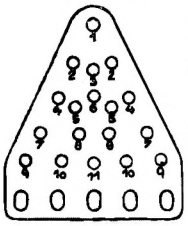
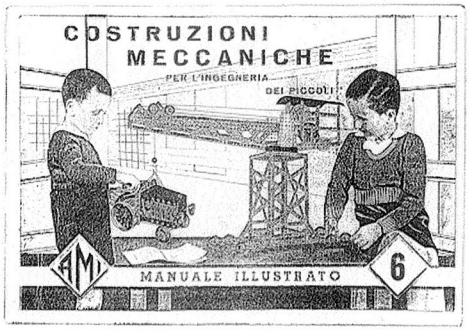
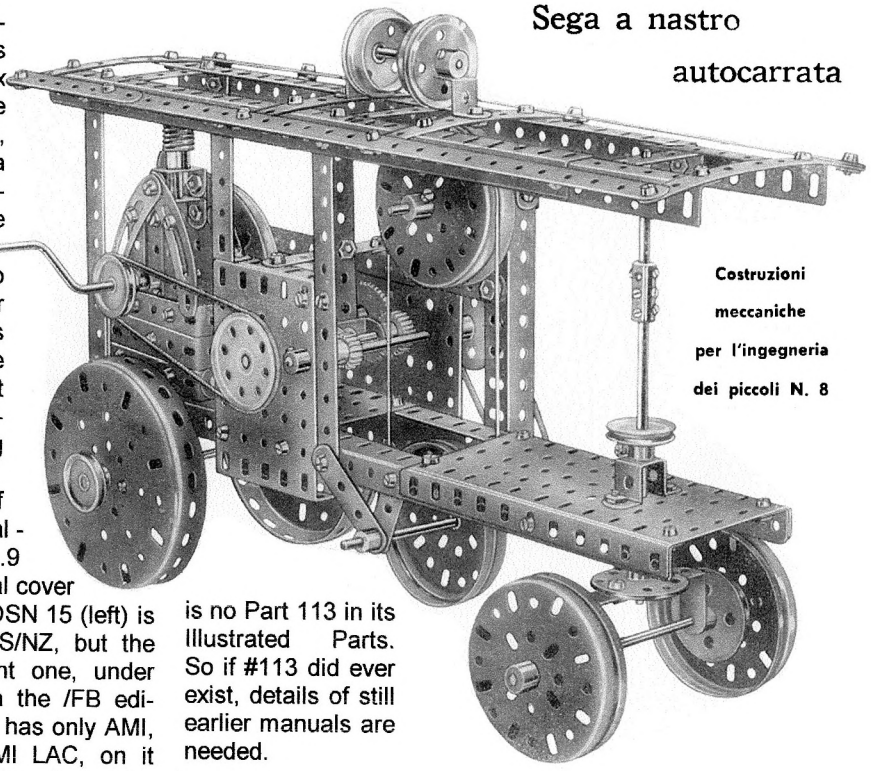
An AMI LAC Question On the No.9 manual described in 15/401, Josep Bernal has pointed out that the Triangular Gearbox Plate, left, is shown on the (unnumbered) p25 as PN 113, but that neither the Plate, nor a #113, is to be found in the Illustrated Parts, or elsewhere in the Manual. The numbers by the holes are used in a Table to show which pairs allow particular combinations of Gears to mesh. So was there ever a Part 113, and also were there originally parts to fill other gaps in the part numbers? Incidentally #113 was the pre-WW2 number of an identical looking MÄRKLIN part.



There was certainly more than one type of manual - the No.9 manual cover from OSN 15 (left) is in MCS/NZ, but the different one, under it is in the /FB edition. It has only AMI, not AMI LAC, on it (note though that inside both have just AMI). The p5 /FB model, a Travelling Band Saw, from Set 6, seems to be the same as a No.8 model (top right) in the OSN 15 edition. (The view in MCS is from the other side and shows a pulley drive from the rear wheel to the gearbox, and from its output shaft to the lower band wheel.) So it's a good bet that the /FB one is the earlier, but Frank tells me that there is no Part 113 in its Illustrated Parts. So if #113 did ever exist, details of still earlier manuals are needed.





A later MINIATUR Outfit Werner Sticht has passed on details of a No.20 Set, near complete and with manual, owned by Jürgen Kahlfeldt. My thanks to both.

