ITEMS FROM LETTERS

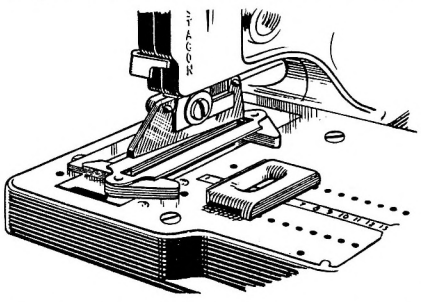
1. From Kendrick Bisset: A photo of a **JUNIOR MECHANIC** No.101 Set (see 13/361), courtesy of George Wetzel. The lid is similar to the that of the 201 described in 12/327, but the 6 models on it are different. The packaging and parts, including Strips with chamfered corners, look the same as those of the 201. The Set appears to be complete and the main parts are 2,4,6 of 16,8,4h Strips; 6 Angle Brackets; 4 Wheels; 2 & 1 of the 2h & 8h long Flanged Plates; and 1 Crank Handle. The interesting thing is that there's a manual with the Set. It covers both the 101 & 201 sets and the cover (opposite) scales at 8¾" wide. The top half is blue with white lettering; the bottom half is white with Manual of Instructions and the maker's name and address in blue.

2. From David Hobson. • The **GILBERT NEW WHEEL TOY** was available in Britain well before 1921 (see 13/360): it is the subject of full page Gilbert ads in the Dec. 1919 and March 1920 Boys' Own Paper. [3 sets were mentioned, at £1.19.6, £3.7.6, & £5.5.0. The middle outfit had 'gears and pinions', and the largest 'also makes a small sleigh and racer with runners'. The model left, one of 3 shown, isn't in the manual summarised in 8/199. Both ads contained a coupon which was to be sent to Mr. A. C. Gilbert (Dept.27), 125, High Holborn, London, W.C.1.]

• The **MANUFAX** Sets 0-4 were advertised (by B&T) before the Sept.1932 date given in 7/155. They are in an Oct.1931 BOP ad at the prices given in OSN 7. It's odd because this ad predates the Dec.1931 Supplement ad which lists only the Nos.1 & 2 outfits.

• A Nov.1956 ad from Claude Rye Ltd. (in the Children's Newspaper) probably marks the end of **JUNEERO** in the UK. It offers Sets 0, 1A & 2A at less than half price, with a further reduction for large quantities. No doubt the manufacturer's stock was being sold off. JUNEERO was on sale in Holland in 1962, see 14/395.

• An article in the October 1920 *The Toyshop & Fancy Goods Journal* advises that the **PRIMUS** Motor Chassis Outfit, and an Electric Motor for use with the standard sets, would be available before Xmas. PRIMUS vertical Steam Engines to drive models are also mentioned.



• A Guillotine attachment (left) for the **PRESTACON** Tool (9/217) was advertised in *The Toy Trader & Exporter* for July 1948, by L.Rees & Co. Ltd - a *Cyldon* Product. The claim was that it would cut the ½, 1, & 2" Strips into any length from ¾ to 12".

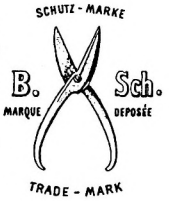
• A system called **DORFAN**, or DURFAN, was in an MCS lists of possibles: nothing definite is known of a normal constructional set of that name but in *The Toy Trader* of April 1927 there's an ad for a constructional electric railway engine called the DORFAN Loco-Builder. From the illustration, the motor and gearing had to be assembled and fitted to a body made up of 2 pressed sides joined together. The name on the box is The Dorfan Co., Newark, NJ, and there's NYC 51 on the sides of the loco.

• In the July 1921 issue of *The Toyshop & Fancy Goods Journal,* a review of the range sold by the toy factor Bedington, Liddiatt & Co. included **PYFYLY** (see 14/365) as a new constructional toy.

Some of the 30 or so relevant trade marks shown in *Toys & Automata Marks & Labels* by Gwen White, are of interest, and for each a name and date (of registration presumably) are given.

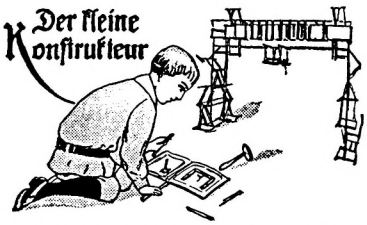
• For **BANGAROO** (see 9/235) they are Alfred James Bartlett of Gloucester, and 1908 (although a later entry shows 1922). The toy is described as 'detached pieces to join together'.

• The 1900 mark to the right belonged to **Bernhard Karl Emil Scheer**, tinsmith, of Burgstädt, and was for 'metal toys to take to pieces' (Zerlegbare Metallspielbaukästen).



• For **STRUCTO** the name is Thompson Manufacturing Co, Freeport, Ill. & the date, 1912.

• The illustration opposite is that of **DER KLEINE KONSTRUKTEUR**, by Hermann Tietz of Berlin, in 1913. No indication is given of the material used. The name was used again in the 1950s, see 12/313.



