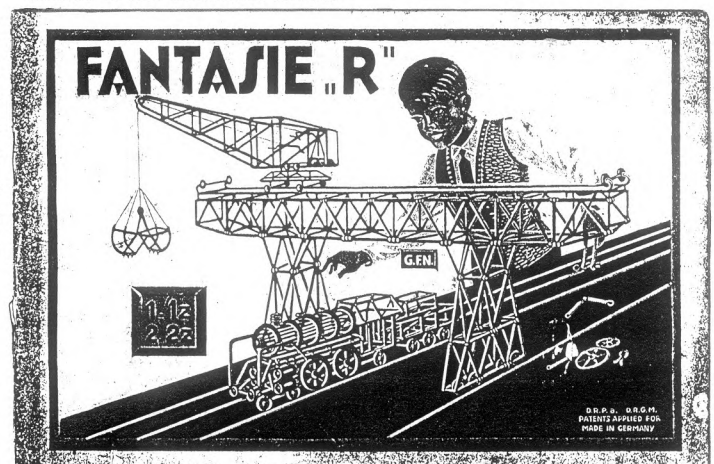
**DUX-UNIVERSAL** This rather unusual system is well covered in MCS and I hope to write some notes on it in a future issue. EZ mentions a February 1939 Patent No. 705732 but I'm not sure whether it was actually made before WW2. Production ceased around 1958.

**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.

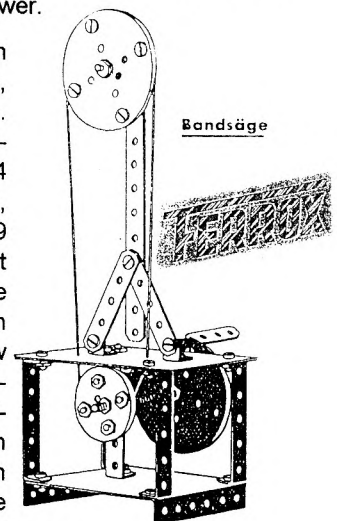
**FANTASIE "R"** This simple system was made by Gebr.

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.



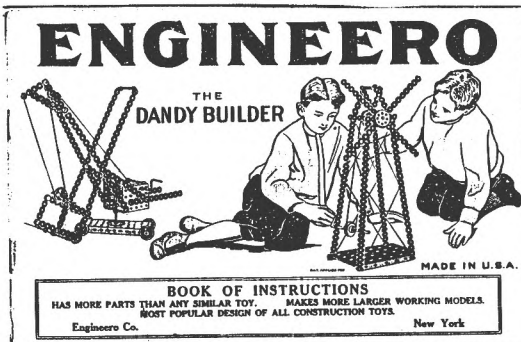
1 Grundplatte, gerade  
1 Grundplatte, gebogen  
1 Traverse 11 Loch  
2 Traversen 5 Loch  
1 Traverse 3 Loch  
4 Winkeltraversen 1x5x1  
2 Winkel 1x3  
3 Winkel 1x1  
2 Lagergabeln 2x1x2  
3 Scheiben 60 mm  
3 Scheiben 36 mm  
1 Welle 80 mm, 1 Welle 40 mm  
26 Schrauben, 36 Muttern

**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 rectangular end holes that extended out to the square

**HISTORY** The earliest known date is from the Jan 16, 1916 G&T, which in its American N/L describes ENGINEERO as a cheap and popular metal construction toy of U.S. manufacture which is selling well. The address of Engineero Co. is given in the Manual as 369 Broadway, New York City, and the 'Factory' as Keystone Mfg. Co., Newark, N.J. - & I also have a note that the original manufacturer was Haber Bros. Inc., of New York City, who sold to Keystone in 1917. None of these companies or addresses tie up with anything so far known of M B, and it isn't clear who was copying who. Quite possibly each was watching the other very carefully. There is 'PAT. APPLIED FOR' on the cover of the Manual, and a date for that would be of interest.

G&T also says that ENGINEERO is also known as the 'dandy builder'. I thought that might mean that sets were sold under the 2 names, but as can be seen, both names are on the manual cover, & so perhaps that's what G&T had in mind. But if anyone has



material under just the DANDY BUILDER name, do let me know.

**SUMMARY OF MANUAL** •Name: ENGINEERO/THE DANDY BUILDER •Details of maker: Engineero Co., 369 Broadway, New York City. Factory: Keystone Mfg. Co., Newark, N.J. •No dates/ref nos. •Page size: 255\*170mm deep. •No. of pages: 20+ covers. •Language: English. •Printing: B&W cover & line drgs of models. •Page No. of Ill Parts & highest PN: 19,36. •Page No. of Set Contents & highest PN: 20/38.

•Sets covered: 25,50,100,200,300. •No. of models for each set: 20, 8,10,7,5. •Name, Model No., Page No. of first & last model of each set: 25: TABOURETTE,1,3; LIBRARY TABLE,20,6. 50: TOWER WAGON,21, 6; RAILROAD SIGNAL,28,9. 100: SWING,29,9; REVOLVING DERRICK,38,12. 200: AEROPLANE,39,13; FLYING MACHINE,45,16. 300: SAND SHOVEL,46, 16; RAILWAY SIGNAL,50, 18. •Other notes: sets sizes, inc #10, are given in the Set Contents but the models are related to the price of the sets.

## More Small ERECTOR Sets

**An Erector Set** David Hobson has kindly lent me a set which has in it the M 973 Leaflet that was mentioned in 8/197 & 15/410. The box measures 7 1/2\*5 1/8\*5/8" and the blue & red lid is similar to the #4 Set one on p74 of *Greenberg*, with a man, & 2 boys working on a large Bridge. The main differences are that there's a toy train on this Bridge and no set number on the diagonal stripe in the bottom left corner. No indication of set size is given on the box or the Leaflet. The corner of a similar lid can be seen in the illustration of the No.0 Outfit in 15/411. On the bottom right corner of this lid is the reference M850, and the address: The A.C.Gilbert Co., New Haven, Conn., U.S.A.

