

## ITEMS FROM LETTERS

1. Numerous points of interest from Jeannot Buteux. • A Swedish set called **LEKSAKSSAMLARMARKNAD** that he saw at a Toy Fair in Helsingborg, Sweden.

- An unknown **aluminium system** with an unusual pattern of Braced Girders, but unfortunately too expensive to buy.
- A plastic set called **TEX** but also, according to one source, a metal set with the same name.

• An early 1916 version of the French **CONSTRUCTOR** system with parts similar to those in MCS but black, and up to twice the size.

• **DELOUTAX**, another translation of the Japanese name for DELTAX/DERUTAXE, see 11/288.

• Another recently discovered Scandinavian system, **DVS INGENIØR**.

• A manual for Danish **TEKNO** dated 1931, which is several years before previously known dates. [TEKNO has TRIX-style parts but a much larger range including more gears and circular parts. The Manual's date is only just after the original German Patent of September 1930 and it would be of interest to know the range of parts in the 1931 Manual.]

• News of a new Dutch set called **MECHATRONICA**. It seems to be intended for industrial use and is composed of a selection of TEMSI red and green parts, including the Temsi version of the 6-speed Richard motor, plus special parts, probably mostly electr(on?)ic. Shown in the brochure is an automatic beer pump which fills a glass placed on a stand in the machine. [The ultimate exhibition model?] The Set costs f 295 (plus tax) and the address of the manufacturer is BTC-Metaal, Postbus 2600, 3430 Nieuwegein, Fax 03402-53188. [I understand that this Outfit has been on sale for 2 or 3 years but is no longer available.]

• **Temsi** (11/292) has licensed production to various firms including **ESCHO-PLAST**.

• On **A.W.S.** (11/294), it appeared in about 1947 and one set known was marked by its purchaser as being bought at Baden-Baden in Sept 1952. [The reason I think the Manual in OSN 11 was from the 1930s is that the highest prize mentioned in it was parts to the value of RM5 - a sum that would have bought a MÄRKLIN No.0 set, say, in the 30s, but very little, I suppose, postwar.]

• Other colours for some **ÉCÉPÉ** and **MÉCANIC** parts (12/314) were tried, green for example and grey Wheels. The brackets around the Sets E and D bis mean that they were not available until towards the end of the ÉCÉPÉ period.

• On **MECHANIKUS** (12/321), a HELLER-MÉCANICUS set was bought [new?] in Belgium in about 1980 and enquiries made it clear that it was not connected with the French toy firm Heller. A town Schmalkalden was mentioned several times in the Manual and it turned out that it was in what was East Germany.

• **BURGSTÄDTER** (12/324) has also been sold under the names **PLASTICART** and **PLASTIKART**.

• A bridge made from the **LILIENTHAL** parts (11/295) is on display at the Deutsches Museum in Munich.

• **TUBA** was also made in Berlin and it appears to be the same as the UK version shown in MCS. The Plates were available in gold, yellow, green, red, and blue, and were also sold as special kits.

• Two different versions are known of **FIX**, **HOHA**, **GLOBUS** and **IMPERATOR**.

• On **METEOR** (12/302), its period was from the 1930s to at least the 1950s, and a nickel finish was used before painted parts were introduced. Parts from a 1950s set were brass plated.

• On **MIGNON** (10/262), one Angle Girder has been found which is made of steel, nickel plated.

• There were actually 10 'Groupes' in **MULTIMOTEUR** (12/304), the 10th being 'Traction Électrique'. Each Groupe is composed of several sets with a total number of between 70 and 100. From Groupe P (Prospection), sets P6, P8, P11, P12, and P13 are known but there were others, though not all were necessarily on sale at the same time. There was only one manual with the P13. Other examples are the '1<sup>er</sup> Cycle' with 25 sets from C10 to C34, and 'Mécanique' from M80 to M99. Members of Constructorama possess many sets, some 20 manuals, and in particular the 6th edition (undated) of the 'documentation général'.

• **COZZONE** (12/313) was mentioned in a Dutch book, and the date given for a set shown in it was 1952.

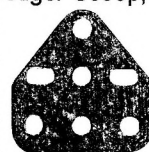
• A **Märklin** catalogue of display models for dealers, some of which are 3 or 4m long.

• And a couple more new names, **MAKKO** and a German system called **FERROX**.

2. From Richard Symonds. • The ad (below) showing a photo of the box lid (or manual cover) of a second-hand **GILBERT RIDE-IT ERECTOR** set. That's a new name to me. The main illustration is of a fairly modern looking boy in the driving seat of a Jeep type vehicle. The only printing on it that I can read is 'First Life Size Erector' and 'Build ..... any of 5 different vehicles you actually ride and steer'. Apart from the Jeep, the 4 other vehicles are probably shown in the white circles, but only one, a 3-Wheel Scooter, can be clearly seen.



• A photo of some yellow and green parts that were all in one lot from a Toy Fair. Some are **THE ENGINEER**, see 12/328, and others seem compatible, including a 47.5mm dia Pulley with no holes in its face, a small Dredger Scoop, and a Flat Trunnion with 7 holes, 2 of them elongated (opposite). Some of the other parts might be for a road grader or snow plough, and are painted the same green and have the same hole size. Finally a canvas belt, 2" wide and 36" long with 10 nickeled Scoops, 1" by 2" wide, clipped to it, and some wooden rollers, 1" dia x 2 1/8" long, with Axles, 4"x3/16" dia through them.



• A copy of an American fortnightly advertising paper called **Toy Shop**. Over 200 pages full of small ads but only 6 classified for OS, including 3 wanted and 2 for current spares, and I didn't spot any OS in a quick look at the dealers' lists. Full details on request.

