Corrections Under KONSTRUKTOR-MEKHANIK in 21/618, '18/566' in the 2nd line should be '18/499'.

ITEMS FROM LETTERS

1. From Werner Sticht. A complete list of all the **Walther** (of STABIL, etc. fame) **patents & DRGMs**, from 1898 through 1933, that he has compiled. In fact he was able to search to 1943 but there weren't any after 1933. Some of the points of interest: • Walther's first metal system was the **INGENIEUR** sets (see 7/164, 19/550), and a DRGM application (#253288) for the **Bifurcated Clips** that were used to fasten the parts together was made on June 16th 1904. On the same date application was made for the 5 DRGMs quoted in 13/348 but their numbers are 248034 to 248038, and not 249934-38 as given in OSN 13. • The DRGM application, #289896, for the wooden **RECORD** parts, (mentioned in 13/348) was made in July 1906. • DRGM 473572, for the use of **Threaded Rods** as axles or connecting rods in a constructional toy with Strips & A/Gs having equi-spaced holes, was made in June 1911. STABIL, which used such Threaded Rods, with Wheels, etc held on them by Nuts, had been launched some time before that, and they were used in the earlier INGENIEUR, so it is surmised that something must have alerted Walther to the need to protect his use of them. Had he become aware of MECCANO, with its less satisfactory tongued Clip method of fixing Wheels to Rods that was still being used in 1911? • March 1913 saw the application for DRGM 548483, subject a **Flanged Plate** with the centre punched out. This suggests that the transition from Period 1a to 1b (see 19/548) was in 1913.

• The date of **introduction of STABIL** is further confused by a wholesaler's catalogue, believed to be from 1911, (courtesy Tobias Mey, via Thomas Morzinck) for the 'Neu! Ingenieur-Bauspiel STABIL' with metal parts. What was new if STABIL had already been on sale for some years isn't clear - new to the wholesaler perhaps. At any rate 5 sets were advertised, with no set numbers, only the sizes of the boxes. The smallest was cardboard, and the others wood, with the largest measuring 46*29*4½cm. Also listed are 2 sets (Stabil - Spezialspiele) to build Railway Wagons. From the details given it is likely that the range was Sets 49 to 53, plus the Railway Sets 60 & 61 (Railway Sets 59-63, from 1914, were mentioned in 13/348).

• On the date of **MINIATUR** (see 17/468), it was not in a dealers' catalogue printed for the toy fair in the Spring of 1914, but it was very probably introduced before Xmas of that year, under the name STABIL MINIATUR. Thomas Morzinck has seen a box and a manual belonging to Tobias Mey, both with this name on them, and though the contents of the Set are as later, the Manual has fewer models for both Sets 20 & 21, than the © 1915 one. It is supposed that the name was changed because customers thought that, particularly because of its low price, STABIL MINIATUR meant a small STABIL set, and then found that they had bought a different system with parts that were not compatible with STABIL.

A pointer to when MINIATUR was being developed is that the DRGM for the Flanged Sector Plate was applied for on May 14th 1914. This part was not introduced into STABIL proper until 1921.

Probably production of MINIATUR ceased in the 1920s but it may have resumed in the mid-1930s. It was advertised in a 1936 brochure, possibly as a reaction to Märklin's MARBI (see 10/246). No changes were ever made to the models in the 1915 version of the manual.

2. From David Hobson. • A reply from **Trix** to an enquiry last October said that their constructional set programme had ceased but that some parts were still available.

3. Clive Weston wrote that he had obtained a copy of ***Baukästen*** (see 21/601) from www.Amazon.de at a total cost of about £21.

4. Kendrick Bisset wrote that he now has another **TECHNICAL TRAINER** set (see 19/528), and the label on the lid has 'F. A. M.' instead of 'TUCKER TOYS' in the white 'T' (see 10/264) with a small 'CO' underneath instead of 'INC'. And the address on the lower edge of the label is for Farmingdale Aircraftsmen instead of Tucker Toys. The corners & top edges of the FAM box are rounded, but otherwise it is similar in construction to the TUCKER one.