Apart from some missing N&B the Set appears to be complete with most of the parts held to a 'flanged' cream card by pressed out tabs and slots. The N&B & Angle Brackets are in a 1 1/2" Ø plain brown cardboard pill box. All the parts are nickel plated and comprise a 5\*4h Plate, 6x5h & 2x9h 1/2" wide Strips, 6 Discs 7/8" Ø, and 6 Angle Brackets. All are made of thin steel, .52mm thick except the .59mm Plate, and the holes are 4.4mm Ø except those in the Discs & 5h Strips, which are 4.5mm. The ends of the Strips are not quite fully radiused (6.8mm) and some burr can be felt around their edges though it isn't sharp. There were probably 12 N&B - the Bolts have the normal round heads, and the Nuts are the post-1924 1/4" A/F size.

From the models in the Leaflet, 2 rather than 6 Discs might have been expected. Another oddity is that 4 of the 6 Angle Brackets are the pre-1924 1/2" wide type, while the others are the later ones, 13/32" across.

The Leaflet is a single sheet folded in 2 with pages 7\*5". The address on the front is as the lid but without the U.S.A., & 10 models are shown on each of the other pages, for 1,2 & 3 of the Sets respectively. Many of the 1 Set ones are among those in 3/46, and two 3 Set ones are shown opposite.

There is no positive indication of date but the last Patent date on the lid (for Austria) is Jan. 25, 1924. The old style Angle Brackets, if they were in the Set originally, might indicate a date near 1924. The design on the lid was changed for the regular small sets in 1928 but if the ad containing the No.0 shown in OSN 15 was accurate, it may have been used for the very small sets well after that.

**A No.000 Erector** The other find is a single page torn from a manual. On one side are 17 'Models Built with No.000 Erector', with inset in a central box, 6 more 'Models Built with 2 No.000 Sets'. The main parts in the Set (see the models below) are a Flanged Plate, #FO, 4x11h Strips, H, 2x21h Strips, I, 2 DAS, FQ (an 11h Strip bent across holes 2

& 10), at least 3 Angle Brackets, 4 push-on Wheels (probably wood), & 2 Axles. The Strips all have the 1/4" spaced holes and all are standard parts, unlike some of those in the 1929 No.0 described in 15/410.

Most of the models are different to those in the 1929 No.0 Leaflet, though a few are of similar design but with Strips replacing the Girders.

On the reverse are small illustrations of 6 large 'Wonderful Models Built With The New Erector', and I found a similar page in a © 1926 manual, though it was probably used over many years. That is the only clue as to date except that Parts FO and FQ were listed from 1928.

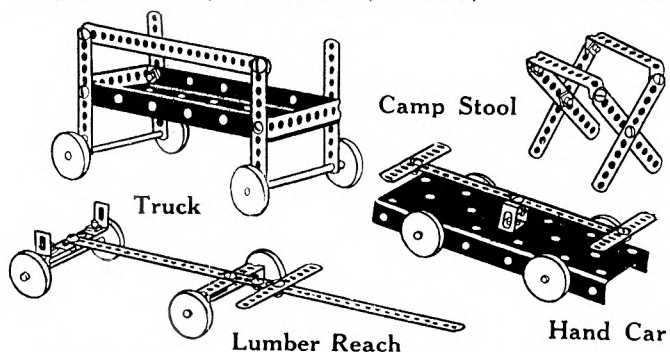
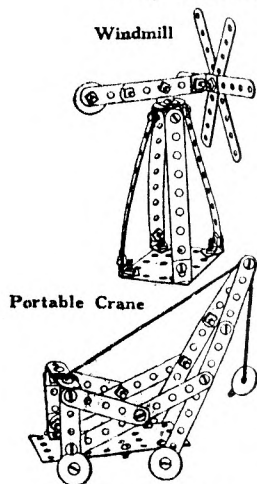
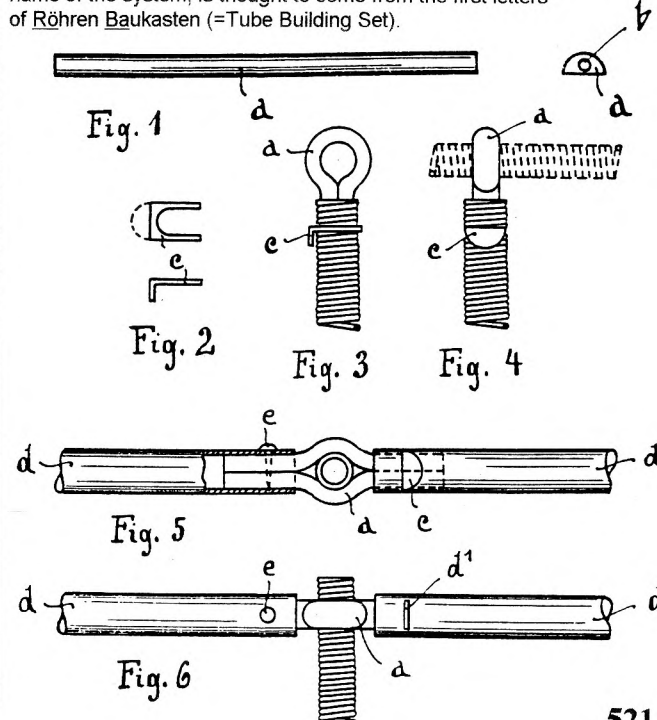
**The FANTASIE 'R' Patent?** This German system was mentioned in 15/413 and David Hobson has kindly sent a copy of the UK Patent 383107, which may show the method used to join the Tubes together. It is headed 'Flexible Connecting Elements for Screwless Metal Toy Building Elements', and is in the name of Jobst Fleischmann of 25 Bielingstrasse, Nuremberg; the application date was Jan.14, 1932.

The idea was that a length of semi-circular section rubber, reinforced by a flexible wire running through it (Fig.1) could be wrapped round a tube, or a wire spiral, and the ends pushed into a similar tube at right angles, to hold the two together (Figs3/4). Alternatively two lengths could be used to join 3 tubes as shown in Figs.5/6.

If spirals were used the joint could, if necessary, be locked by pushing a sheet metal clamping fork (Fig.2) into the rubber between the coils of the spiral, as at 'c' in Figs.3/4. With tubes (Figs.5/6) the fork could pass through slots 'd' on either side, or a pointed pin, e, could be pushed into the rubber through a hole in the tube.

So was this the method used in FANTASIE 'R'? The date and use of tubes & rubber connectors all sound right, but was the method described in the Patent really practical? Let's hope that one day some FANTASIE parts will turn up.

Incidentally I didn't mention in OSN 15 that ROBA, the alternative name of the system, is thought to come from the first letters of *Röhren Baukasten* (=Tube Building Set).