• **HAPPYNAK** (4/72 & later in MCS) is from The Matchless Metal Polish Co, Old Swan, Liverpool in 1915 - not the name in MCS but both were at Old Swan.

3. Richard Symonds sent a photo of a **CONSTUCT-O-CRAFT** Model 100 set, which is packed in a tube with a screw top, 3⅛" Ø by 9⅝" long. The main point of interest is the 'Manufactured exclusively by Hedge Tool & Mfg. Co.' on the tube. The only address is Chicago, which is also that of the Boxar Tool & Mfg. Co., the maker given in MCS. Hedge came after Boxar because a Boxar manual, like the one the MCS material came from, is © 1946, and this tube carries © 1948 HT&MC. The photo of the boy and model shown on the tube is identical to the one on the Boxar manual. There was no manual in the tube; the few remaining parts in it are the same as those in a #500 Boxar set. Were the two companies one and the same with just a change of name? In case anyone wants a starting point, Boxar's full address in the manual is 2240 W. Ogden Ave., Chicago 12.

4. Thomas Morzinck wrote that **ebs** metal construction sets are being made in The Czech Republic for the German company Ebert & Schön of Munich, and are sold only by the firm Manufactum, of Marl (near Essen). A leaflet gives a few details - the parts are said to be 50% larger than those of comparable outfits, and all metal ones are nickeled. 8 small sets are available, each making one simple model - a Windmill, Carousel, Biplane, Cross Country Car, Fire Engine, Big Wheel, Tractor & Trailer, and Timber Lorry. The latter is over 70cm long with Road Wheels that look in proportion. A larger outfit with 228 parts makes a nice looking Wind Turbine, apparently driven by clockwork. There's a blurry photo, that won't reproduce, of each model. The address given for further information is Handelskontor Ebert, Aidenbacher Strasse 108, 81379 München, phone/fax 089 788111/788118. This sounds as if its the same as the E.B.S. mentioned in 17/491.

5. Roger Baker sent a photo of an unused No.3 **MAC ET NICK** set. The lid is covered by a colourful picture of a man & a boy behind a large model Submarine, with a Crane in the background. The 'blueprint' with the set (in French) looks about the same size as the one described in OSN 17 but is in portrait format, and the 10 models on it are different with a Monoplane top right and a Warship bottom left.

6. From Michael Grace: • 'On the **MÄRKLIN Robot** Set from a few years ago, I found it rather 'fiddily' to make up - some of the clearances were tight and there was a good deal of play in the various movements. Overall it was a bit

HAPPYNAK This simple constructional toy from 1914 had rolled tinplate Tubes which pushed into formed tinplate Joints with split sockets. These notes are based on the manual and the few remaining parts from a No.0 set (courtesy David Martin); details of patents & advertisements from David Hobson; the MCS pages which were I think the outside pages from a No.1 manual; British Tin Toys by Marguerite Fawdry; and photos, courtesy Mike Rhoades, of a few parts & manual pages like those in MCS. My thanks to all.

FIG.A

HISTORY HAPPYNAK constructional sets were produced by a Liverpool company called The Matchless Metal Polish Co., in a factory opposite Meccano's in Binns Road. It was one of a range of toys sold under the Happynak trade mark. The company was originally called Paton, Calvert & Co.; the name was changed in 1901, and then changed back again in 1919. Tin Toys gives HAPPYNAK's launch date as 1915 but shows an advert which was actually from Oct. 1914. The company name on it is Paton, Calvert & Co. and that disagrees with the chronology above. HAPPYNAK was advertised throughout 1915 and then a Jan. 1916 ad announced that it was hoped to resume production of Happynak toys after the war. No end date is known but sets were still being made in 1922. A list of the Company's exhibits at the 1929 British Industries Fair does not specifically mention a constructional set among the list of its toys.

The PATENT It was No.9150 and the date of application, with a provisional specification, was 11th April, 1914. A further provisional specification, No. 18584, dated 12th Aug., 1914, was followed by a (considerably redrafted) complete specification 3 days later on 15th Aug. It was accepted (as No.9150) on 4th Feb., 1915.

All the specifications were in the name of Joseph Davenport Bruce of 67 Heathfield Road, Wavertree, Liverpool, manager for James Wallace Paton of Binns Road. It is noted on the provisional specifications that James Wallace Paton was temporarily in Canada at the time.

The figures in the Patent are shown below in Fig.B, with Figs.1-15 showing various elements of the system, and Figs.16-21 some models made from them.