3. David Hobson sent one or two items on **Gilbert** in the UK. The 1921 GPO London Trades Directory lists The A. C. Gilbert Co. as a manufacturer of Gilbert toys, and scientific and educational toys, at 125 High Holborn, WC1. In a local South London paper (The Blackheath Guide and District Advertiser), Gilbert toys and ERECTOR were prominent for the first time in the 1921 pre-Xmas ads. They included: • Dubois of Lewisham who advertised various sets from 7/6, and the No.6 'includes a powerful motor which will operate any ERECTOR model'; also 'The New Wheel Toy' which made 12 models, 32/6 [see 8/198]. • John H. Bailey of Blackheath had, as well as the full range of MECCANO and PRIMUS outfits, **Gilbert sets**, including the Hydraulic and Pressure Set, the Light Set, the Gilbert Air-Kraft, Mysto Magic, etc. Mr. Bailey also announced, 'I have procured at low price a number of the Gilbert Machine Guns (B654). These I am offering at the absurdly low price of 5/11 each. These Machine Guns have a steel barrel and fire a wooden

continued to be made until at least 1966. The hole pitch was 12.0mm and the Axles and N&B were 3mm Ø. All parts were nickel plated. As well as the sets mentioned in OSN 8, there were packs of parts Z1-Z14 available. In a photo of a 1955 F Outfit the only part that isn't in the MCS Extra Sheets is a Circular Plate of 45 or 50mm Ø (slightly larger than B31) with only a centre hole and 4 others on a pcd of 36mm (probably). To give an idea of size, the Pulley which takes the Tractor Tyre scales at 75-80mm diameter.

**STRUCTATOR** From EZ. This system was made by Bing between 1913 and c1917. Then, if I've understood correctly, from 1919 to 1921 it was produced by 'H.Huck, Inh. Adolf Huck' of Nürnberg as '**TECHNIKO/TECHNICO**'. A firm called J.Kleiner of Houndsditch advertised STRUCTATOR in G&T from May 1922 until April 1924, but I suppose it's possible that they were selling old stock. As shown in MCS, the original sets were advertised here in December 1913.

The German patent was Nr.282410 of 14 January 1913. The grooved Baseboards were wooden; the Plates (see 6/115) and some of the small parts were aluminium.

**TECHNIK** Another small set from the WW2-early 1950s period. The parts were made of steel and bare aluminium: some of the former were plated, nickel or brass, and others painted red. Holes were 3.9mm Ø but I don't have the spacing. In EZ the name TECHNIK-METALLBAUKASTEN WESTFALIA is mentioned in passing and it might be the WESTFALIA described later. There's also a small photo of a set in Pl.60 with TECHNIK on it but it's too small to see any of the other wording.

**TECHNIKUS** I couldn't find anything in EZ on the postwar East German system of that name that's in MCS; the one made by VEB Funkwerk, Leipzig with an 'RFT' logo, and parts that look just like STABIL. There is however mention of an earlier TECHNIKUS made by Menki Zimmer of Fürth from 1914 to ?. No other details are given.

**TECHNOFIX** From EZ. This was a system in which steel Rods were joined by being pushed into Connectors (rather like the MECCANO Rod and Strip Connector) which were then joined together in some way. No N&B were used and David Hobson has suggested that the method may be that shown in a UK patent from 1924. It is No.230975 in the name of B.Buxbaum, and toy bridges and awning frames are mentioned as possible applications. One Connector has a spigot 'd' which engages in the hole 'c' of the other Connector; and then sliding the Rod 'e' in the second Connector over the holes prevents the joint from falling apart. The ends of the Rods were to be tapered if necessary.

The system lasted from 1928 to at least 1935. The original maker (or agent?) was W.Keller & Co. of Stuttgart, followed in 1930 by Kosmos, also from Stuttgart, and then from 1931, Gebr. Einfeldt of Nürnberg. An ad from 1935 is headed KOSMOS-BAUKASTEN TECHNOFIX.

The ad shows 3 models, a small Trolley with Wheels that have 4 large holes in their faces, an Arch Bridge, and a Crane. The Pulleys in the latter look like the Trolley Wheels but small holes can be seen between the large ones. The Crane has a quite complicated braced structure but no indication of scale is given.

**THALE STAHLBAU TECHNIK** Some notes on this

East German system were given in 8/174. There are photos of 2 sets in EZ and it's interesting to see that the 5\*5h Plates have elongated holes along 2 opposite edges, and not the larger holes in OSN 8. The only other difference is that the shade of the EZ red parts isn't at all orange.

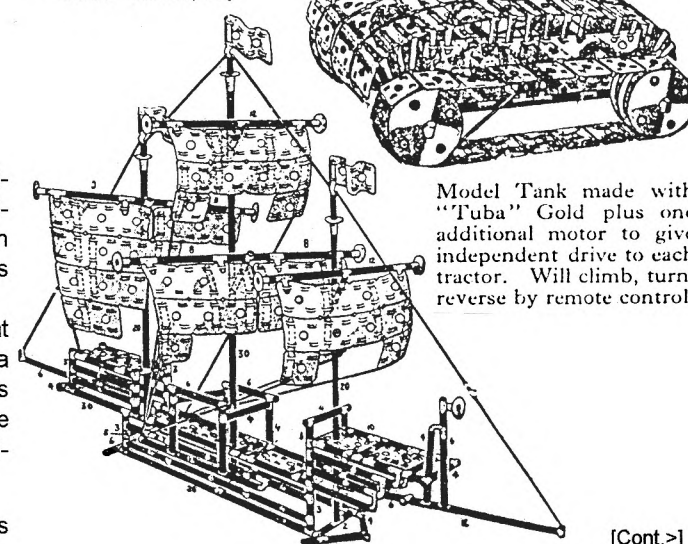
The dates given in EZ are from the 1950s to the 1970s; the maker, Krause & Co., later became VEB Metallspielwaren Thale/Harz.