The box is black, 258*175*20mm, with a large colour label just like the DEN LILLE INGENIØR manual cover in 7/157, except that the LH panel has fancy scroll work top & bottom, and 'WALTHER'S **Miniatur No. 20**' in between.

The manual is the same as the 1915 one described in 17/469, and the Set Contents are identical to those in it (see MCS), except that the quantity of Nuts in Sets 20/21 is given as 44/67.

Parts. The Strips are .65mm thick and vary in width from 9.4 to 9.6mm. Holes are 3.2mm and the spacing varies from 9.96 to 9.98mm. The Saw Blade & Fan are similar to STABIL parts but smaller in diameter. [The sizes given in OSN 17 are the same as STABIL parts.]

The N&B were missing from the Set but the **thread** on the Screwed Rods has an o.d. of 3.15mm and 40 tpi [so probably ⅛" BSW]. The jaws of the Spanner are 5.8mm wide.

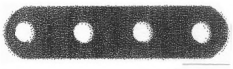
Date. The box label indicates 1919 or later, and the prices in the manual could be either from before 1918 or from December 1923 onwards (with high inflation in between). So it's reasonable to think the Set is from 1924 or later.

Some PFIFFIKUS Parts David Hobson kindly lent me some parts which he found in a mixed lot, and identified from a small photo in *Baukästen*, p218, as very likely to be PFIFFIKUS - a small German system, said to be from the 1930s, maker unknown. The hole pitch is 12.5mm and unusual features are Strips a little narrower than normal, holes a little larger, a small Windmill Sail, a pressed Half Road Wheel, & 2 SAS (Single Angle Strips). Screwed Rods are used as axles.

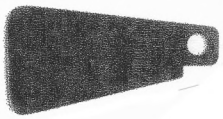
• DATA (in mm) Strip (11-hole): •Hole pitch/dia, 12.5/4.5; •width, 10.9; •thickness, .65; •ends semi-radiused. Boss, Axle Dia, DP (Mod): N/A. Thread, N&B: not known.

The different parts in David's haul are listed below. All holes are round and vary from 4.4 to 4.5mm Ø.

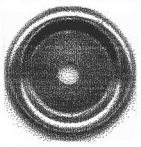
• **Strips**, 2,3,4,5,7,9,11h, mostly 11.0mm wide & .70mm thick, with ends cut well back, sometimes to 2½mm outside the end holes. The 4h is shown below.



• 1*3*1 & 1*5*1 **DAS**; 1*6 & 1*10 **SAS**; and an **A/B**, all made from the appropriate Strips.



• A 3*7h **Perforated Plate** with very small corner radii. A **Windmill Sail** (left), 45mm long o/a & 23mm wide - it is shown on a Windmill in *Bk* (bolted to an 8h Wheel Disc), but in the little Biplane that David made with his parts, a pair bolted together make a good propeller.

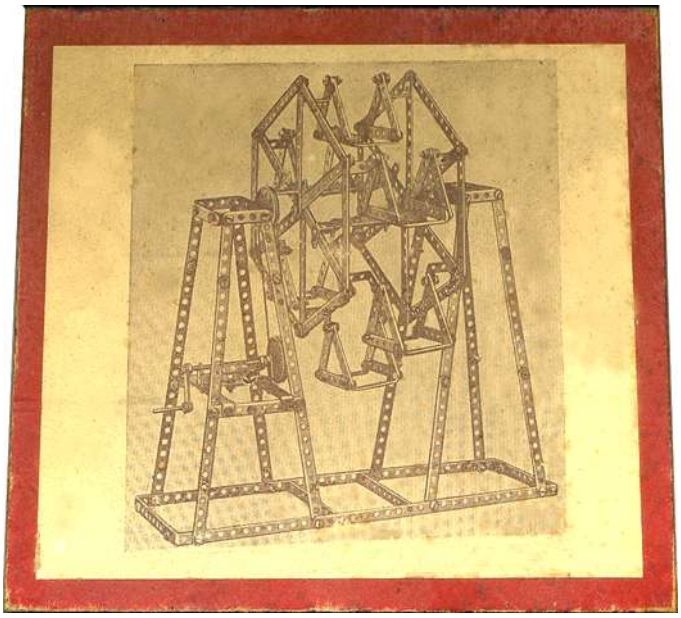


• The **Half Road Wheel** (left) is 28½mm Ø & 3mm deep. The centre hole is 4.3mm, and it is surrounded by a flat circle of 18mm Ø. Two together give a complete 'tyre', and back to back a pulley of sorts.