Earlier patents (No.3937 of 1913 by John David Roland of Mosely, Birmingham, and No.1430 of 1914 by John Thomas Lawrence of Houndsditch, London) had described frameworks made from metal rods or tubes pushed into flexible split or solid tubular sockets, and so the claims in the HAPPYNAK

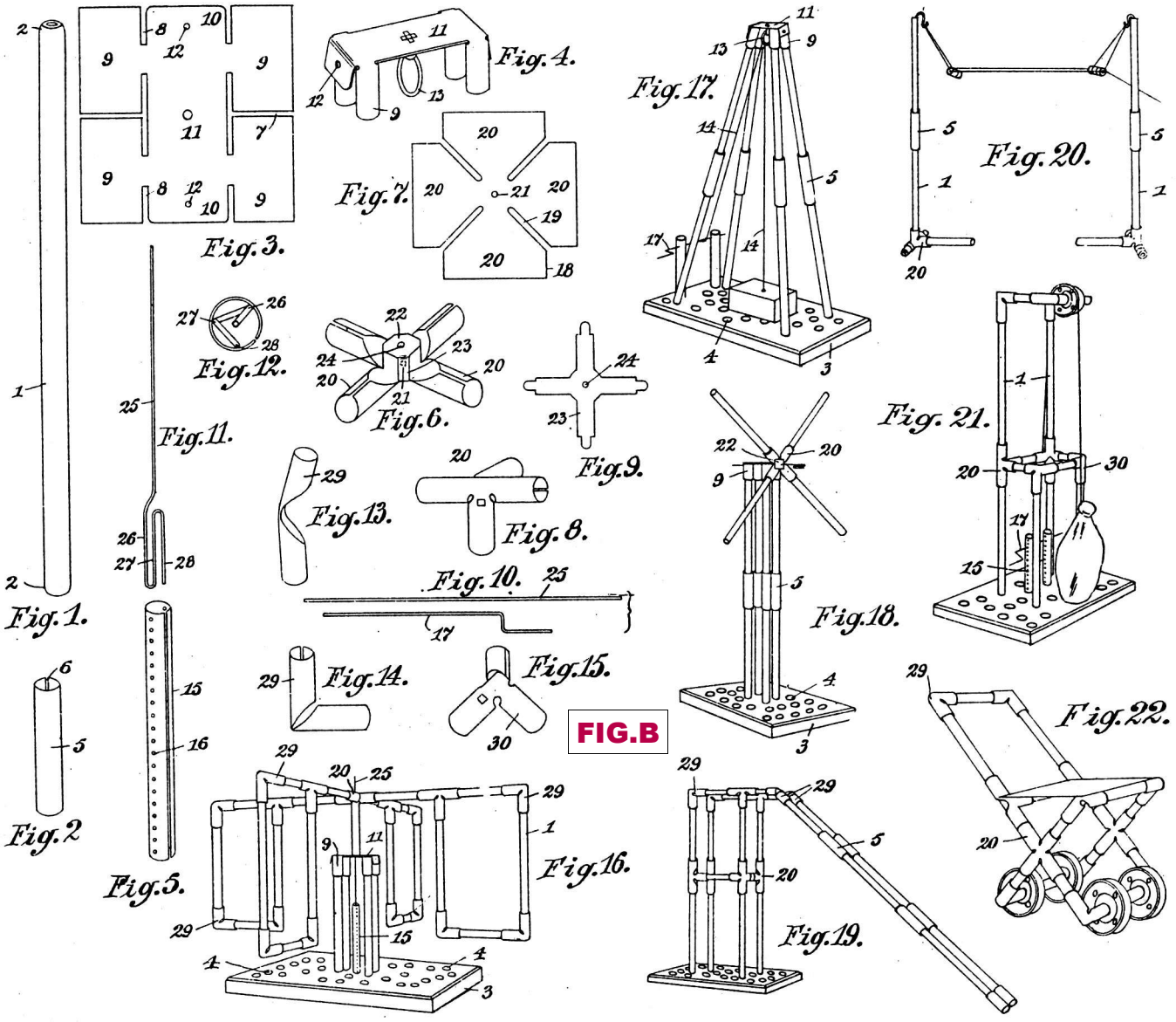


FIG.B

patent relate only to specific parts. These are cardboard Tubes; the joints in Figs.4 & 6 of Fig.B; the Perforated Tube in Fig.5; and the Supporting Rod in Figs.11 & 12.

The Tubes (Fig.1) were to be made of cardboard by winding paper to which adhesive had been applied, and with, for preference, slightly bevelled ends to allow easier insertion into the Joints.

A wooden Base with vertical and angled holes could be used to ground the Tubes in suitable models.

The Joints were to have 2, 3 or 4 split sockets and be made of metal, tinplate for example, flexible enough to allow the sockets to be bent to different angles and springy enough to grip the Tubes. The Joint in Fig.2 is to join Tubes end-to end, and other Joints are shown in Figs.4, 6, 8, & 13-15. Fig.7 is the blank for the basic 4-socket Joint in Fig.6, which can be bent to make Fig.8 etc. Also by adding a boss (from Fig.9 by bending the arms to form a cup, and then bending the tab ends of the arms to 'clip onto' the gaps between the sockets 20) a bearing for a Rod is provided by holes 21 & 24.

Fig.3 is the blank from which Fig.4 is pressed with holes 12 to journal a Rod, & a hole 11 to attach a ring. This part could provide a top anchoring point for Tubes grounded in the Base.

Fig.5 is the Perforated Tube with holes right through to provide bearings for the wire Rods, etc. shown in Fig.10. Finally Figs.11 & 12 show the wire Supporting Rod which pushes into Tubes with an end protruding to form a shaft for a rotating structure, as in Fig.16 for example.