**TITAN** EZ gives the period of this 10mm hole pitch system as c1948 to 1960. MCS/FB gives the hole diameter as 3.5mm. The manufacturer was originally Titan GmbH of Ludwigsburg/Württemberg, and later of Schwäbisch Hall, as in MCS/FB. A photo of a set from about 1950 shows the Strips and small parts black, A/Gs green, most Plates red, and most circular parts red, silver or green. The only parts in the rich blue are the 11\*7h and 9\*7h Plates, and the large Flanged Discs (PNs 64 & 65 can be seen). The model on the box lid is predominantly red and blue with silver wheels, the colour scheme given in MCS/FB. The parts were made from steel 1mm thick.

Jeannot mentioned a TITAN (2) with steel parts painted light grey but I don't know whether this was a colour variant of the above or a different system.

**TUBA** This is included as a UK system in MCS but the evidence now available indicates that it was German. The original Patent was German, applied for on 31 May 1933 by Josef Szapiro, and it was made in Berlin by the firm Die Tuba Spielwaren GmbH. David Hobson tells me that the UK Patent, 434838, of May 1934 (with a Convention Date of 31 May 1933), was in the name of J.F.Kennedy, a British subject but with a Berlin address of Joachimsthaler str. 38. In ads for TUBA in *Games & Toys* there is no mention of it being British made, and most likely it was imported from Germany. It was originally advertised in Sept 1934 by The Chad Valley Co. Ltd, Harborne, Birmingham 17, but in the last ad, in Oct 1935, Andrew Charles Ltd, 13-16 Wrothesly Street, Birmingham 5, announced that they had taken over sole distribution. Several models were shown in the different ads including the ones below. Under colours Jeannot listed steel, blued and nickel plated, and then later, gold, silver, red, green, blue, and yellow Plates. A photo of a German sets in EZ shows black Tubes, bright Plates, a red large Pulley and yellow small ones - similar colours to those given in MCS. An ad in German for the Motor is also similar to the one in MCS apart from using metric units, but it does show it running from a 4½v battery, and it gives the diameter as 30mm.

Model Galleon made from "Tuba" Silver, 15/-



Model Tank made with "Tuba" Gold plus one additional motor to give independent drive to each tractor. Will climb, turn, reverse by remote control.

[Cont.>]

**Two TUBA Sets** A little of the history of TUBA, particularly in the UK, was given in 15/419. The system was German, made in the mid-1930s, & is rather unusual with Tubes joined by Connecting Clips that are wrapped around them, and small, flexible Plates which can be attached in various ways. The different sets were denoted by the colour of the box and this account is based mainly on 2 UK sets, a Yellow, & a Grey kindly lent by David Hobson. The Grey has 'Improved Pattern' on the box lid and is therefore assumed to have been later than the Yellow.

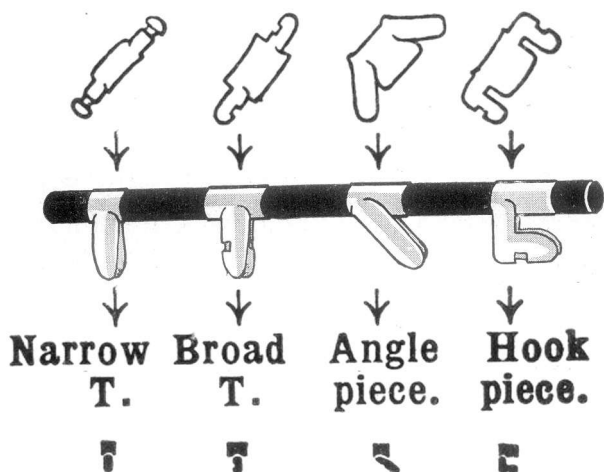
From OSN 15, the two UK firms that sold TUBA were The Chad Valley Co. Ltd., and later, Andrew Charles Ltd. However the obliterated name in one of the manuals with the Yellow set is the Tuba Toy Co., London, and so they may have been involved before Chad Valley.

In the notes on the parts etc that follow, reference will need to be made to the various known items of literature. They are fully described later but for convenience are listed below together with shorthand 'codes' for them.

- With the Yellow set: a Tuba Toy Co. manual with models for 5 sets (Green-Silver) (TT), and the Model Book 'A' for Green models from (probably) Chad Valley (CV A1).
- With the Grey set: a different Model Book 'A' for Green models from Chad Valley (CV A2); and a 'Tuba Tips' Leaflet.
- Photos of 9 pages from a Chad Valley Model Book 'B', with models for 9 sets (Green-Gold) (CV B1).

**The PARTS** The **Tubes** are 5.5-5.6mm Ø, rolled from steel about .4mm thick, and with a blued finish. Lengths of 2,3,4,6, 8,10,12,20, & 30cm were mentioned in the early manuals (TT & CV A1), but the 20 & 30cm sizes are not listed in the later ones (perhaps after the advent of a new part, the Prolongation Piece, said to join Tubes more rigidly).

The **Connectors** are soft steel, nickel plated. The 4 below

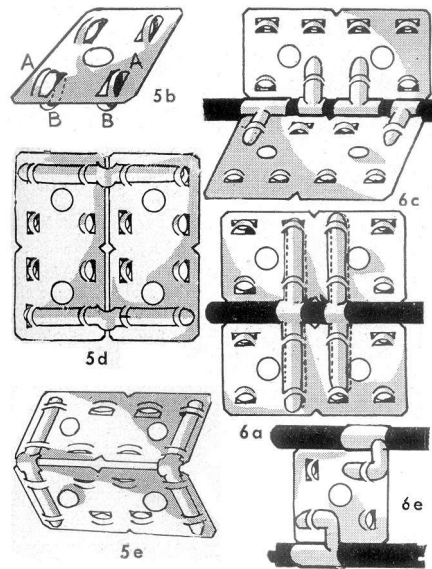


are supplied 'flat' (30-35mm long) and when wrapped around a Tube (as right), form a spigot onto which another Tube is pushed. All the Narrow T-Pieces In the Grey set, & 4 (of 22) in the Yellow, have shaped ends, as in the 'flat' part above, to give a 'knob' at the end of the spigot. What bene-fit this brings isn't clear.