5. From Peter Kessler. Apart from the La Manche Set (see 21/595) **Märklin** have 10 other '**specials**' currently listed. Most are railway items but of possible interest are a 60cm long metal Zeppelin from the 1930s (#11400), and a Fire Engine with Tender (#19035). [The Zep is probably non-constructional; the Fire Engine looks like a long van with a ladder on its roof, and is said to be 'auf Basis des Auto-Baukastens'.] Peter said that delivery of these items was uncertain, and that he hadn't yet been able to order any of the cheap parts mentioned in 21/595.

6. An interesting **MECCANO X** item from Tony Press, copies of the front & back of a Liverpool X2 Model Leaflet, 13/1037/5, with the text in both English & French. On the front the top panel is the same as the LIF one in 16/446, and the text (English in the LH column, French in the right) is the same as that of a 1932 'X' one. The back shows 6 'Super Models' as on the 1932 'X' Leaflet except that the 2 additional centre models of the latter are omitted to make room for the Lists of 'X' parts in the 2 languages. [Despite Tony sending it from Australia, I suppose this Leaflet might have been for the Canadian market.]

7. Ron Michalowski wrote that the 6 page **ERECTOR Booklet** described in 21/593, did bear the reference M 973.

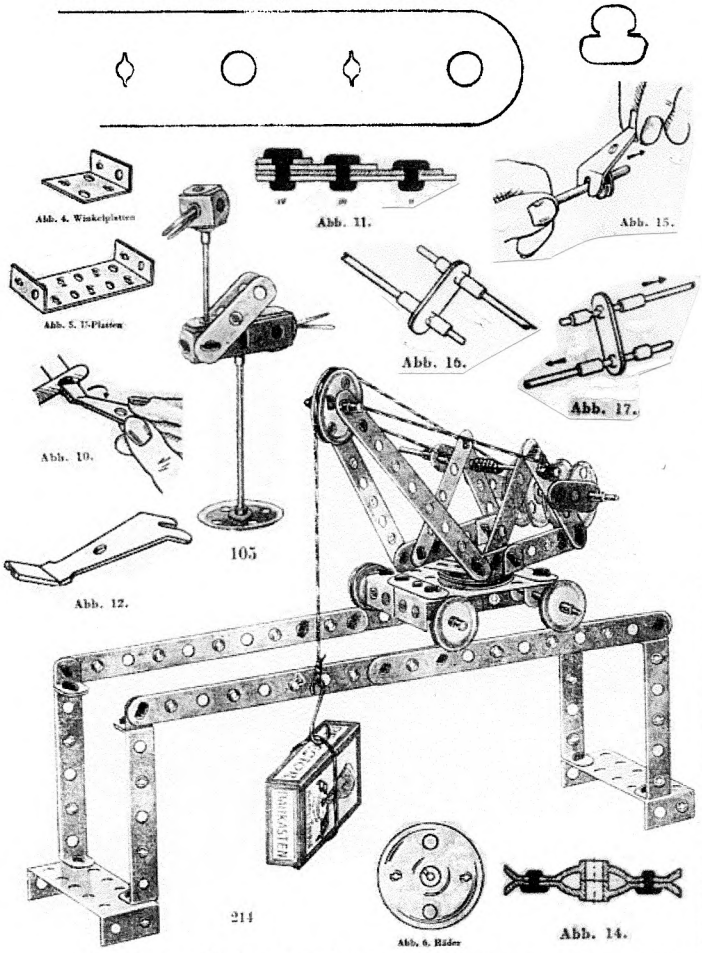
8. Jacques Pitrat sent a picture from ebay of a 'new' system, **PERFECTOR**. The models above the name on the manual cover (right) are a Loco, a Lorry, a Marine Engine, and a Railway Signal, but nothing can be seen of the individual parts. The box has a similar label on the lid. It was described as being German but *Baukästen* says that it was Austrian, made in Vienna by Kappl & Trubrig in 1948. How long it lasted isn't stated but the firm stopped making toys in the 1950s. No other details are given. [Since the above was written Kendrick Bisset has sent more details which will be included in OSN 22.]