The models show the use of the various parts, with the Cord in the Fig.17 Hoist passing through the ring of the Fig.4 Joint. Fig.20 is a Wireless Telegraph aerial with the horizontal cords passing through a Perforated Tube at each end. The Patent makes no mention of the Pulley Wheels used in some of the models, nor the seat in Fig.22.

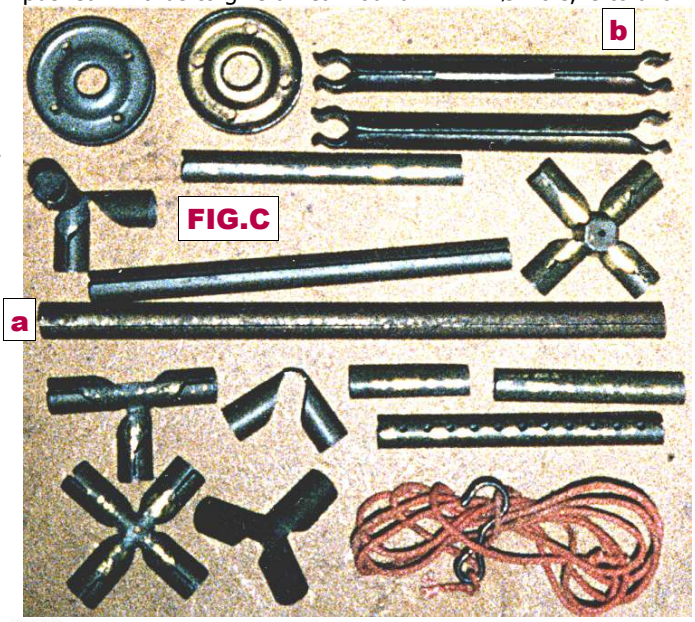
In the first provisional specification the cardboard tubes were to have their ends fitted with a metallic ferrule or sleeve. And Rods made of wood or other cheap material could be used instead of the cardboard tubes. Also pulleys were mentioned, and pieces of card, wood, & fabric, suitably coloured if desired, were envisaged, though it wasn't said how these would be attached.

The PARTS Steel Tubes were used instead of the cardboard ones in the Patent, but otherwise, with the few exceptions to be mentioned, the parts match those in the Patent. Figs.D below is the Illustrated Parts from MCS and Fig.C right the No.1 parts (plus 3 KLIPTIKO parts for comparison: the Tube, 'a', & the 2 Tubes with clip ends at 'b'). The No.0 parts to hand are in less good condition but traces of their original brassed finish can still be seen. In Fig.D the starred parts are said not to be in Set 1, and as Sets 0-3 are mentioned on another page it could be assumed that all the system's parts are shown. However 2 sizes of both the Rod & the Perforated Tube are among the parts listed on another page, and details of these are given in the notes which follow.

Tubes. They are rolled from .012" sheet with a gap of 1mm or a little more. The gap has to be squeezed to near zero to push them into the Joints and then their diameter is about 8.4mm. Some of the Tubes in the No.0 parts are printed in colour on their inside in a pattern which looks to be Union Jacks – probably army surplus material from the war. The Tubes slide inside KLIPTIKO parts.

Perforated Tubes, 3 & 4½" long, with 2mm holes through both side walls at ¼" pitch. So 11 in the 3" and 17 in the 4½", plus half holes at each end.

Joints. They are formed from .020" thick steel and are about 9½mm Ø with a gap similar to the Tubes. No.1 is 1¼" long. The others are as shown except that the No.4 Flat has a 1.9mm centre hole. The No.4 Joint with Axle is among the parts in Fig.C. The Fig.4 Joint in the Patent became two actual No.4 Top Joints, one 'with holes' (to journal a Rod) and the other 'with Ring'. One Top Joint forms the radiator of the Tower Wagon in Fig.N. The notch in some parts, a circular tab pushed inwards to give a near round 1.7mm Ø hole, is to allow



them to 'always be kept on the same side' so that the Tubes will line up one with another.

Base. Not seen but no doubt wooden. The straight holes are lettered; the angled ones numbered.