Pairs of the Cross Piece right (37mm long) allow Tubes to be joined in-line, or added on either side at right-angles, as shown. Finally, bottom right, a pair of Prolongation Pieces, 21mm long, used to join Tubes in-line. The part is similar to the Cross Piece except

that it doesn't have the flexible centre and is generally much more rigid. One of its arms, and the Cross Piece likewise, is a little longer than the other, and has, for no apparent reason, a small hole in it.

The **Plates** are 2cm wide & 2,4,6,8cm long, and are again nickel plated. Fig 5b below shows the 2\*2cm, and the longer ones are multiples of it. The centre holes are large enough to allow a Tube to pass through, and act as a bearing when a Tube is used as an axle. The nicks on the edges and the large holes allow the Plates to be curved in a series of 1cm long flats. The pressed through loops along the edges permit 2 Plates to be joined by snapping one into one another 'like a press button'. This does work but a fair force is needed and some of the loops broke away at one end when the Plates were separated. The different Connectors allow many other ways of joining the Plates, and some examples are shown above using Cross Pieces (Figs.5d,e,6a), T-pieces (6c), and Hook Pieces (6e). In 5e the bend is made after the Cross Pieces are in place. In 5d & 6a corresponding Cross Pieces can be used underneath for extra strength. In many cases Prolongation Pieces can be used instead of Cross Pieces to give more rigidity.



The only other main parts are 2 wooden Pulleys and a nicked Hub (called a Cone) for them. The **Pulleys** are 3 & 5cm Ø, 9mm wide, and the 5cm has 4 face holes at 16mm radius. The 3cm is stained light brown and the 5cm red. The holes are 5.9mm and so rather loose on a Tube (but 5.6mm in the 3cm in the Grey set and so a tight push fit). The **Hub** is a 15mm Ø (13.5 in some) disc with a 7-9mm long split sleeve extension. A Pulley pushed over the sleeve is held fast to a Tube, as in the 5cm Pulley shown above the Prolongation Pieces in the column left. The part also serves as an axle stop & a pair can be used either side of a loose Pulley to locate it.

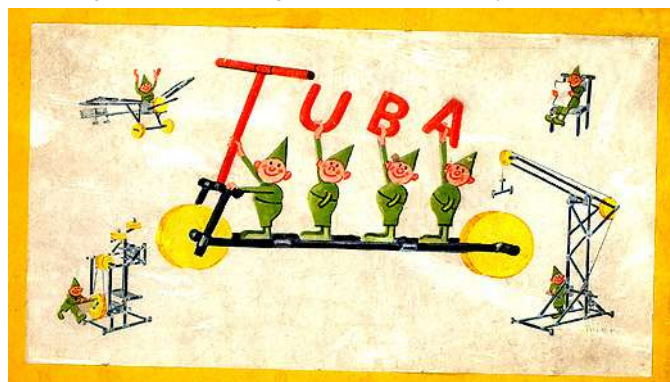
Finally a hank of twisted green **Cord** in the Yellow set. There was also a **Motor** in the Yellow set but it would have been an addition as the box isn't deep enough to accommodate it. It can be seen in the models shown later. Its body, 30mm Ø by 37mm long, has a nicked brass casing with brown paxolin ends. Stamped onto the casing is TUBA with the 4 elves motif, as on the Yellow lid shown later, and PRECISION MOTOR underneath. The output shaft has a 12mm Ø, 3-step cone pulley pressed onto it. The Motor runs on 4v d.c. and the terminals are short tubes. Red & brown Connecting Wires ending in connectors push onto them. The connectors are similar to T-Pieces with a black Bakelite sleeve over the spigot. Mounting is by Tubes through the large holes at the bottom, with Hubs either side.

The German **patent** hasn't been seen but the parts in the British one are, with a few minor differences, those described above. One variation not proceeded with was the use of hexagonal rather than circular section tubes, with fittings to match - the possible (dis)advantages of this weren't explored.

**The SETS** Initially only 5 sets were available: Green, Yellow, Blue, Red, & Silver. Later the range was extended to 9: Green, Yellow, Blue, Red, Grey, Silver, Check, Black, & Gold. Ultimately the 3 largest included a Motor.

The **YELLOW SET** box is 33\*24\*3cm with the label, 13¼\*

24cm below – the background was probably white originally. The inside is divided into 15 sections by yellow, double-sided partitioning with a truncated triangular section. No inventories are available for TUBA and so the contents of the sets to hand will be given even though neither is entirely complete. For

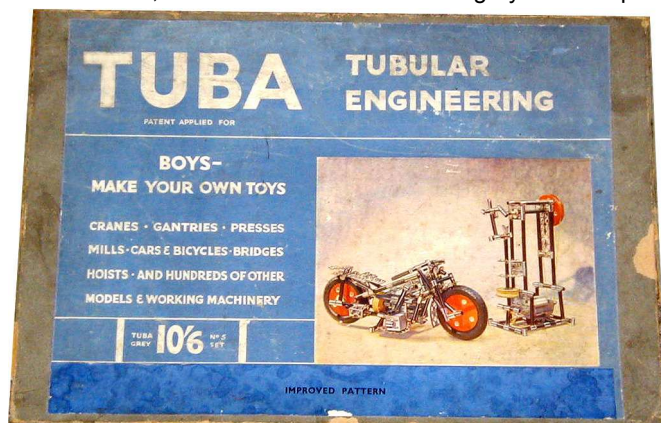


example, the Yellow has only one 2cm Plate and the Grey has only 2 Hubs. Also, as well as the Motor already mentioned, other parts may have been added to the Yellow, the Prolongation Pieces for example (as explained later).