• The parts are well enough made for what was probably a cheap set, though the holes in some Strips are slightly off centre and the hole pitch not quite correct in some pieces. All are plain steel with no sign of paint or plating, but in *Bk* the Half Wheels have a brass look.

• A 2-ended **Spanner** can be seen in the photo, with hex openings; one end is straight and the other is cranked & angled.

A modern dictionary gives 'artful dodger' & 'sly dog' as meanings of Pfiffikus, but a prewar one prefaces those by 'clever fellow'.



above on the the red lid. The mention of the Big Wheel model being on the inside of the lid in OSN 9 was probably a mistake. In the bottom of each box, along one side, is a light blue box with lid, 15¾*4¾*1¼cm, for some of the parts. Also a Card with the Head, Disc & Scale drawn on it, and folded twice, Z-wise, to run along the bottom and up & over the parts box. The made-up Tram sits in the shallow recess alongside the parts box and it's possible that there were other, similar parts boxes alongside the model, on top of the raised part of the Card. In one Set the N&B were in a light brown envelope, 13¾*7½cm.

The parts Some additional notes follow. Two errors crept into the OSN 9 account: the **hole pitch** is 7.0mm, not 7.5mm (so the 11h Strip is about 3" long), & the **wheels** are Pulleys, not Discs. • The **Strips & Brackets** vary in width from 7.1 to 7.3mm. • The **Pulley**, left, is 27¼mm Ø; 4 are 3½mm wide across the vee & the other 4 are 4¼mm. The discs are riveted through forming two 2.2mm Ø face holes; the other pair are 3mm, large enough to take any of the Bolts in the Sets. • The **Span'driver**, right, at ½-scale, is 85mm long o/a. • Various **N&B**, some M3 and some M2.6 were found, all steel with tapered cheese-headed Bolts and hexagon Nuts. The M2.6 **Bolts** have 4.9mm Ø heads: 47 are 6mm u/h, 63 are 8mm, & 86 are 10mm. The 56 M3 Bolts are 8mm u/h with 5.8mm Ø heads. All the **Nuts**, 220 M2.6 & 72 M3, are pressed and rather poor quality, 4.9-5.2mm A/F, and 1.5-1.9mm thick. The Bolts and some of the Nuts look like bright steel; the other Nuts are a dull darkish grey, like the steel Strip parts. It's not obvious from the quantities found which N&B were from which set, and one can't be sure they were all in the Sets originally. • There was a small hank of thin, brown Cord in one of the sets.

The **Model Sheet** is 254*299mm folded into 4. The front panel is headed KONSTRUKTIONSPIEL, with the Set Contents underneath, and 'N/0875 Made in U.S. Zone - Germany' along the bottom. Also on this side of the sheet are a table of the parts needed for each model, and 2 models, a Crane & a Man with the card Head. On the reverse are 8 models from a Table top left, to the Tram, bottom right (the made-up model). There is a photo of each model and none are named.

A later Set One Ebay lot consists of a mass of parts that look to be a mix of steel & aluminium, 3 flat Cards with the shapes drawn on each, but with the Scale below the Head & Disc, and not over them as on the folded Card in the present Sets. Also a Model Sheet but only the front panel can be seen. It is generally similar to the one above but has 'Made in Germany. Chr. Moser, Nürnberg-W' along the bottom and the Inventory shows a few more parts in the Set including 6 instead of 4 Pulleys, enough therefore for the Tram. The new Contents are, with the old quantities, if different, in brackets: 56,12(10),50x 6,4,11h Strips; 4,8,4(2),20,4x 1*5,4*2,3*3, 2*2,1*3h A/B; 13,14x 1*4*1,2*2*2h DAS; 6(4) Pulleys; 165 (150) Nuts; 150(140) Bolts, assorted; 2 Span'drivers; 1 Cord.

With no reference to the U.S. Zone this set no doubt dates from after 1949, and the improved contents are in line with it being later too. Chr. Moser would presumably have been the printer; nothing is known of KONSTRUKTIONSPIEL's maker.

KONSTRUKTIONSPIEL: S2 **OSN 38/1140**

Snippet: PFIFFIKUS Since the note on the parts of this small German system in 23/659, more information has come from two sources. First, three sets seen on Ebay, one of which is shown right. Each was described as a No.2, and each was in a similar box, about 24*19cm, with card partitions. The words in tiny black letters along the centre of the name on the lid is probably METALLBAUKASTEN. One of the sets had a manual with it (right), said to contain 8 models. Each set contained a 5*11h Flanged Plate with a centre 3*7h cutout, and round holes in its square cornered flanges. Otherwise the few parts that can be seen clearly do not look to differ from those in OSN 23 except that the set shown here contains an 8h Wheel Disc, a part needed for the Windmill on the front of the manual.