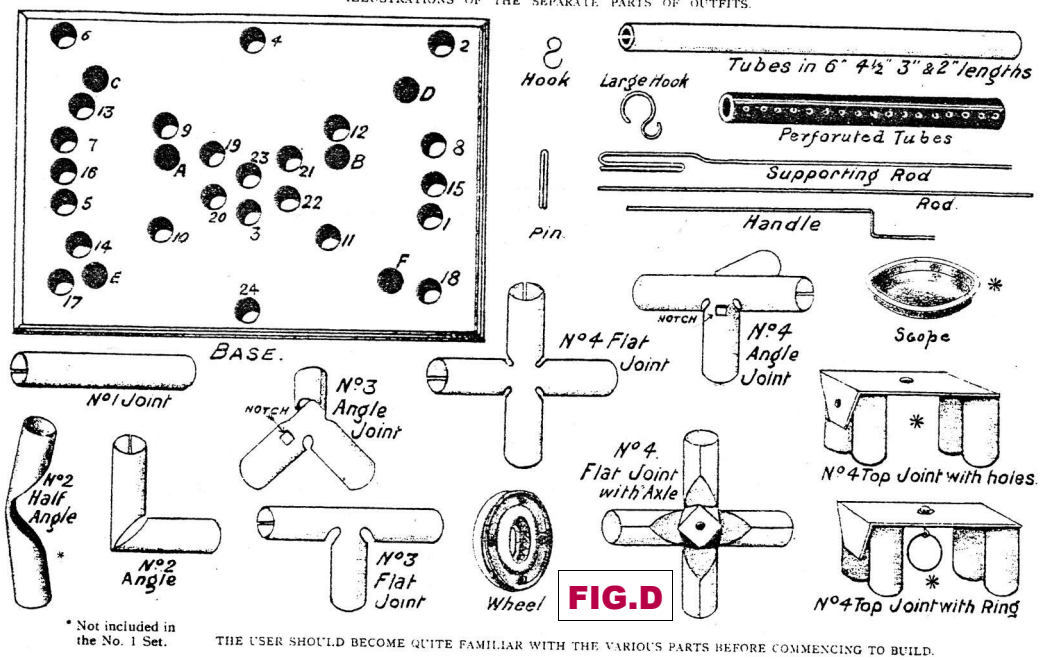
Wheel. A pulley which scales at 2" Ø.

Handle, **Rods** 6 & 3", and **Supporting Rod**. Not seen.

Hooks. The ones in Figs.I & K look to be the small part, and the large version is probably the one above in Fig.C. This type may also be holding the tops of the Cord jib stays in Figs.I & M.

Lynch Pin. Not seen. It would pass through a Perforated Rod used as an

ILLUSTRATIONS OF THE SEPARATE PARTS OF OUTFITS.



* Not included in the No. 1 Set.

THE USER SHOULD BECOME QUITE FAMILIAR WITH THE VARIOUS PARTS BEFORE COMMENCING TO BUILD.

axle to prevent a Wheel falling off.
Scope. Not seen. It is used in Fig.J as a scale pan.
Card Parts. Not seen. The No.0 instructions say 'The CARD SEATS, etc, are made by cutting out of the Tray in box as marked'.

The SETS By Jan. 1915 Sets 0 & 3 had been added to the Nos.1 & 2 advertised in 1914. All four sets are mentioned in both the No.0 & No.1 manuals, and 15, 20, 45, & 75 models were claimed for them.

The parts used in the No.0 models are: 8,8,4,4 for the 2,3,4½,6" Tubes; 3x 3" Perforated Tubes; Joints: 2x #1, 8,4,2x #2,3,4 Flat, 4,2x #3,4 Angle; 1 Wheel; 1 Handle; 1 Small & 2 Large Hooks; 2 Pins; String; various card parts.

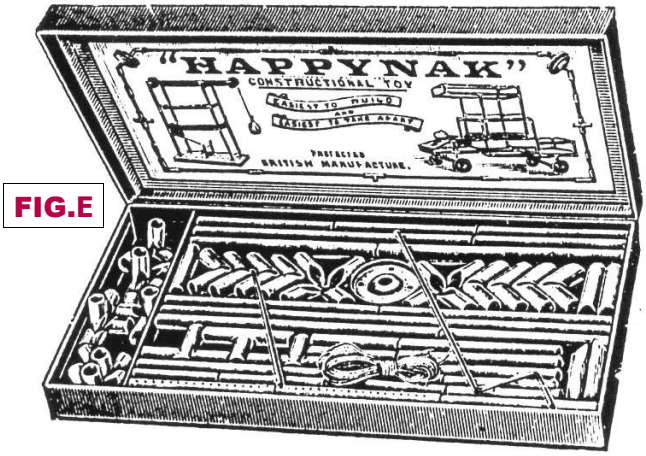


FIG.E

The No.1 included all the parts except the Scope, Supporting Rod, and the following Joints: #2 Half Angle, #4 Top with Ring, & #4 Top with Holes. Only 1 Wheel is used in the few models seen.

All that can be said of the larger sets is that the No.2 had at least 5 Wheels, 2 Scopes, & a #4 Top Joint with Ring. No models larger than the Tram in Fig.K and the Tower Wagon in Fig.N are shown in any of the material to hand and they each require perhaps 50 Joints, against the 20 needed for the No.0 models.

The only illustration of a set is the one above taken from a 1922 advertisement: it might be a No.0, or slightly more likely, a No.1.

The MANUALS Both are printed in purple. The No.0 is a single sheet folded in two to give 4 sides 277*218mm, and then folded in two again, no doubt to fit into the box. The top half of the front is shown in Fig.A. Below it came the 'INSTRUCTIONS': a list of the different parts; get to know the parts and place on one side those needed before starting to build; and a note about the 'notch'. Along the bottom, a 6" scale.

The inner pages show the 15 models from GARDEN SEAT to COUCH. There is a shaded line drawing of each with most of the parts labelled and a list of those required. 3 of the models are slightly simplified versions of the Figs.20-22 models in the Patent. Most of the rest are furniture items or similar, plus a Goal Post, a Rugby Goal Post, and the 3 models in Fig.H right (full-size but rearranged).