**Corrections** • On the lid of the MORECRAFT No.4 Set (19/537) the MORECRAFT/POWER/Equipped group of words are at bottom right, not bottom left as stated. Thanks to Don Redmond for pointing this out. • On KON. SHKOL'NIK in 18/501, '7 & 11h Strips' in the 4<sup>th</sup> line of the 5<sup>th</sup> para should read '7 & 9h Strips'.

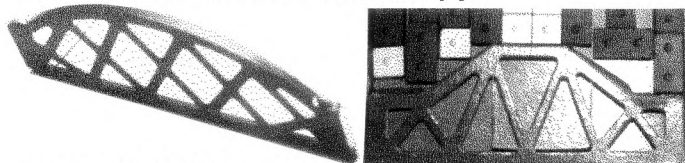
## ITEMS FROM LETTERS

1. From Thomas Morzinck. • A photo from Tobias Mey of the lid of a No.1 **Kosmos MASCHINEN** Outfit. It's in full colour and shows a boy using a real bench drill that is of a similar type to the model shown in 20/586. The drill is blue and a couple of parts alongside the box look blue too. The wording along the bottom of the lid is: KOSMOS-BAUKASTEN MASCHINENBAU. Also in the photo is the manual, in portrait format, cream with the same picture as on the lid, but quite small and in black.

2. From Don Redmond. • Some details of the **MODERN-MORECRAFT No.4** box described in 19/537. The box is 2¾" deep with both the top (lid) and bottom based on a wooden frame 13⅞"×11"×1⅞". [The lid sits on top of the bottom, located by an inner liner, and this gives a clear space above the inner tray, where a Motor could have sat, of 2¼" at most.] On the bottom of the box is \$4.89 in pencil.

• On the **ELETTRO BRAL** Ruhmkorff Apparatus (19/532), Heinrich Daniel Ruhmkorff (correct spelling) 1803-77, invented the induction coil in 1855, and it was called by his name, the Ruhmkorff Coil, in the 19<sup>th</sup> century.

• A letter from Kendrick Bisset in the July 1997 issue of the *S. Cal. Club Newsletter* compares the Richter metal Arch Bridge Parts with those produced by Gilbert for use with **MECCANO-BRIK**. (He had bought the toy division of the US branch of Richter's company in 1919.) The Arches are supported by the same type of U-Strip but their bracing is simplified with no vertical members. (But in ads & manuals the Richter pattern is shown.) In size they are the same height, 2", but the Gilbert parts are 6" long against 6.12", and 2.21" wide against 2.35". The Richter parts are painted a dark blue-grey and the Gilbert ones red. [See also the notes on the Richter parts in 19/555. The Arches and Roadway in a #000 MECCANO-BRIK Set are made of orange cardboard and the Arch is humped with diagonal bracing. In the photo below right, the metal U-Strip may be visible behind the card humped Arch, and on the left an oblique view of the Gilbert metal variety.]



• On **STRUCTO** (see 15/424) one Spider (Bush) Wheel has a flat front face and another has a boss on it protruding ⅛". The groove on the Crank Handle to hand is 'barely a scratch'. The pitch of the Sprocket Chain is about 8mm, perhaps 3 links to the inch.

• On **bolt heads** (20/585), 'Allen' is the name of the hexagonal socket in the head, not the head itself. There are other sockets of course, the PHILLIPS cross type for example, and square Robertson sockets which were patented in, and are unique to Canada.

• On the **POW'R HOUSE Ferris Wheel** (20/587), the radial Arms are indeed a rounded channel section, with 2 long tabs at one end which are bent out at right angles to attach to the Rim Segments where they join each other. The Rims have a channel or groove at one side, evidently for a drive belt. Also the hole for the Axle in the Side Supports is at least ¼" Ø and so presumably the Hub and Axle correspond. [The Axle can be seen more clearly in the original of the illustration in OSN 20 & could well be ¼" Ø.]

3. From Werner Sticht. • On the yellow parts in Germany, see 20/571, some of the **original MÄRKLIN parts** were

yellow. Pl.18 in *Bauklötze Staunen* shows a 1935 outfit and the 25mm Pulleys, Bush Wheel, and 38mm Flanged & Grooved Pulleys are yellow. In the late 1930s such parts were made of aluminium due to material shortages and were unpainted. A set with such parts can be seen in *Eisenzeit*, Pl.36.

• On the **Lilienthal patent** (20/571), although it was in the name of Otto Lilienthal, the aviation pioneer, in reality his brother Gustav was the inventor of the system. Otto's name was used because Gustav, who had also invented ANKER blocks, had lost all his money in November 1987 as the result of a lawsuit with Richter.

• Of one 'imitator', Hornby, in his Life Story (see 20/571), wrote, 'One of the earliest of these systems consisted essentially of bars of wood perforated at regular intervals with holes, and capable of being fastened together in various positions by metal pins passed through these holes. By means of this system it was possible to build a variety of houses and other fixed structures, but it was impossible to construct engineering models or mechanisms that worked. No matter how the parts were joined to one another, the result in every case was a fixed position - there was no means of producing movement. The opening words of the patent specification of this system read:- "The subject of the invention is a toy building set, by means of which structures can be put up closely resembling real structures put up by carpenters . . . ." This phrase places it beyond all possible doubt that the object of this system was to produce fixed structures based on the principles of carpentering. Meccano, on the other hand, is designed to produce working structures built on the principles of engineering.'

The patent referred to is 153854 of 1903 by Walter Walther (see 13/348) and the opening phrase quoted is a direct translation of the original German. It is now known for sure that Walter was the son of Franz, the originator of STABIL. Hornby's application for a German patent to cover his 1901 invention was not successful. [I understand that the papers that might have explained why were destroyed long ago, but I hope to include more on early patents in the next Issue. Why did Hornby give so much space to Walter's patented system? And was it ever produced?]

4. From Jeannot Buteux/Constructorama. • Some details of a **YUNYI [YOUNI] KONSTRUKTOR** set like the one described in 20/567, but from 1994. The nickel plating in it is very bright but flakes off in the fingers. The abbreviation 'F-ka' stands for Fabrika (фабрика), meaning factory.