Don Redmond kindly sent the other information, details of some parts found in lot of STABIL. They included a 1*8h SAS but otherwise all the OSN 23 parts were present except the Spanner. (The latter was in a photo in Baukästen, and in passing it is said there that the parts date from the 1930s and that the box they are in is not the original.) Don's parts have a hole pitch of 12.4mm rather than 12.5mm and the Strips are 11.0±.1mm wide. The holes in the 3*7h Perforated Plate are severely burred. Also among the parts a 34mm Ø 4h Wheel Disc - about the diameter of the 8h one in the Set above, and a flat Spanner about 95mm long o/a, with a single, angled end whose hexagon jaws are 7.5mm across.

PFIFFIKUS: S1 **OSN 38/1140**

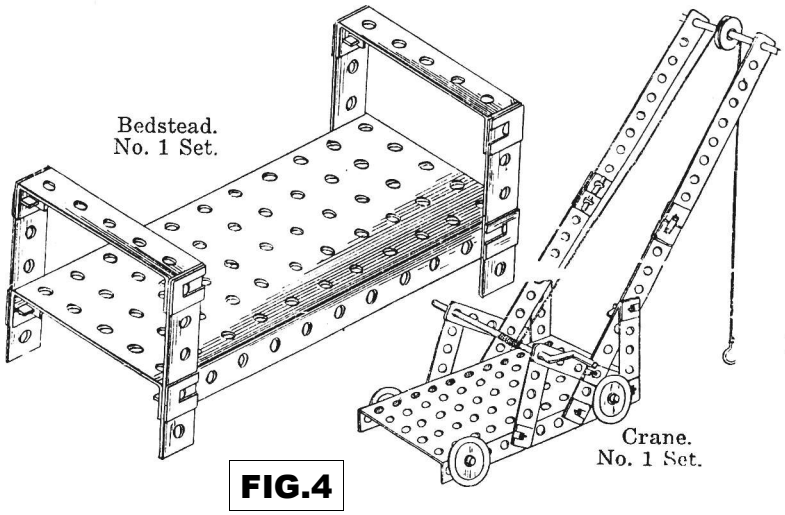
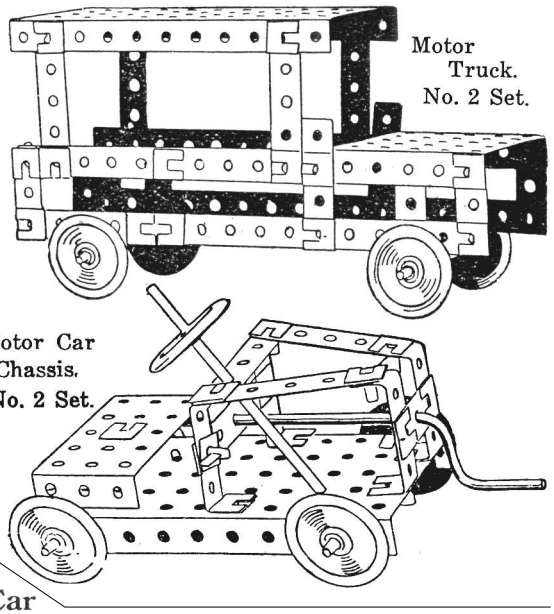