The back page shows 5 models that can be made from the larger sets, as on the facing page. The Chair-O-Planes & Crane are for Set 1, the Mobile Crane & Scales for Set 2, and the Tramcar for Set 3. The other model (Fig.N) is taken from the 1914 advertisement, and may be for Set.3. The steering wheel is a part not seen or mentioned elsewhere.

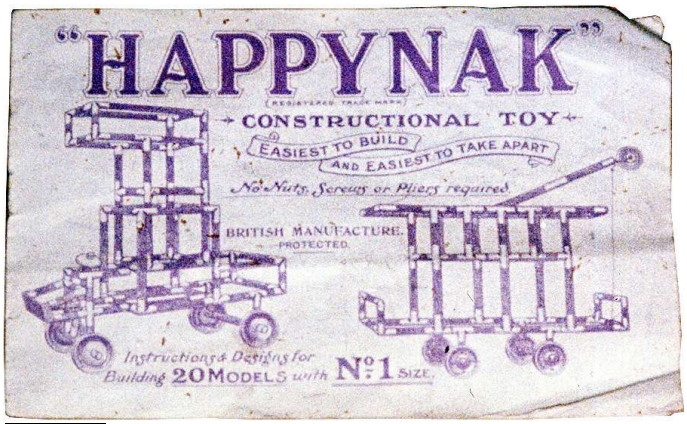


FIG.F

The outer cover of the No.1 is shown above and measures about 8¾*5¾". The inside covers are, in order, the Illustrated Parts in Fig.D, and the Instructions. The latter mentions Card Seats, etc but with no reference to cutting them from the packaging. The back page shows 5 models that can be made from Set 2: the one in Fig.17 of the Patent, the Mobile Crane in Fig.M, and 3 simple Hand Trucks – the one above and two with 2 Wheels. I wonder why it was thought that they would attract interest in the No.2 Set.

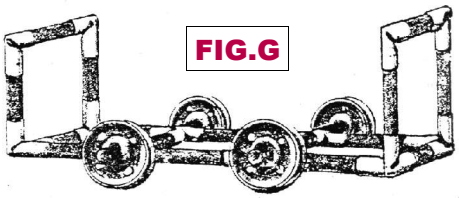


FIG.G

USING THE PARTS The parts to hand had a good selection of Tubes but very few Joints, and none of the small Pins, Hooks, etc. I was therefore only able to make a small model, a much simplified version of the Hoist below using a substitute Pulley. Despite being somewhat battered the parts fitted together reasonably easily, and the Joints gripped the

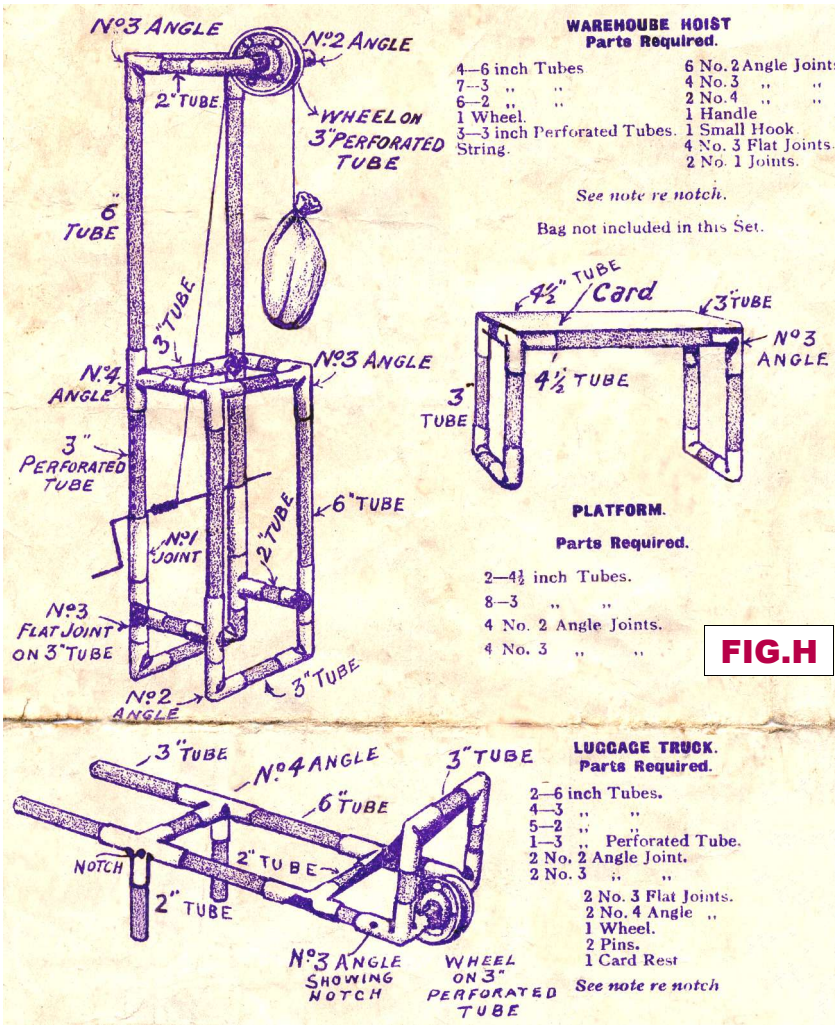


FIG.H

Rods firmly. The resulting framework was more rigid than I'd expected. But among the parts were 4 sockets which had broken off Joints at the 6mm wide neck, due no doubt to excessive bending and straightening. So this may have been a weak point and the metal used, while springy enough to grip the Tubes really well could not withstand too much bending.