• **OS names** not yet mentioned in OSN: ARMA (Czech, 1960, green Wheels); BOB (German); CONSTRUCTO (Belgian, c1948); IDÉAL MÉCANIQUE; KÖSTER (from 1951, a theme set to make trains in various colours); LA CONSTRUCTION MÉTALLIQUE; M.C.D. (Dutch); MECCAMINI; MULTI-MAKE (French, from c1910); LES NACELLES VOLANTES (French); N.S.V. (Dutch); TECNOR (French)

• On the date of **HOHA** (18/517), a set is known from 1950.

• In a known **KONSTRUKTOR-MEKHANIK** set like the one in 18/566, the Axles are 4.0mm Ø and the Bolts are 6,8,10 & 15mm u/h. [See also 20/566].

• **MECHANICUS** (see 18/518) was sold in Holland under the name MECHANIKUS STAALKNUTSELDOOS (an original brochure is known).

• The Patent described in 18/521 does indeed correspond to **FANTASIE 'R'**. Fig.10 on p11 of the Manual is identical to Fig.5 of the Patent, and one manual models is marked G.F.N. 1932. (G.F.N. = Gebr. Fleischmann / Nürnberg)

• On **GEOBRA** (19/522), there is also a larger outfit to make a Crane of the same type but bigger. Such a set is known from 1970.

• At the time of writing an **OS Exhibition** is being held at Euro Tecnica (at the Old Customs House, Hergersberg) near the Belgian/German border (Bullange/Losheim). On view, over 70 different systems which belonged to the late Dr Griebel, with sets and many models. The exhibition may have closed by the time you read this, so phone beforehand

**FANTASIE "R"** This German system, made by Gebr. Fleischmann in the 1930s, was noted in 15/413, with details of the UK patent in 18/521 & 21/618. The "R" probably stands for Röhren [Tubes], the system's basic structural parts. They are joined by pairs of semi-circular rubber Connecting Strips which push into their ends. Now more details have come to light, mainly thanks to Urs Flammer for details of the FANTASIE manual, and to Wilbert Swinkels for a reference to his web page, [wiswin.nl/News%202015%202%20Viertel.html](http://wiswin.nl/News%202015%202%20Viertel.html), & permission to reproduce photos from it. The web page shows the ad which announced FANTASIE 'R'

The system was launched in March 1932 & it is not in Fleischmann's 1936 catalogue. It's said that the name was changed to ROHR-BAU or ROBA (from Röhren Baukasten?) at some stage – perhaps there was confusion with PHANTASIE, Fleischmann's other metal system of the time. However no mention of either alternative name has appeared as yet in sets, manuals, ads, dates, etc. But bear in mind that the manual described later is the only known evidence for FANTASIE, & it was the only item seen on Ebay in the last 25 years.

**The LAUNCH AD** It listed a basic Set 1 with 114 parts for 109 models, and add-on sets 1Z, 2, & 2Z. 1Z had 98 structural parts, No.2 was a Wheel set with 84 parts, & 2Z a Gear set with 165 parts including a Worm. Each set cost 50 Pfg & a 25 Pfg manual had 65 pages with 168 models. TRIX Units also cost 50 Pfg at the time.

5 models were shown in the launch ad, a simple Sledge (Fig.2), & an Eccentric Press (Fig.12), both of which are Set 1 models in the manual; a Reversing Mechanism (Fig.6) which needs Sets 1,1Z,&2Z; and two large, complicated models, including Fig.3, neither of which are in the manual. Without knowing the names of the larger models it is not

perhaps too clear what they actually do, but the 5 models shown seem to indicate that FANTASIE 'R' was projected as a serious system and that a wide range of realistic models was possible.

**The MANUAL** Fig.1 shows the front cover, probably about A5 size; the other covers are blank except for the printer's 'RK' logo on C4. Inside, 64 pages printed in black on paper now yellowed with age. All the text is in German, English, French, Italian, & Spanish. p1 is the title page: 'Book 1 for Sets 1; 1Z; 2; 2Z'.

pp2-6 have Intros listing the sets & their scope. pp7-9: Intros to Groups A-G of Basic Constructions. p10-15 have Constructions A1-4, joining Tubes in a straight line; B5-29, joining Tubes at an angle; C30-43, creating bearings; D44-46, crankshafts; E47-53,