9. From Don Redmond. • A brass Flanged & Grooved Wheel with a tread almost conical, and a very smooth curve from flange to tread, is believed to be early **AMERICAN MODEL BUILDER**. Can anyone confirm?

• After removing the nickel MECCANO & AMB parts from a **STRUCTOMODE** No.3 box, the remainder are believed to be original, and include the following. ½ & ¾" tinplate Pulleys without Boss, the ¾" with 4 peened over tabs in the centre hole, the ½" with 3. Strips erratic in their punching and in the form of the ends, with punching burrs on almost every hole. One of 4 Windmill Sail with the holes too close to the outer end. Double Brackets of heavy strip and noticeable higher than MECCANO. A bright nickel 5*11h Flanged Plate, out of square in both sheet & hole punching, with the flange holes on one side distinctly above the midline of the flange, (as in the MCS illustration). 2 bright, and one dull nickel Flanged Sector Plates, with 'slanted' or irregularly punched flange holes. However there is a possibility that the bright Flanged Plates are from a different set/system. These parts are of a much poorer standard than some other parts known to be STRUCTOMODE.

PERFECTOR This small Austrian system was mentioned in 22/650, and below an account of it, mainly from a copy of the manual. Kendrick Bisset sent it and he obtained it from Charles Smith, who owns a set - my thanks to both.

PERFECTOR consists of 40 different parts with a 'nickel plate type finish', and its unusual feature is that they are joined by special, flat Keys. A tracing around one of these is shown below, together with a tracing of part of a Strip, both full size. To join 2 parts a Key passes through a large round hole in one, through a slot in the other, and is then turned through 90°, using a special Tool (Abb.12 below), to lock it (Abb.10). 3 depths of Key are provided to join 2, 3 or 4 parts (Abb.11). The holes are at 15mm pitch - the large one looks to be about 5mm Ø; the small one with slot about 2 to 3mm. Generally every other hole is slotted.



Axles run in the small holes, and the Pulleys can be locked to them using a Driving Dog on one side and an Axle Stop on the other. These are a push fit on the Axles and the other end of the Tool can be used to move them along the Axle (Abb.15). The Dog engages a recess in the Pulley, and also in the Crank Strips. The latter allow a crank handle to be constructed (Abb.16,17). It might be thought that the Dog would be sized to engage with any of the slotted holes, and this may be the case, but if so it isn't clear why special Crank Strips are needed - as drawn these seem to have small bosses with slots for the Dog.

The **parts** are: • 2,3,5,7,9,11h Strips, with 2 versions of all but the 2h, the second with the round & slotted holes interchanged. • A 2*1h A/B; 2 versions each of: a Double Bracket, and 5 & 7h wide DAS. • The 2 Flanged Plates (Abb.4,5 above). • Pulleys which scale at 25 & 38mm Ø; the larger one (Abb.6) can be seen to be made from 2 Pulley Discs (Abb.14). • 2h long Crank Strips, one with 1, and the other with both holes slotted. • Axles 30,48,60,78,108, 150mm long. • The Axle Stop and Dog already mentioned, and a Coupling which is probably a push fit too. • Washers whose use isn't described but might be useful as packing if a Key were to be rather loose. • The Tool, and another called Radabzieher, which isn't illustrated but from its name may be to move the Pulleys on the Axles, though the Tool seems able to do that. • The 3 sizes of Clips, and a Bifurcated Paper Clip, used as decoration, and sometimes to join parts.

The **manual** is ©1947 and has models for Sets No.1 & 2. The No.2 has 44 strip parts, 6 Plates, and 65 Clips; the No.1 has all the different parts, generally in half the quantities of the No.2. There was a linking set 1a. The cover (see OSN 22) is grey-blue & blue-black on white; the label of the ebay set is similar but with the centre 'P' & the background to 'PERFECTOR' in red.