REMARKS Presumably HAPPYNAK was intended to be a cheap product, so how did it compare with KLIPTIKO, a slightly more elaborate system which had appeared a little before it (see 44/1339). In Jan.1915 HAPPYNAK Sets 1-4 cost 1/-, 1/6, 3/-, & 5/-. No KLIPTIKO prices are available for 1915 but in 1917 the cheapest, No.0, outfit was 2/-. But prices in general had increased by that time, the smallest MECCANO, the No.0, from 3/- in 1914 to 5/- in 1916. So perhaps the KLIPTIKO No.0 fell between the HAPPYNAK No.0 & No.1. Both the No.0's had only one Pulley and although the HAPPYNAK manual has 15 No.0 models against 7 for the KLIPTIKO, the latter were in the main appreciably larger and more interesting.

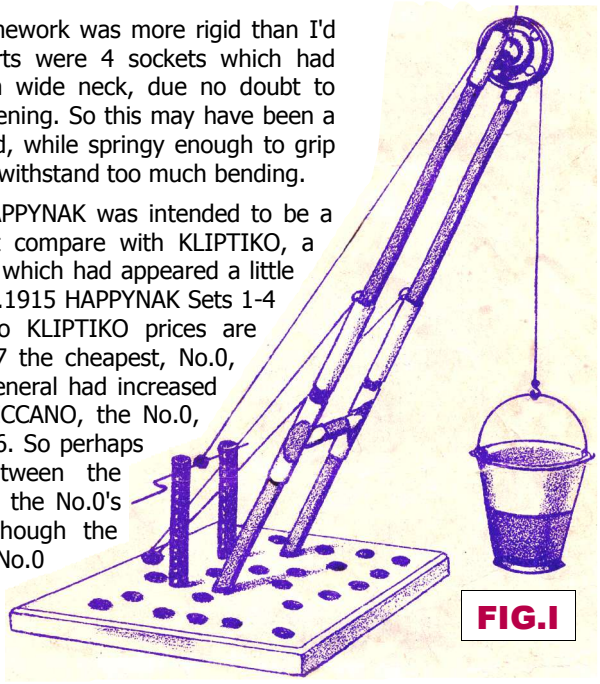


FIG.I

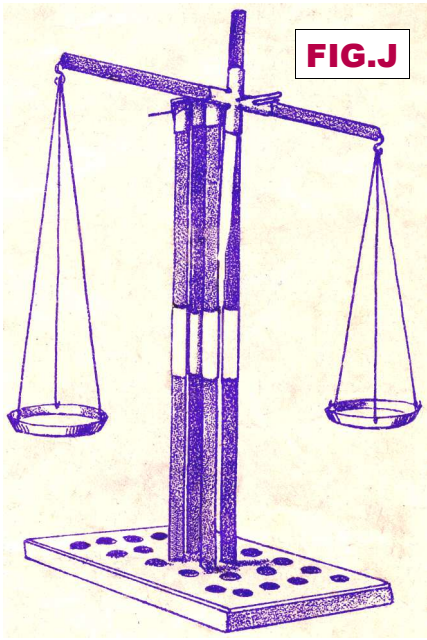


FIG.J

More generally, my impression is that HAPPYNAK was a little slower to assemble than KLIPTIKO, but frameworks were more rigid. Other HAPPYNAK pluses were the Base, an easy place to start building for young modellers, and the Crank Handle, much superior to the expedients needed in KLIPTIKO models. On the minus side the HAPPYNAK Instructions were less helpful than KLIPTIKO's. They didn't for example