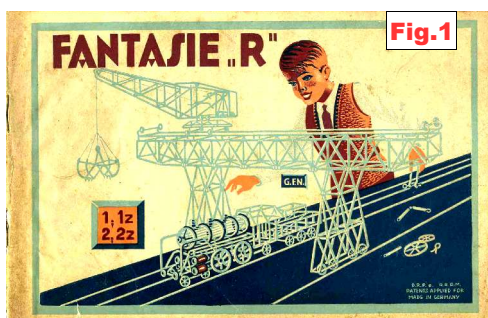


Fig.1

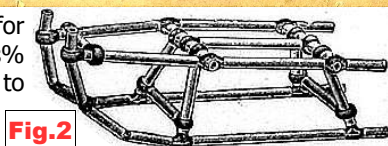


Fig.2

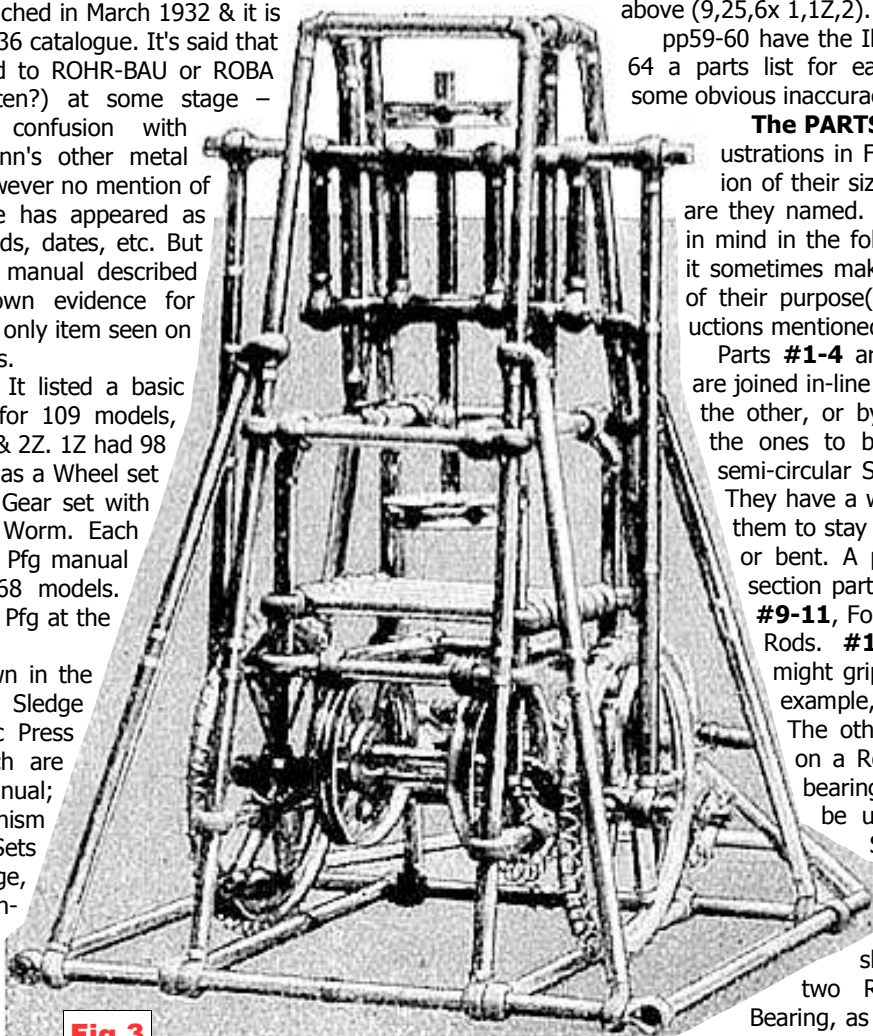


Fig.3

wheels & gears; F54-70, various including the Worm (#29 in Fig.9), uses of the Spiral (#28 in Fig.9), a universal joint, see F68 in Fig.5, & uses of the wire in the Strip, see F54,55,66 in Fig.5; G71-75, attaching sheet cardboard (G73 in Fig.5 is one way).

pp16-58 show 168 models, with a shaded line drawing of each. 1-109 on pp16-36 can be made with Set 1, from Schraubenzwinge, Screw clamp, to Elektrokarren, Trolley car. Models 110-168 on pp37-58 need the set(s) specified for them, from Vielflächner, Polyhedron (1x Set 1Z) to Verladeanlage mit oben laufendem Drehkran, Loading plant with rotary crane above (9,25,6x 1,1Z,2).

pp59-60 have the Illustrated Parts; pp61-64 a parts list for each model (there are some obvious inaccuracies).

**The PARTS**, from the manual illustrations in Figs.4 & 9. No indication of their size is given and neither are they named. This should be borne in mind in the following notes because it sometimes makes it hard to be sure of their purpose(s). The Basic Constructions mentioned are all in Fig.5.

Parts #1-4 are rolled Tubes which are joined in-line by pushing one inside the other, or by a short sleeve over the ones to be joined. #5-8, the semi-circular Straight Rubber Strips. They have a wire core which allows them to stay in shape when curved or bent. A pair, giving a circular section part, will be called a Rod.

#9-11, Formed Rubber Strips or Rods. #12-13, Sleeves. One might grip a Rod, and thus for example, form an end to it. The other Sleeve might slide on a Rod, and could form a bearing. The 2 types might be used in C35. #14, a

Spring Coil which can be used to grip the end of the Strips in a Rod, or over a short Tube used to join two Rods (A3). #15, a Bearing, as in D46, or C43. #16, use not positively identified but per-

haps a thick, flexible rubber band which is used to connect 2 parts together. Examples are F66 & the attachment of bearings for the winding handle & jib in Fig.8. #17-19, Pulleys. #20-21, Rims for larger pulleys. E49,50. #22-26, Gear Rings to fit over #17-21. E51. Though drawn differently #22's teeth look the same as the others in other illustrations, see Fig.6. The Gears can mesh together at any angle. #27, Short Spiral, perhaps uses as an axle stop, as in F60. #28, Long Spiral, used for example as cord guide on a crank handle made from a Rod, F60. See also F61, the Rods' rubber is stripped off and the wire cores formed to engage the Spiral, as in F54,55,66. #29, Worm Gear which

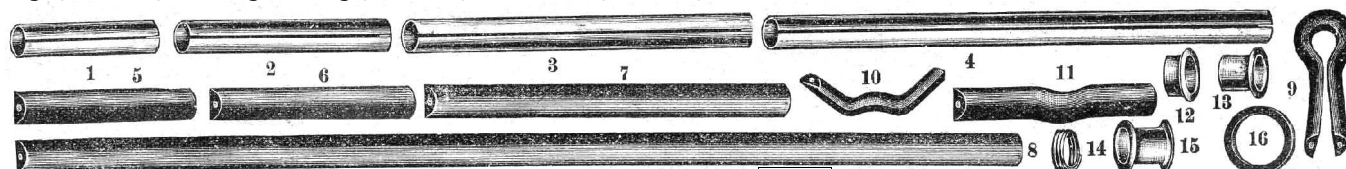
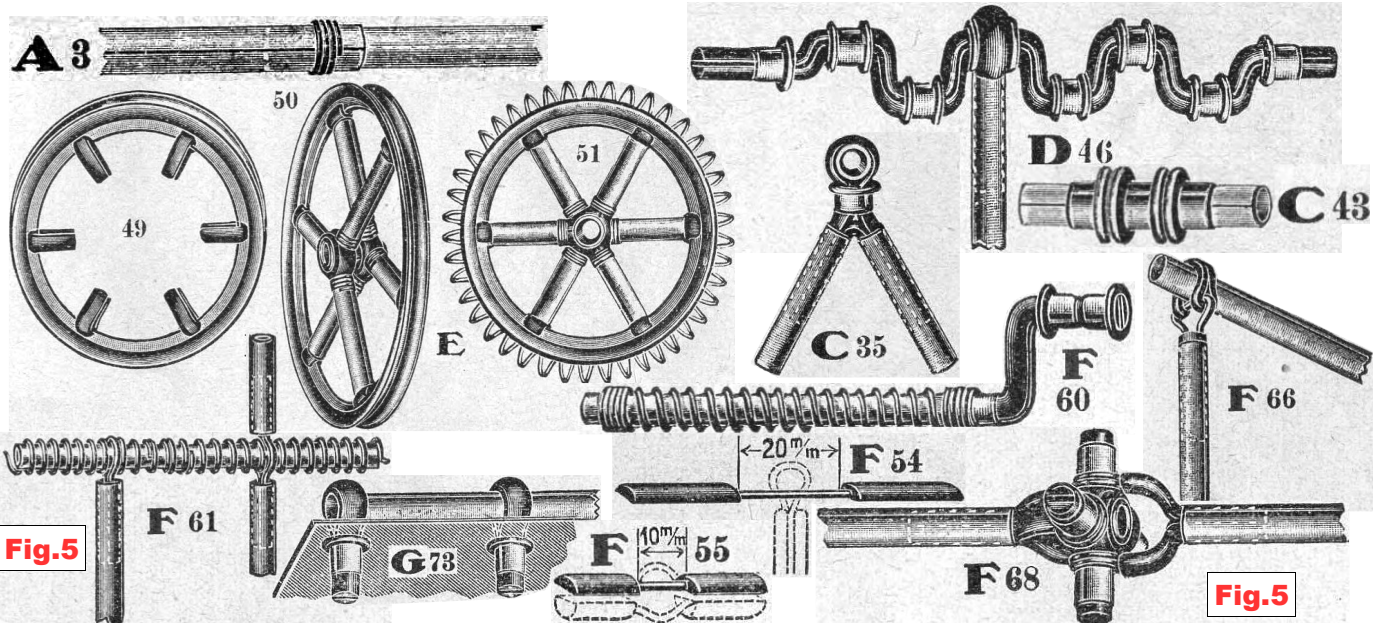