SUMMARY OF MANUAL •Name: PERFECTOR BAUKASTEN •Details of maker: Kappl & Trubrig, Wien 1. •Dates &/or Ref Nos: © 1947. •Page size: 210*142mm deep. •No. of pages: 28 unnumbered inc covers. •Language: German. •Printing: Blue/black on white cover (see 22/650); ½-tones of models. •Page Nos. of Parts List/Set Contents (no PNs): 27. •Sets covered: 1,2. •No. of models for each set: 60,31. •Name, Model No., Page No. of first & last model of each set: 1: Ente,101,5; Teigknetmaschine,160,22. 2: Windmotor,201,23; Koller+gang,231,18. •Other notes: •Details from photocopy with pages ordered as received (which seems correct but results in many models being out of sequence). •Model names are on pp25-26.

The large selection of **models** starts with some attractive birds, including the one left, followed by a wide range of fairly ordinary models, including many machine tools. Some lack the triangulation that would be needed to ensure adequate rigidity. The largest Crane is shown opposite. Cord drives are used in many models and some of the vehicles have cord operated centre pivot steering. None of the 3 larger models on the manual cover (at the top), a Lorry, Loco & Tender, and a Marine Engine, are in the manual.

No mention is made of a patent. On the back cover of the manual is the promise of add-on sets with simple Gears, A/Gs, Junction Plates (Knotenbleche), Large Wheels, and other 'versatile innovations'.

ARMATURE Jeannot Buteux/Constructorama kindly sent a copy of a Leaflet, all that is known of this French system. It is thought to date from around 1930, and may have been made at Lyon. The Leaflet has illustrations of 3 sets, Nos.1,2 & 3, together with a list of extra parts, & 18 models. No indication is given as to which of the models can be made with which sets. All the large, and a selection of the small models, are shown on the front cover, full-size. The main parts are Rods of 6 different lengths, from 25 to 150mm, & cubical Joints. It has been suggested that the parts may be wooden and this seems likely, though it does raise one or two questions.

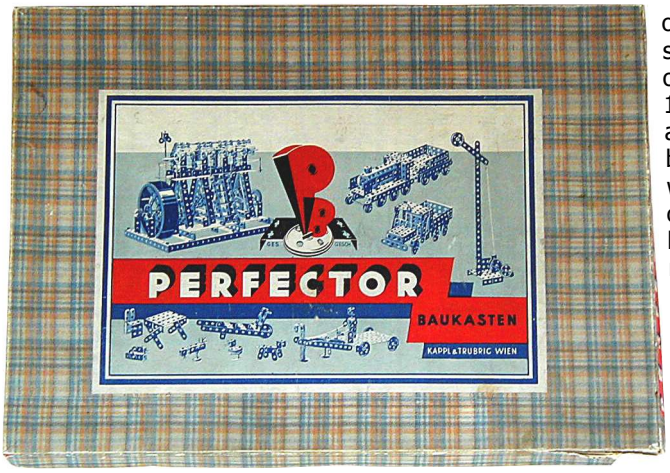
One is about the ends of the Rods. At a glance they appear to be threaded, but by scaling, the Rod diameter is very roughly 4mm and this doesn't seem big enough to allow a wooden part to be threaded successfully. And in any case I don't see how the Cubes, for example, could be assembled using threaded Rods.

Perhaps the 'threading' is merely fine grooving to allow a more effective push fit in the Joints. A patent is claimed on the Leaflet but with no number given - no doubt it would tell all.

Another question is price. If the Rods just push into the Joints, ARMATURE is a very simple system, but maybe not a cheap one - the 3 Sets ranged from 55 to 135 Fr. and if that was around 1930, by way of comparison, a No.0 MECCANO cost 34 Fr. in 1931, and a No.3, 185 Fr. So was there something special about ARMATURE? Alternatively, I think their was some inflation in France during the 1930s, and perhaps the Leaflet dates from later than 1930.