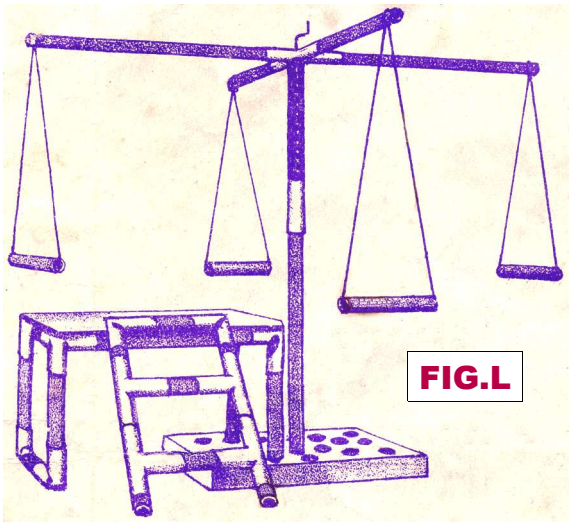


FIG.L

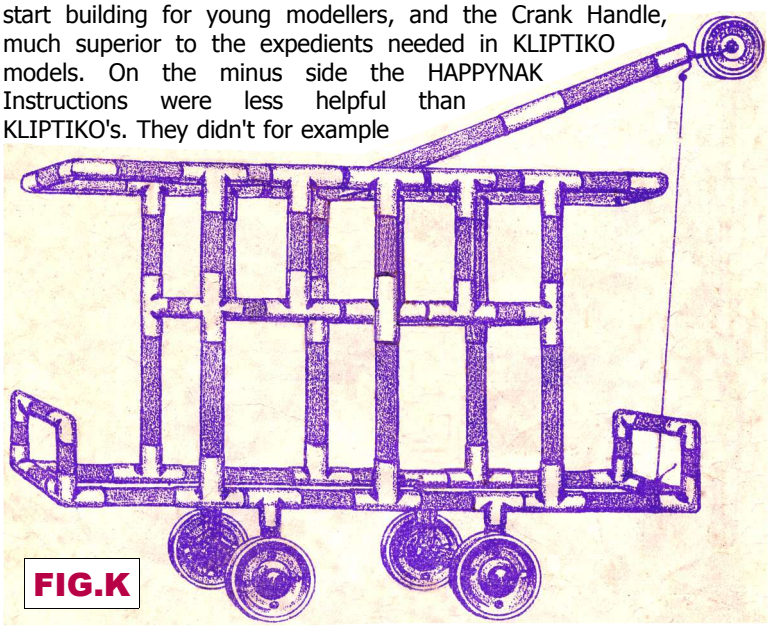


FIG.K

mention the latter's method of joining Tubes in-line (by pushing one into the slit in the other and twisting) though it works perfectly well with the HAPPYNAK parts.

The limited quantity of HAPPYNAK that turns up may not be that significant as a pointer to its popularity when it was on the market: I don't recall seeing any small KLIPTIKO sets even though KLIPTIKO carried on well into the 1930s.

Perhaps KLIPTIKO outlasted HAPPYNAK because it 'sold itself' better with large, interesting models to aspire to, and, unlike Meccano's Blocksetter, they could be made from the larger sets. And later the coloured parts were introduced and the presentation of the sets and manuals updated.

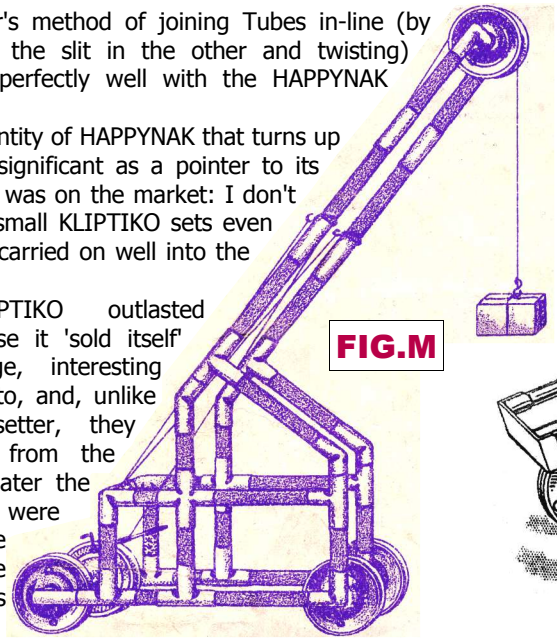


FIG.M

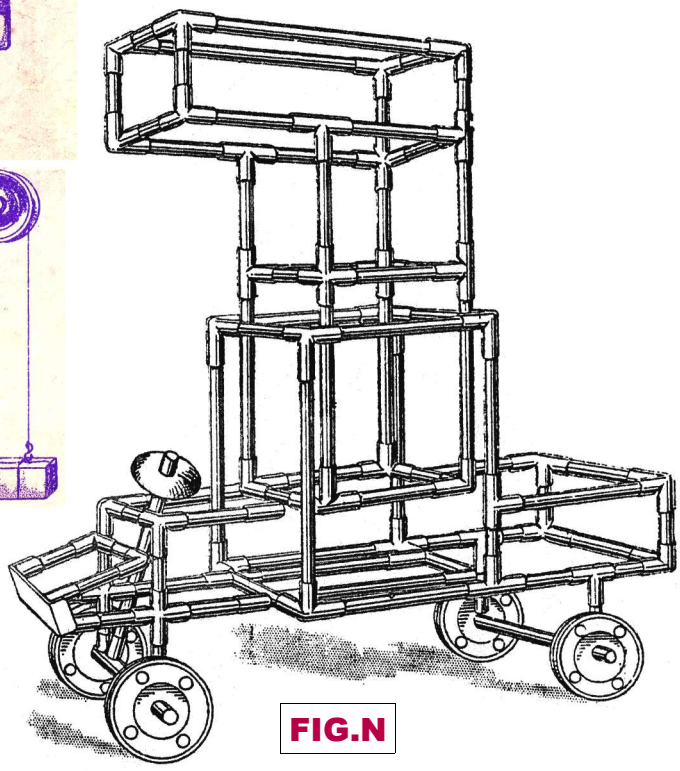


FIG.N