Fig.4



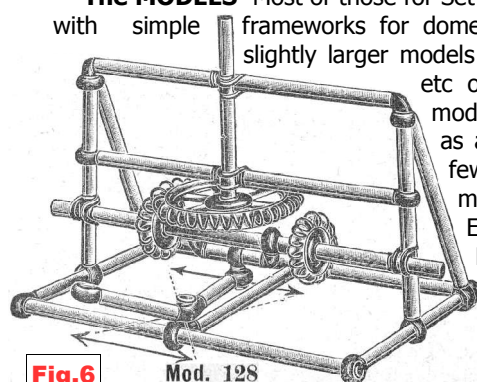
meshes with the Gears (Fig.10).

**SET 1** Its inventory, from the parts listed as needed by the models, is: 8,8,8x #1,2,3; 6,5,8x #4,5,6; 4,24,6x #7,9,11; 6,6,6x 12,13,14; 4,4,4x 15,16,18.

**The MODELS** Most of those for Set 1 are quite small, starting with simple frameworks for domestic items etc., and then slightly larger models including Scooters, Carts

etc on up to 4 Wheels, plus models with pulley drives such as a Windmill. Among the few larger models, the most complex is the Eccentric Press in Fig.12, one of the five models shown in the launch Ad.

The later models start with some complicated

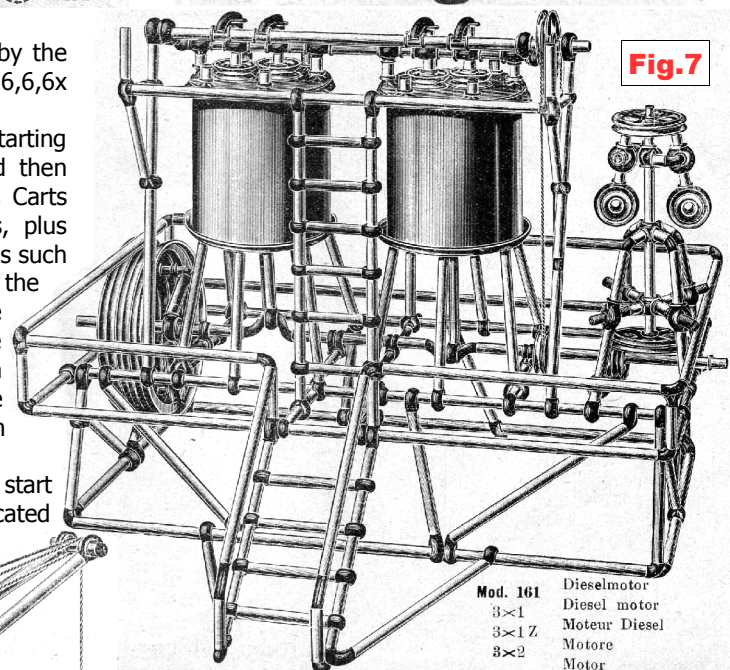


**Fig.6**

Mod. 128

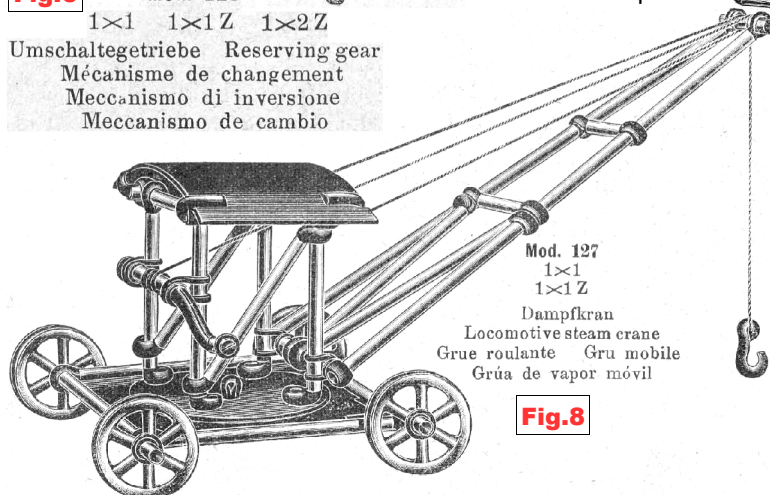
1x1 1x1Z 1x2Z

Umschaltegetriebe Reserving gear  
Mécanisme de changement  
Meccanismo di inversione  
Meccanismo de cambio



**Fig.7**

Mod. 161  
3x1  
3x1Z  
3x2  
Dieselmotor  
Diesel motor  
Moteur Diesel  
Motore  
Motor