The Set as found contained: 9,5,11,10,6,3,6 of 2,3,4,6,8,10, 12cm Rods; 1,5,3,7 of 2,4,6,8cm Plates; 5,2 of 3,5cm Pulleys; 8 Hubs; 22,65 of Narrow, Broad T-Pieces; 7,4,20 of Angle, Hook, Cross Pieces; 3 Prolongation Pieces.

The larger manual with the Set, the TT, has models for 5 sets, Green, Yellow, Blue, Red, & Silver. The other, CV A1, is for just the Green set models, and there are appreciably more of them than in the TT. It bears no company name but may have been from the Chad Valley period because a Model Book 'B' is referred to in it, and one such, from Chad Valley, is known (and described later).

The **GREY SET** box is 45\*31\*3cm and the lid, with its less ethereal label, is shown below. The box is grey and the price



panel confirms the set as a GREY No.5 SET despite the blue label (this is the only known instance of a Set No. being used). The darker blue panel along the bottom with IMPROVED PATTERN on it, has been stuck on top of the label. The inside has the same type of yellow partitioning as the Yellow but now there are 30 compartments, and each has the name of the parts in it stamped on the top of an adjacent partition.

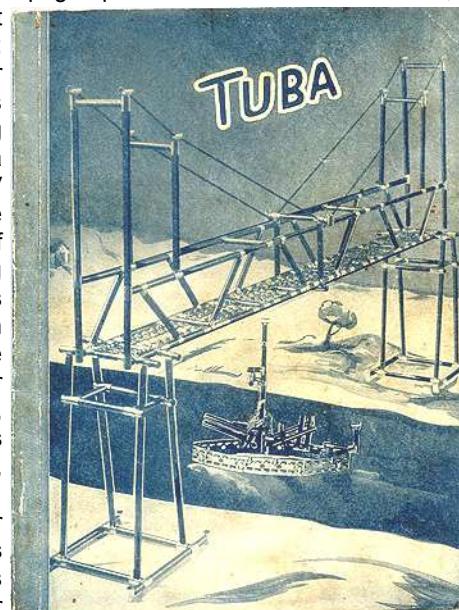
The Contents as found are: 18,11,8,8,11,8,11 of 2,3,4,6,8, 10,12cm Rods; 20,8,6,4 of 2,4,6,8cm Plates; 4,2 of 3,5cm Pulleys; 2 Hubs; 26,17 of Narrow, Wide T-Pieces; 6,2,19 of Angle, Hook, Cross Pieces; 17 Prolongation Pieces.

The manual with the Set is CV A2, and it has the Chad Valley name in it, albeit blacked out. It is basically very similar to the CV A1 except that a new part, a Prolongation Piece, to join Tubes more rigidly, is introduced. Since it only includes Green set models, a Book 'B' would presumably have (also?) been in the Set originally. The TUBA TIPS leaflet in the Set has constructional hints on 3 of its 4 sides, and on the back is a list of the 9 sets available, Green to Gold as given earlier. The Motor was included in the Check set (and perhaps in the

larger sets, but this isn't stated).

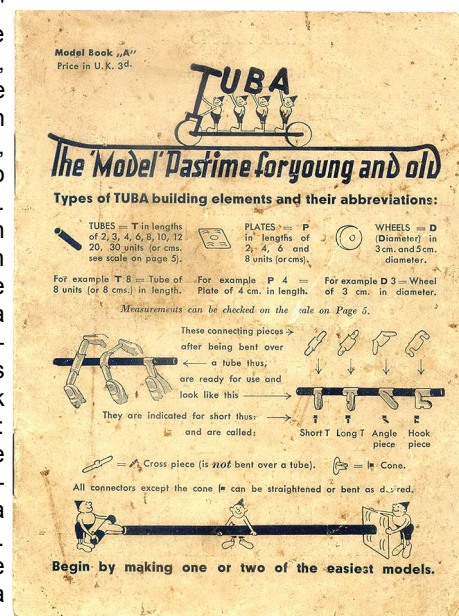
**The MANUALS** All have the same page size, 160\*120mm, and all are printed in dark blue. A shaded line drawing with a parts list is provide for each model, plus one or two scrap views for the largest ones. Each model has a Fig. number.

**The TT.** It has 40 pages plus covers. C1 is shown below; C2 is blank except for 'Printed abroad'; C3 has an ad for the Motor; & C4 has a photo of a Sailing Ship (shown as a Silver model in CV A1). pp1-7 comprise an Intro, details of the parts, & building instructions. p8 lists all the models with their names and the sets needed for them. Underneath, but blacked out, is 'TUBA TOY CO., LONDON'.



The models for the sets are as follows. Green: Figs 1-33, Horizontal bar to Wind pump, on pp9-17; Yellow: Figs 40-56, See-Saw to Tricycle carrier, on pp19-24; Blue: Figs 60-74, Wind mill to Rack waggon, on pp26-31; Red: Figs 80-90, Swing to Steam engine, on pp33-36; Silver: Figs 100-103, Tramway (overhead cable) repair car (24" high) to Mobile tower crane (27" high), on pp37-40. Photos of a Fire Engine & a Gantry Crane, both non-outfit models, are on pp18 & 32; p25 has a photo of the Fig 103 Tower Crane.

**The CV A1.** It has 16 pages and no covers (but they may of course be missing). p1 is shown below, it has 'Model Book "A" // Price in U.K. 3d' at the top. pp1-4 have details of the parts, and instructions. The Green models on pp5-13 go from Fig 1, Grotesque figure, to Fig 53, Wind pump. So more models than in TT and although most of the latter are present they are in a different order. pp14-15 have 4 examples of models from Book 'B', a Blue Aeroplane: a Yellow Machine press, a Red Stationary steam engine, & a Silver Sailing ship. p16 has a list of the model names, with a Limousine & a Tank underneath – in CV A2 they are said to be Black & a Gold models respectively. 'Printed abroad' is at the page bottom. No company name is shown anywhere.



larger sets, but this isn't stated).