The Price List of spare parts has the Tiges (Rods) in 6 lengths, and 'Dés : 0 50 pièce'. I don't know the word 'dés' but I suppose it's the Joint, an abbreviation perhaps. No mention is made of the Propeller, and the 2 types (at least) of Wheel &/or Pulley that can be seen in the No.3 Set, and in a few of the models.

PERFECTOR A little on this unusual Austrian system, mainly from a manual, was given in 23/855. This account is based on a No.2 set, largely complete, but with no manual, and a few Ebay photos. As explained in OSN 23 the parts have alternate large & small holes with the latter extended each side by a narrow slot; they are fixed together with flat Keys which go through the large hole, then the slot, & are turned 90° to hold the parts together.



The SET Its box, 35¼*25½*2½cm, has a chequered pattern as on the lid right. The label is 25*17¼cm and 'PERFECTOR No.2' is printed in white on a red label on each of the lid's end aprons. Inside there is one partition and the small parts are in 2 white card boxes 6¾*4½*2cm, printed in red & black with the logo & maker's name, as on the lid. In another No.2 seen on Ebay, the parts are clipped to, or push into, a green backing card.

The **PARTS** have names followed, where appropriate, by the total number of holes, and after a slash, by the number of slotted holes. For example, Langband (Strip) 9/4.

The OSN 23 manual gives the contents of the Sets 1 & 2 as follows, with the No.1 in square brackets: **Strips**: 4,3,3,2,2,2, 2,2,2,2,2 [2,2,2,1,1,1,1,1,1,1,1] of 2/1,3/1,3/2,5/2,5/3,7/3, 7/4,9/4,9/5,11/5,11/6; **Crank Strips**: 2,2 [1,1] of 2/1,2/2 (these parts have bosses instead of slotted holes, so the 2/1 has one large hole & 1 boss, & the 2/2, 2 bosses); **A/B**: 6 [3] of 2/1 (the drawing in the Manual shows an A/B 3/1, a part not in the Set nor in the Manual models); **D/B**: 2,2 [1,1] of 3/1,3/2; **DAS**: 2,2,2,2 [1,1,1,1] of 5/2,5/3,7/3,7/4; **2*2h Single Flanged Plate**: 2 (one of each hand) [1] of 6/3; **5*2h Flanged Plate**: 4 [2] of 14/7; **Pulley**: 4 [2] of 0/0 (the centre hole isn't counted); **Pulley Disc**: 8 [4] of 4/2; **Axles**: 2,2,2,1,2,2 [1,1,1,1,1,1] of 30,48,60,78,108,150mm; **Keys**: 50,10,5 [25,5,3] of Type II,III,IV; 2 [1] **Couplings**; 10 [6] **Axle Stops**, 10 [6] **Driving Dogs**; 10 [6] **Washers**; 1 [1] **Tool**; 1 [1] **Radabzieher** (see OSN 23); 23 [19] **Bifurcated Clips**, used to hold the parts in the box & in some models.

Now a few notes on the parts; those shown below are asterisked. **Holes** are 5.4 & 3.2mm Ø at 15.0mm pitch. **Axles** are 3.07mm Ø. **Bosses**, are rolled tubes riveted down with 2mm, 5.0mm o.d., protruding on one side, and a rectangular notch, 2mm wide & 1mm deep, cut out of its wall for the Driving Dog. The bore is 3.2mm Ø. **Strip & Plate parts** (***:** 3h Strip, A/B, Single Flanged Plate) have 3.2mm holes dimpled slightly so that the outside diameter of the dimple is about the same as the larger hole, and can engage with it to locate 2 parts relative to one another when being clipped together. Strips are 14.3mm wide. **Keys*** II, III, & IV, below, (to join