Mod. 127

1x1

1x1Z

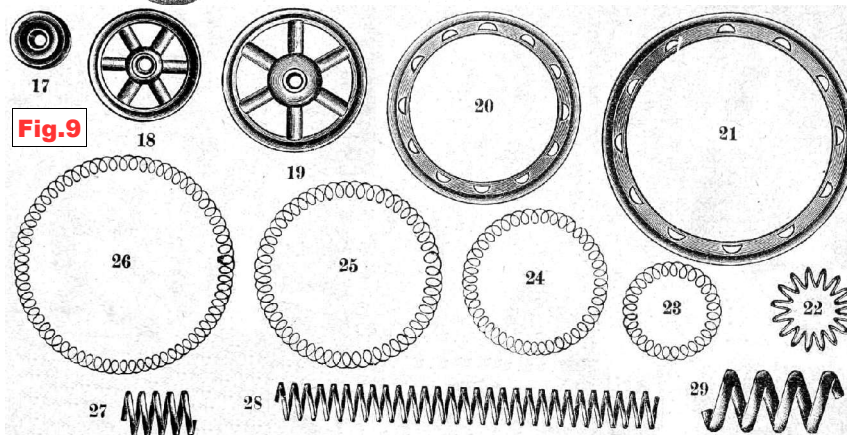
Dampfkran

Locomotive steam crane

Grue roulante Gru mobile

Grúa de vapor móvil

**Fig.8**



**Fig.9**

geometric frameworks, followed by a good variety of rather larger models such as the the Crane left. Larger and more complex models then start to appear, including machine tools, agricultural machinery, and the Motorcycle & Sidecar in Fig.13.

Finally 9 'supermodels', 4 of which are shown in Figs.7,11,14,15. The others are a 4-4-2 Loco, a 6-Wheel Tender for it, a Big Wheel, & a Hammerhead Crane.

Generally the models look quite attractive but only one small aircraft is included & only one modern road vehicle, a small, very simple Lorry. And apart from demonstrating them, few of the models use the Gears, and only basic mechanical drives are used. Some of the Carts etc have centre-pivot steering, and from its front wheels the Tractor looks as if it has steering but I can't see how it is achieved. Some of the models use cardboard to improve their appearance & in a few cases to allow a mechanical movement. For example if the Crane in Fig.8 can slew it is thanks to the its cardboard parts.

The presentation of the models is satisfactory for the small and many of the medium size models but much is often left to the builder to decide in the larger ones. The size of the model illustrations here compared with those in the (assumed) A5 size

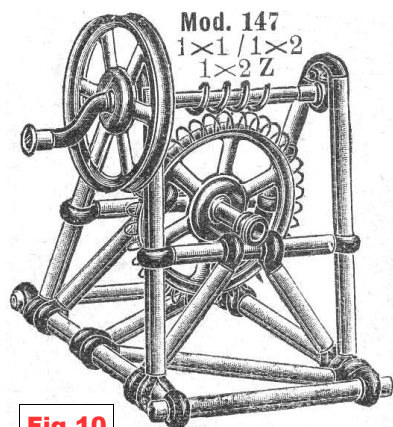


Fig. 10

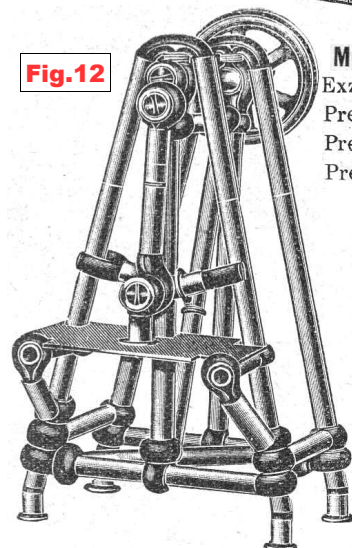


Fig. 12

Mod. 106  
Exzenterpresse Eccentric press  
Presse à excentrique  
Pressa ad eccentrico  
Prensa excéntrica

manual are given by Fig. 15.

FANTASIE seems to have been reasonably priced but its short life suggests that either it was too difficult to use the parts, or that for some reason the rubber Strips didn't live up to expectations. It would be interesting to have some parts to play with but suspect that building one small to med-

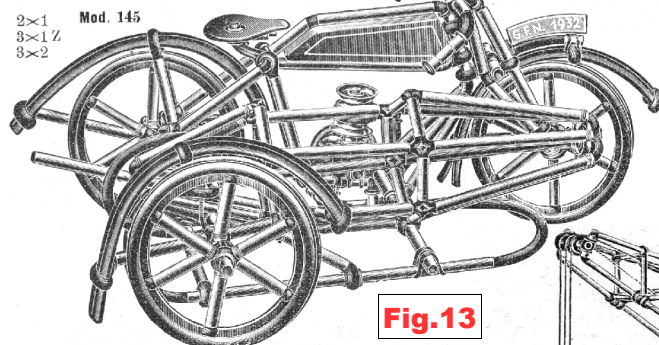


Fig. 13

Motorrad mit Beiwagen / Motor bicycle with side carriage  
Motocyclette avec voiturette de côté / Motocicletta con carrozzetta laterale / Motocicleta con cochecillo al lado

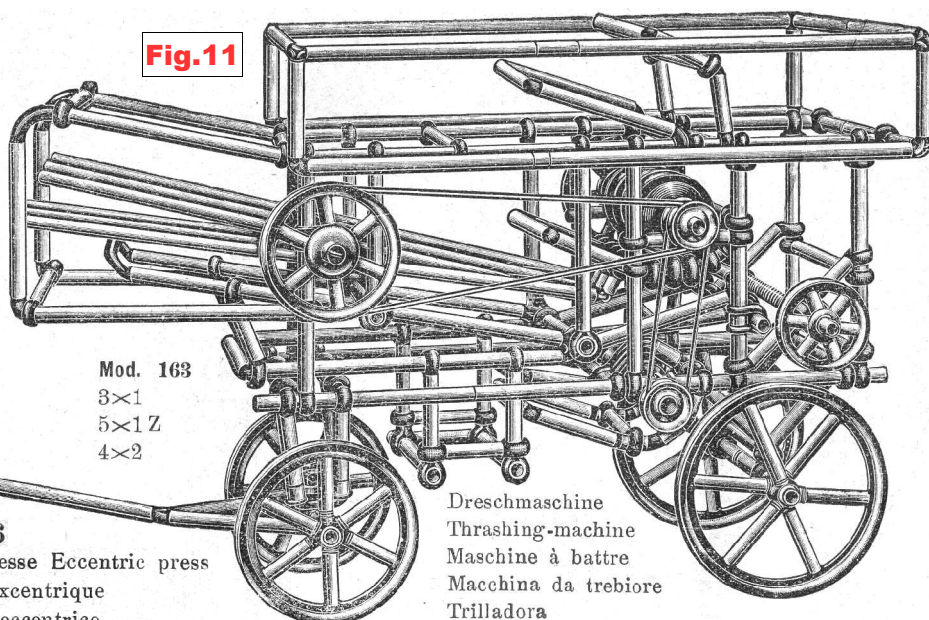


Fig. 11

Mod. 163  
3x1  
5x1 Z  
4x2

Dreschmaschine  
Thrashing-machine  
Machine à battre  
Macchina da trebiore  
Trilladora

ium size model would not inspire undertaking more complex ones, let alone designing new ones. And in any case it's most likely that after 80 years the rubber would have deteriorated.