**The CV A2.** It has 16 pages including covers, and p1 (C1) is similar in style to the CV B1 cover shown overleaf. But it has 'Model Book "A" Price 3d' at the top, the model is the Yellow Machine Press, and the THE CHAD VALLEY CO., LTD., HARBORNE, ENGLAND at the bottom has been blacked out. p2 has a photo of the Roundabout which is on the cover of CV B1 described next. pp3-5 have details of the parts, and

instructions, all quite similar to CV A1 except that the Prolongation Piece is included, and the section is now headed 'The ABC of "TUBA" '. The company details, as on p1, are at the bottom of p3, but again blacked out. There is no PR. One thing about this manual and CV B1 below, the TUBA with 4 elves logo which was in the earlier manuals, no longer appears, and TUBULAR ENGINEERING has been added to the TUBA name. This also applies to the Grey lid of course.

The models are on pp6-14 with, now, their names alongside them. pp8-14 are identical to CV A1; on p6 Figs 2 & 3 are replaced by a new model, Fig 8, Scoring Machine – Fig 3 is dropped and so is Fig 8 on p7, replaced by Fig 2. p15 has 5 example models, a Blue AEROPLANE, a Grey MOTOR CYCLE, a Red SAW BATTERY, a Black LIMOUSINE, & a Gold TANK. A photo of the Silver Sailing Ship is on p16 (C4).

**The CV B1.** The photos of this manual are of pp1-7, & 42-42 – p1 (C1) below has the Silver Roundabout, as in CV A2,

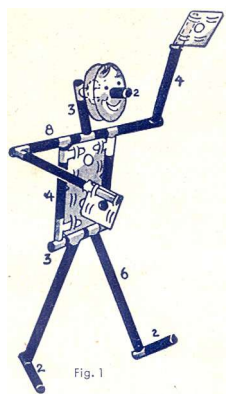


while p2 has the model on the CV A2 cover, but now called AUTOMATIC PRESS instead of MACHINE PRESS (as it was in TT). Under it the 9 sets are listed with the number of the models in the Manual against each. The parts/instructions on pp3-5 are as in CV A2 except that the company name on p3 hasn't been blacked out and a note has been added at the bottom of pp4-5 saying that it is

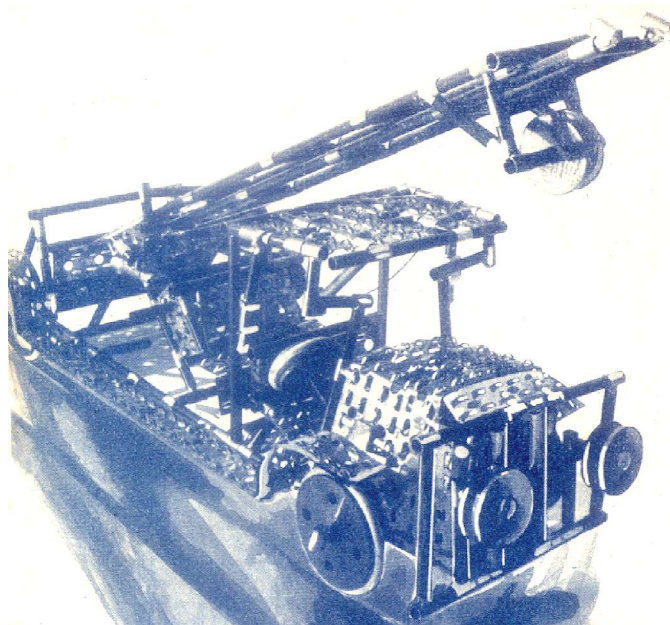
essential to start by making all the standard constructions. The Green models are Figs 1-53 as in CV A2 and those on pp6-7 are identical. The last Fig. for the other sets are: Yellow, 87; Blue, 116; Red, 141; Grey, 161; Silver & Check, 187; Black, 211, Gold, 241. The last 2 models are 222 (sic), Tank (with Two Motors), on p42, and 241, Aeroplane, on p43.

**The MODELS** All in all a good selection, starting with small items of furniture, Barrows, etc. Then a number of fairly simple mechanical models including some small machine tools, and others such as a Crane, an Anti-aircraft Gun, a Glider, a Lift, & the Yellow Machine Press on the opposite page. Finally in the TT manual, 4 larger Silver models - the Bridge on the TT cover, a large Crane, and, on the facing page, a Tower Repair Wagon with centre pivot steering, & a Crane on a Gantry.

One of the new models in the CV A1 manual is the 'Grotesque Figure' left, the only known TUBA human or animal model. Interesting later outfit models are the Motorcycle on the Grey lid, a realistic looking Car, a Sailing Ship, & an Aeroplane with wings made from Plates curved chordwise. Also, see the facing page, a Steam Engine, & a Tank (an enlarged photo) with tracks made from 2\*2cm Plates joined by 'threading elastic through the loops' - each track is driven by a Motor, & a small Pulley, not mentioned elsewhere, is used in the final drive. Other models, perhaps not made



from any of the sets, are the Fire Engine atop the next column, with the Pulley Wheels fitted with Rubber Rings, and a Gantry Crane. All the models opposite on the next page are the



original size apart from the Tank, at 85%.