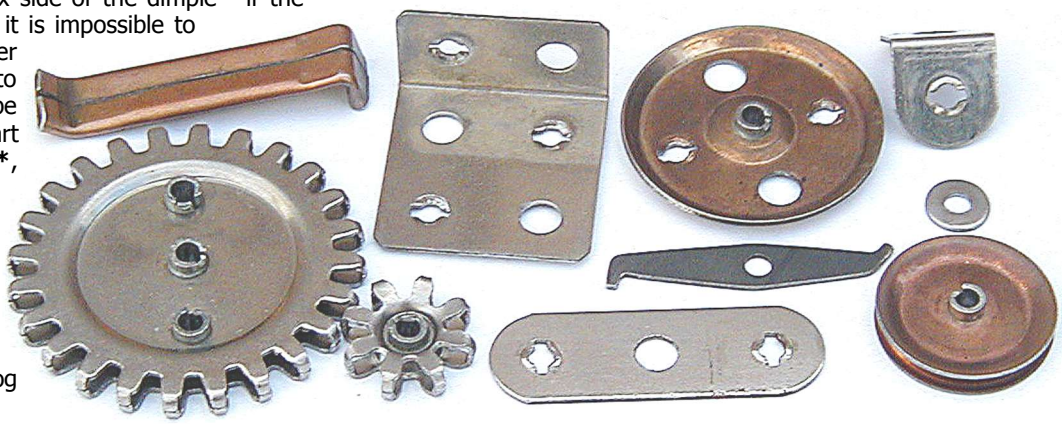
2,3,4 parts) are made of 1mm thick blued steel and are 7.7mm wide. They must enter the convex side of the dimple - if the Clip is put in from the other side it is impossible to turn it. Clips III/IV have a shoulder (barely perceptible for Clip III) to locate the first 1/2 parts to be joined - then the dimple locates part 2/3 as before. The **Pulley***, 22½mm Ø, and **Pulley Disc***, 36mm Ø, are copper plated. The ring of 4 holes in the latter are at 10.75mm pitch. The **Coupling***, (to the left of the Keys, also coppered, is a rolled tube, 4.4mm o.d & 8.3mm long. It is a tight push fit on the Axles. The tiny dog of the **Driving Dog*** (two are shown to the right of the Keys, one on an Axle) is about 1.2mm wide & 1mm deep; it is at one end of what looks like a blued spring clip, 4mm wide, with short wings parallel to one another. The part has to be pushed onto an Axle - its metal is too thick to allow it to be sprung on. The **Axle Stop** has not been seen but in the manual looks like a short version of the Coupling. The **Washer*** is 8.7mm o.d. The **Tool** shown in OSN 23 was not in the Set; instead the flattened coppered tube* with cranked ends to turn the Keys, and the flat part*, that looks as if it might be from a clock's escapement serves to push parts along Axles. Both work reasonably well but they may of course be 'DIY' parts. **Finish**: except where stated all parts are nicely nickeled.

Over & above the OSN 23 manual inventory, 2 extra Brackets and a pair of **Gears*** were found in the Set. The latter are Mod.1.8 and are made from 2 formed toothed discs riveted together in the manner of the 1926 STABIL parts. They are 18.3 & 47.5mm o.d., with 8 & 24 teeth, and all the holes are fitted with 'notched' bushes. The pair run together quite well at 2h spacing, and just about at right angles. 3m of very thin, coarse brown **String** was also found in the Set.

OTHER SETS 2 No.1 sets seen on Ebay have boxes about 25*18cm without a partition; their lid labels are as on the No.2 and nearly cover the lids. One long lid apron visible is red and has 'PERFECTOR No.1' on it in white. A No.1a has also been seen and its box lid looks the same as the No.1 except that it has 'PERFECTOR No.1a' on its red lid apron. The No.2 with the green backing card already mentioned looks otherwise the same as the present No.2. **Manuals** are shown with several of the sets and their front covers are all like the lid label (see 22/650) but printed in shades of blue/grey.

The Gears & extra Brackets in the Set might mean that the No.2's content was upgraded at some point or perhaps the add-on set with Gears, promised in the OSN 23 manual, did become a reality, and (some of) its parts found there way into the Set.