**The German PATENT** No. 592725, dated 12 Aug. 1931. It covers the same ground as the UK patent (see 21/6180) and though redrawn, the figures are similar except that the Strips in Fig. 1 are shown curved as well as straight. And this patent is in the company name: Gebr. Fleischmann, Metallwarenfabrik, Nürnberg.

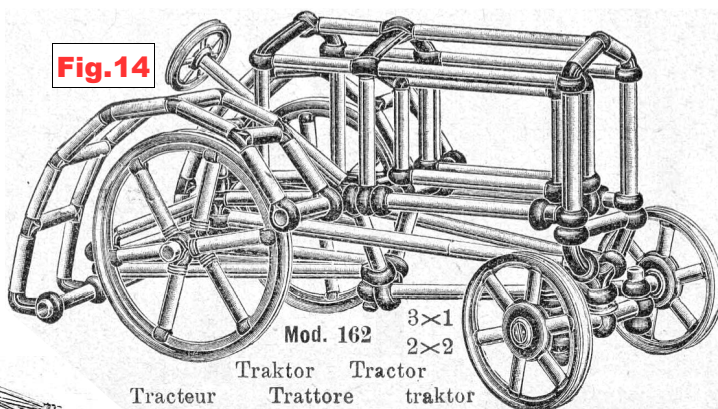


Fig. 14

Mod. 162  
3x1  
2x2  
Tracteur Tractor  
Trattore traktor

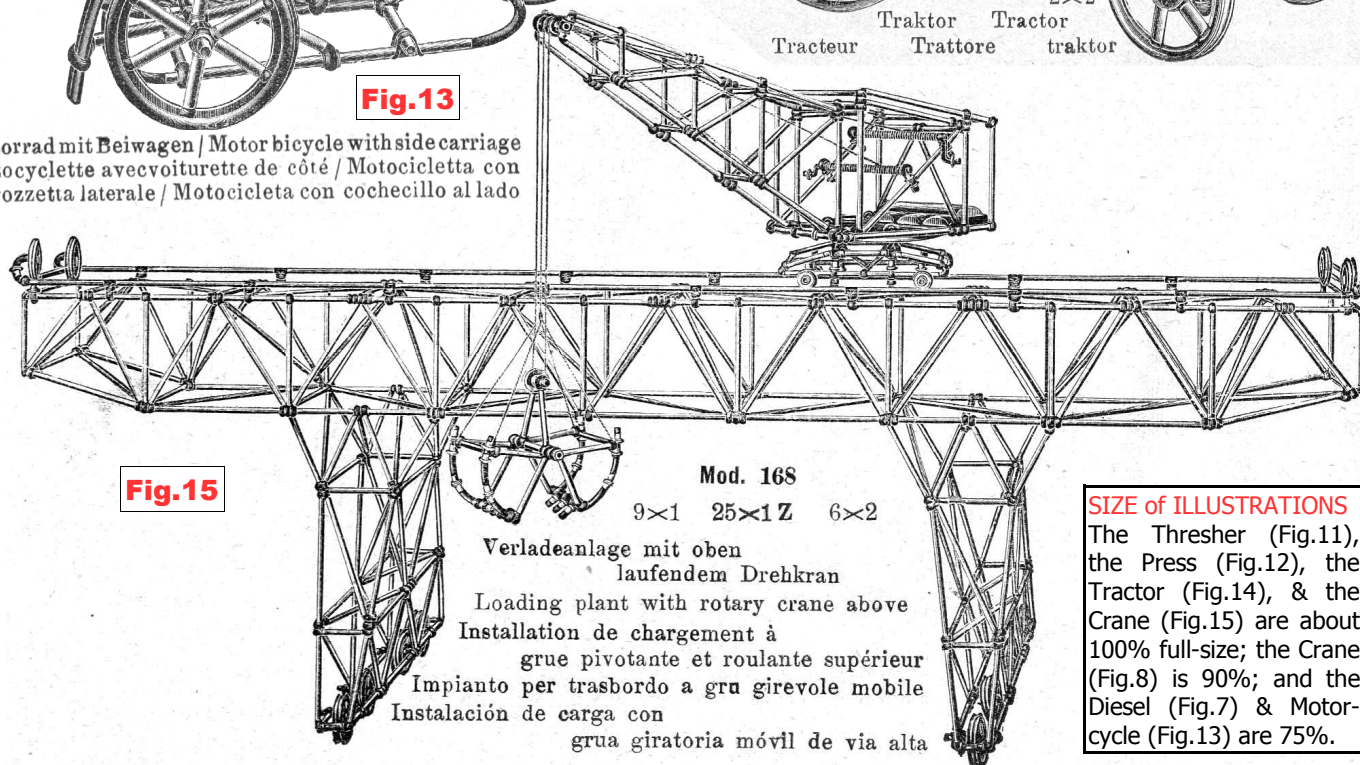


Fig. 15

Mod. 168  
9x1 25x1 Z 6x2  
Verladeanlage mit oben  
laufendem Drehkran  
Loading plant with rotary crane above  
Installation de chargement à  
grue pivotante et roulante supérieur  
Impianto per trasbordo a gru girevole mobile  
Instalación de carga con  
grua giratoria móvil de vía alta

#### SIZE of ILLUSTRATIONS

The Thresher (Fig. 11), the Press (Fig. 12), the Tractor (Fig. 14), & the Crane (Fig. 15) are about 100% full-size; the Crane (Fig. 8) is 90%; and the Diesel (Fig. 7) & Motor-cycle (Fig. 13) are 75%.