I made the Machine Press from the Yellow Set & Motor. A few of the T-Pieces were loose on the Tubes but otherwise they gripped very well once the Tube on the spigot was pushed home (though a very hard push was often needed & removal was even harder – a hammer & a pair of pliers helped). The downside of the excellent grip was that the position of a Connector along a Tube couldn't be changed without removing the spigot Tube, and that often meant dismantling other parts of the model as well. That's quite often a problem with 'Rod/Tube' systems of course. One plus with TUBA was that by opening out a Connector it could be pushed over a Tube between other Connectors already in place. Some care was needed to assemble the framework in the right order, but when finished the model looked the part, and, rather to my surprise, worked well too. The use of 2 Cross Pieces to form the big & little end bearings gave a rather sloppy fit and I replaced them with 2 of the 'loose' T-Pieces.

**HISTORY** Details of the German company, Tuba Spielwaren GmbH, were given in 15/419, and also the earliest known date, 1933, the year application was made for the German patent. *Baukästen* gives the dates for the company itself as the 1920s to 1935, and says that 5 TUBA sets were available. All that is known of them is a photo of a Red set in *Baukästen* – the box partitioning looks just like those in the UK sets and the lid label is identical to the Yellow one shown earlier.

As already explained 3 UK companies were involved with TUBA – Tuba Toy Co., The Chad Valley Co. Ltd., & Andrew Charles Ltd. The literature available gives an indication of the changes that occurred, as follows, in the probable date order.

The TT manual has a line in it which has been blacked out, but can still be read as Tuba Toy Co., London. So this company may have preceded Chad Valley as the first UK agent, and Chad Valley, who started advertising TUBA in Sept. 1934, did the blacking out. The CV A1 manual with the TT is for just the Green set models - it bears no company name but is likely to have been from the Chad Valley period, or at least later than the TT, because a companion Model Book "B" is mentioned in it, which has the same scope as the TT. The TT & CV A1 list or imply a range of 5 sets - Green, Yellow, Blue, Red, & Silver. Linking sets are mentioned in both manuals but with no details. Both also mention the TUBA Motor, and some details, including the price, 5/6, are in the TT. It was not included in any of the sets.

The next two manuals have the Chad Valley name in them, albeit blacked out in one, and represent a later Chad Valley phase. They are CV A2 which was with the Grey set, and CV B1. 9 sets are mentioned in both, that's to say the 5 above