REMARKS By normal standards the parts are accurately made but tiny variations in the metal thickness & the contour of the dimple affect the grip of the Clips and therefore how well the parts are held together. Some half of the Clips could be turned reasonably easily with the Tool and held parts tightly, though movement of them by hand was possible. Otherwise, at one extreme the Keys could be turned by hand and the parts would turn under their own weight, and at the other, Keys could only be turned using pliers and the parts were quite hard to move. The other problem in making models was to use the parts to advantage without ending up unable to join them because pairs of large or slotted holes coincided. 2h Strips with 2 large holes or 2 slotted holes would have been a great help in this respect.



It is shown in Fig.3 (Biegsame Welle) and may be the MECCANO type, perhaps about 6cm long. • **Bolts**: M4 {50}; M4 x 12mm {3}; M3, for the bosses {15}. For reasons unknown two types are shown in Fig.3. • **Nut** M4 {70}. • **Spanner**, see Fig.3 but the actual part is longer has a cranked ring opening at the other end. In one Ebay set the tray has a dedicated recess for it between the Gears and the Motor. • **Screw-driver**, wooden handled.

FIG.7

The MANUAL has 20 pages, 21*15cm, and the cover is shown left. Its PR is Sb 52/66 V 11 28 559. The same cover can be seen in all the Ebay sets including those with the earlier lid. Apart from the off/on/reverse Switch in Fig.4, the models seen are simple mechanisms often needing a few standard parts which are not in the Set. Alongside each model is a small stylised sketch of an industrial application with a short account on the technology on the facing page. Figs.5 & 6 are examples of the models. The original illustrations of the Switch in Fig.4 have been rearranged.

SONNEBERGER: S4 OSN 43/1306

<u>Snippets. A PERFECTOR No.3 OUTFIT</u> Since the notes in 38/1163 a No.3 set, not previously known, has been seen on Ebay. It isn't 'organised' but it contains some parts not seen before. The Ebay photos don't actually show the set's number but one of them is a manual page with a model (right) made from 'Baukasten 3'. Also below, a few points of interest from recent Ebay photos.

The NEW PARTS These are mostly those which were promised as additions to the system on the rear cover of the manual described in 23/855. They comprise the Gears already covered in OSN 38 and: • A **Pulley Disc** (Fig.2), nickelled, which scales at 68mm Ø. • A **Strip** of 15h, and probably a longer one of around 20h. • A **Perforated Plate** 2*7h, and a 7h long **A/G**. Both these would be made from the blank used for the <u>2</u>*5h Flanged Plate. • An **Axle** about 20cm long. • Possibly the **Triangular part**, two of which can be seen in the scrap view of the rear axle in Fig.1. • The **Tool** in Fig.2 which looks to be a short length of Strip with a centre hole and a notch in each of its rounded ends. One end is angled. It is used to move parts along Axles and was the second Tool mentioned in the OSN 23 manual, not the black one illustrated in OSN 38. • On the **OSN 38 Tool**, one manual page shown for the Ebay Set describes how it is used to open the Driving Dog to allow it to be pushed onto or along an Axle. The nib at one end is slid between the Dog's wings and turned through 90° to spread them. Such a tool wasn't found necessary when the Dog was first tried (before OSN 38) with an Axle, but it has now been found that by chance the Axle used then was one of two with a diameter of only 2.99mm, and the Tool is definitely needed with normal 3.07mm Ø Axles. Also opening the part to put it on an Axle was almost impossible unless it was held with pliers because otherwise the rather large force needed to turn the Tool was so great that the part slipped round in the fingers. It was noted that although a whole page in the manual is devoted to using this Tool it doesn't show the Dog being opened prior to putting it on an Axle. Really the Dog's springiness is unnecessarily strong. • Also from said manual page it is clear that at that time the **Axle Stop** was just the Driving Dog turned round so that its square end faced the appropriate way. It may be though that earlier it was a separate part, perhaps similar to a shorter version of the Coupling.