FIG.4



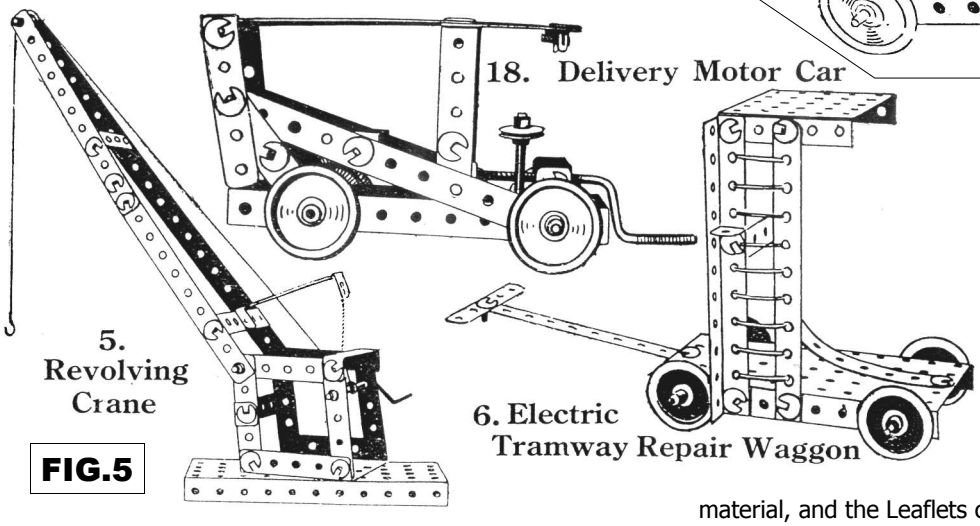


FIG.5

to be pushed in really hard and pliers were sometimes a help – it was then equally hard to remove them. It was also necessary, as stressed in the Instructions, to use the correct number of Washers to ensure the Wedge would grip, and at .012" thick they are thin enough to allow this. On the whole I doubt if the Patent's claim of speed of assembly & disassembly compared with N&B was really justified. The Wedge couldn't be used to hold a Clip in place when it was being used as a to allow two parts to pivot but the tongue is 4.3mm wide and my substitute Axle Stops could be pushed onto it. The movement was a little lumpy and the tubular type of Clip in the patent (see 22/636) would have been better.

HISTORY The 'Sole Agent For Australia & New Zealand' given in the first leaflet was P V Morris, 7 Elizabeth St., Melbourne. But was ENGINEERIT American? Having an agent could well point to a foreign product but certainly doesn't preclude an Australian manufacturer. The case for America: tin plated parts were common there in the early days, as were Motors similar to the ENGINEERIT one, and there is no claim anywhere of Australian manufacture. For Australia: home to the only known ENGINEERIT material, and the Leaflets contain no Americanisms.

Now patents. The lid, but not the Leaflet, has 'Patent Applied For' on it, though it doesn't say where. But if in Australia was it the application which led to the successful 1923 patent by James Perrott (see 22/636)? It covers both the square & round types of Clip and the model shown in the patent (Fig.1 in 22/636) is not dissimilar to the Bedstead in Fig.4 from the first Leaflet. If the Perrott patent was independent of ENGINEERIT it seems unlikely that it would have been granted if ENGINEERIT was on the market at the time. In which case ENGINEERIT must have appeared after 1923 and presumably with Perrott's agreement. And presumably it had disappeared before EZY-BILT was launched in the early 1930s (see 34/1030) using the circular Clip?

Snippets. PFIFFIKUS A few points of interest about this small German, 12.5mm pitch system, since the last note in 38/1140. • The Ebay photos of 3 sets have same lids & partitioned boxes as in OSN 38. • In 2 sets the Flanged Plate has stiffening grooves across each end as below, and the

FIG.1

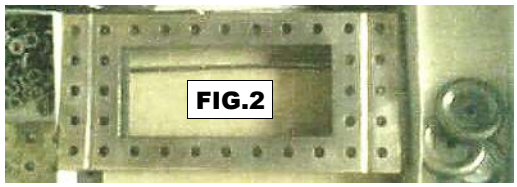


FIG.2

grooves run down the flanges. • Just discernible on the right in the photo left is a Spanner with a narrow neck to its angled head: the type, 9.5cm long, that was in Don Redmond's lot in OSN 38. On the left of the photo is what looks like a flat Screwdriver with a pierced handle but no such part has been seen in other sets. • Other parts seen are a Stabil-style wire Crank Handle, as in the Trip Hammer below; the 1*8h SAS which was also in Don's parts; a 1*2h A/B (or possibly it's 2*2h); 3 & 6cm long Screwed Rods, and possibly a longer one; a wire Hook; and hexagonal Nuts. • The manual is actually a single sheet folded in two with 2 models on each page. The front was shown in OSN 38, and the models on the other pages (very blurry) are: a See-saw and a crank-driven machine of some sort; a Crane and a Side-Tipping Truck; a Swing and the Trip Hammer. None of them are the models on the lid.

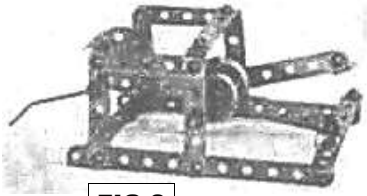


FIG.3