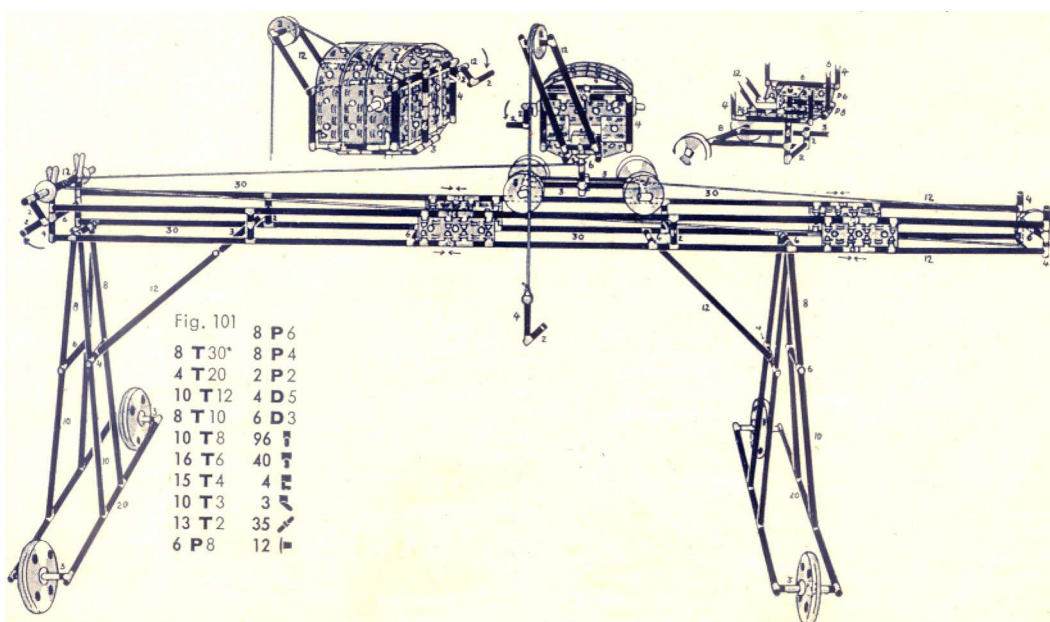


Fig. 101

8 T30*	8 P6
4 T20	2 P4
10 T12	4 P2
8 T10	6 D3
10 T8	96 T
16 T6	40 T
15 T4	4 T
10 T3	3 T
13 T2	35 T
6 P8	12 P

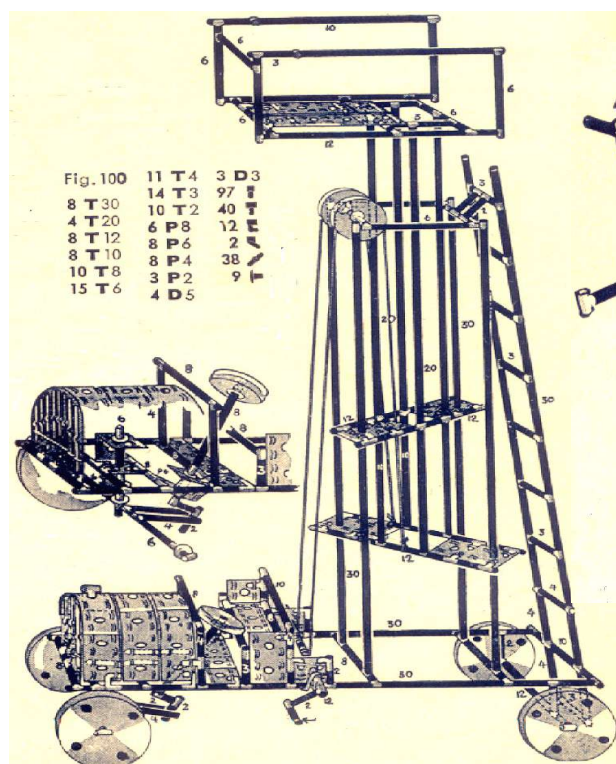
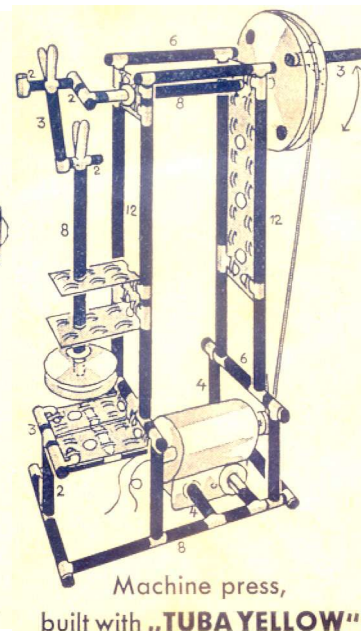
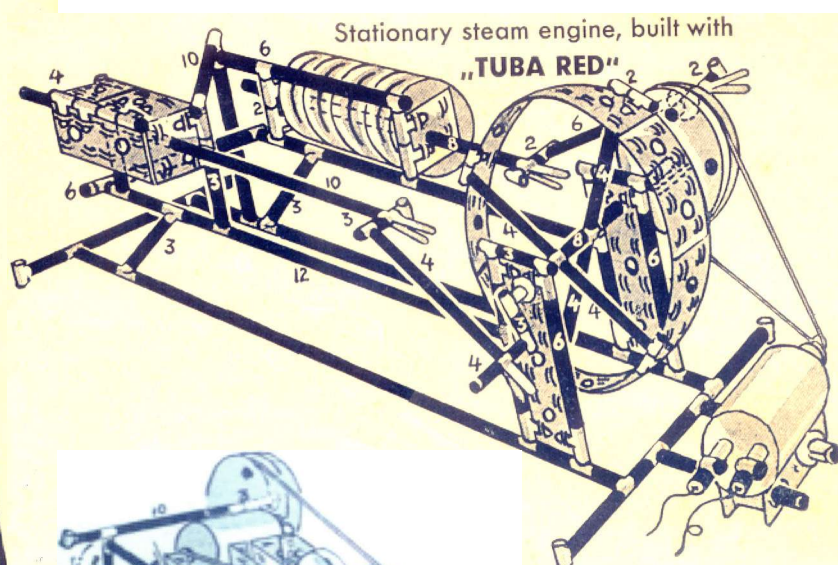


Fig. 100

11 T4	3 D3
8 T30	97 T
4 T20	40 T
8 T12	6 P8
8 T10	2 P6
10 T8	8 P4
3 P2	38 T
15 T6	9 T
4 D5	

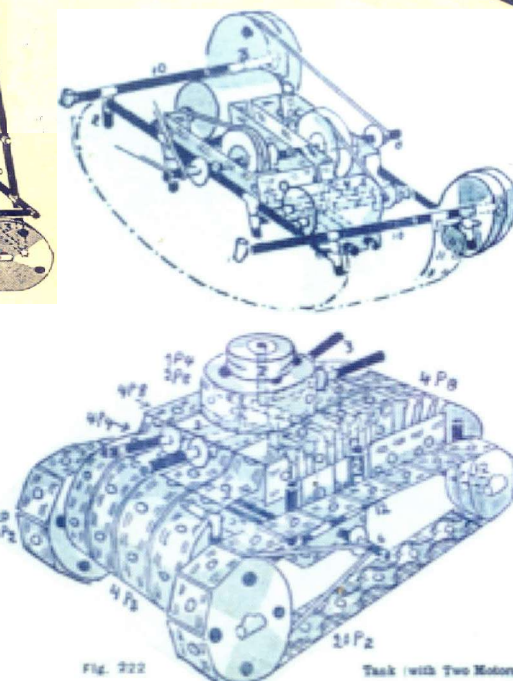


(though it isn't known if they had the same contents as before) plus 4 new ones: Grey between Red & Silver; Check (= Silver+Motor); Black; & Gold. It isn't clear if there was a Motor in the Black & Gold sets. The new Prolongation Piece is introduced in both and in CV A2 it was said to be included in the Red set upwards.

The TUBA TIPS leaflet in the Grey set lists all the above outfits (priced at 2/6, 3/6, 5/6, 7/6, 10/6, 15/-, 21/-, 25/6, 29/6) & the Motor is included in the 3 largest. It now cost 5/11 separately and a Motor Accessory Box, at 9d, was available, with Driving Belts, Plugs, & twin silk Flex.

There is no mention of Linking Sets in CV A2 & CV B1, but it is said in the former that 'TUBA parts are obtainable in small packets, as also are Motor Tyres, Driving Belts, Cleats, etc.'

Chad Valley seem to have been quite busy in the year they were involved with TUBA, with new sets, revised manuals, & new models. Presumably the new sets & models came from Germany but no equivalent German material has been reported so far. Another change would presumably have been



associated with the 'Improved Pattern' label on the Grey Box, an indication perhaps that earlier 'new' sets were different in some way. The only obvious physical change was the introduction of the Prolongation Piece, and if that were the difference there may have been a manual for the new sets which didn't include it.

After only a year why did Chad Valley cease to be the UK agent? As pure speculation, if Tuba in Germany did close in 1935, that could be the reason. Then the remaining stocks might have been sold off by Andrew Charles, the Grey set amongst them, and they blacked out the Chad valley name in CV A2.

The TUBA parts are neat, well made, and quite versatile, especially the Plates. And with its good range of models, it seems to me to have been rather better than most comparable Rod/Tube systems. Nevertheless it had but a short life, again like most of its kind. KLIPTIKO & FAC are the only exceptions that come to mind, one very simple & one very complex.