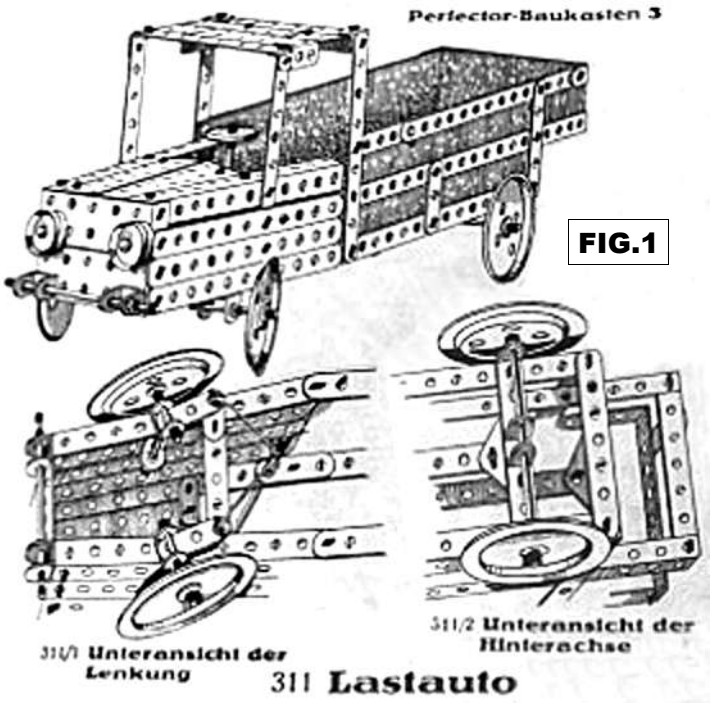


FIG.1

The SET is in a 2 layer, 5cm deep, brown box with an irregular pattern of dark brown streaks on it. It has the same plan size and lid label as the No.2. The base has the same partition too and the tray has two lengthways partitions giving 3 bays of near equal width. The parts sit on blue cards in these bays and the small parts are in 3 of the small parts boxes. The set seen has many more parts than the No.2 including 8 Flanged Plates, 4 of the new large Pulley Discs, and 2 each of the Gears (all copper coloured, as in Fig.2). Among the jumble of other parts two each of all three Tools can be seen and so the box probably contains parts from more than one set. Supporting this, there are nickel & copper Pulleys & 36mm Pulley Discs, whereas in all the other 7 sets (Nos.1, 1a, & 2) seen on Ebay all of each of the circular parts in them have one finish or the other (in passing the Pulleys in one No.1 are brass coloured). Going back to the Set, in one corner a number of bright RH Bolts & hex Nuts can be seen – they look about the right size to fit the small holes but may of course be foreigners.

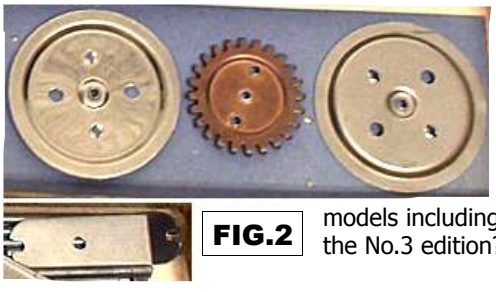


FIG.2

The MANUALS All that is known of the No.3 manual is the model in Fig.1 and the page devoted to using the Tool to open the Driving Dog. The model has cord operated 'proper' steering and the wheels are the new Pulley Discs, used singly.

It is also worth mentioning that although the OSN 23 edition is the commonest seen it is now clear that it was made up from an earlier 20 page manual with 8 pages of No.2 models added in the middle. That explains the odd model numbering in OSN 23 and without the 8 pages the models are 101-160 as before, followed by only 201-207 for Set 2.

Was there ever a manual with No.2 models including the Gears? Or were they the included in the No.3 edition?

PERFECTOR: S2 OSN 43/1306