

A LOOK AT THE CONSTRUCTIONEER. This system was marketed in the U.S. for a few years after WW2 and is unusual in having a hole spacing less than the basic $\frac{1}{2}$ " normal in American parts. It consisted of about 50 parts (ERECTOR consisted of well over 100 at the time), mainly (see MCS) Strips, large Flanged Plates (called Bases) and some special parts, mostly associated with fairground models. This account is based on a couple of incomplete sets, a #6, generously donated by Bill Harrison, and a #12 via Richard Gilbert (no relation), who found it while looking for MECCANO in Florida, when he was on holiday there. With the #6 and some loose parts with it, were 2 Manuals Copyright 1947 and with the #12, one Copyright 1948.

THE SETS. The #6 comes in a cardboard box 14x18x1 $\frac{1}{4}$ " with a colourful lid showing 15 of the models which can be

made with the set. Inside is a yellow metal tray with pressed out tags to hold the parts in place. The #12 is in a red metal case with rounded corners and edges, it has the same plan dimensions as the #6 but is 4" deep; again there is a tray (blue) but as well as the 'tags' there are holes in it which allow it to be used as the base for a Merry-go-Round, see p5b of MCS/FB. No Set Contents are available but from the parts used in the models the smallest set, #2, consists of 2 Bases, Strips, Brackets, 4 off 1 $\frac{1}{8}$ " Pulleys with Rubber Rings, and 26 N&B; the #4 has more of the same and the #6 more again (around 90 Strips and 45 N&B), plus 4x13-hole A/G and a small C/W Motor. This Motor is not mentioned in any of the literature and at first glance might not be thought to be a The CONSTRUCTIONEER [T/C from now on] item, particularly because its mounting holes at 3.2" centres, don't line up with the T/C spacing; however it is undoubtedly part of the Set, there was a small Leaflet with it giving instructions for mounting and using it in models, and there is a special cutout in the metal tray for it. Sideplates are 7/8" deep and $\frac{1}{2}$ " apart, and the longer one with the mounting holes in it measures 3.7"; the spring is 3/16" wide and its shaft is shaped to form the winding key. The #8 Set has the Wasp 110v Motor, 18 and 20-hole Strips, 6 off 2" Pulleys with Rubber Tyres, 6 Carnival Seats for Ferris Wheels and the like, and more of the other parts including 10 Bases of different sorts. New parts in the #12 are 28-hole A/Gs, Universal Joints, the Barrel, and the Pinion that drives it, Horses, and the large circular parts B-141 and A-142; 143 N&B are needed for the largest model.

THE PARTS. • All parts are steel except the Barrel A-151 and the associated parts A-152, 154, they are zinc die castings. Strips, Brackets, Pulleys, N&B, bosses and the Eccentric A-126 are nickel plated, other parts are painted. Parts not seen: A-101, 124, 125, 149, 153, 155, 156. All holes are round except in the second version of the Eccentric, A-126, see below.

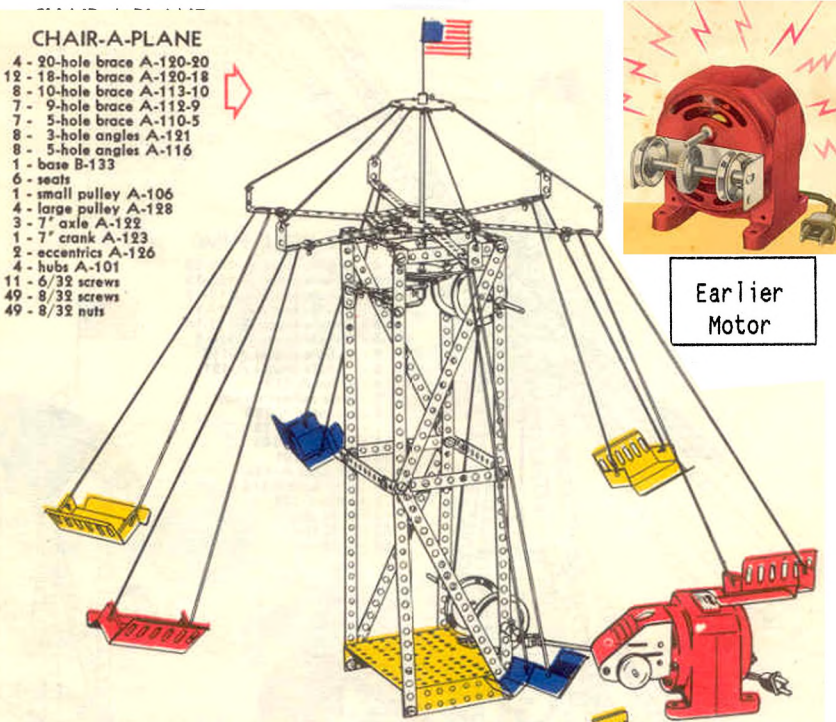
• Strips (called Braces) have hole centres exactly 7/16" (11.1mm) apart and their width is the same. They are about .030" thick, holes are 4.7mm dia (in the other parts as well), and the ends are radiused .27". A/Gs (called Angles) are .020" thick with corner radii of about 1/8"; they are yellow or dark red.

• The Deep Base, B-133, has two rows of holes in both of its flanges. Some of the 3 Sectional Bases, B-135, are as shown in MCS but others are 1 hole shorter with the material containing the single end hole omitted; these also have a lengthways stiffening groove midway between the outer two rows of holes. Bases vary from 22 to 26 thou thick and corner radii from 1/8 to 3/16", with square corners on some Short Bases, B-118. All Bases have been seen painted blue and dark red except B-133, 134, all of which are yellow.

• The yellow circular Base Plate, B-141, has a diameter of 13.9", with a 5/16" flange around the outside and a boss in the middle. The Eccentric Plate A-142 is light red and 3.9" in diameter. B-127, the Carnival Seat, and the Horses, A-143, are light red, blue or yellow.

• The cement mixer Barrel A-151 is about 2 $\frac{1}{2}$ " dia at the 40 tooth gear ring, DP about 16. The bore of the bottom boss is tapped with a coarse thread (why?), and this boss, o/d .373" runs in the centre of the Barrel Support A-154. These parts are not painted but the hand Wheel, A-152 is yellow and it has the name and address of the maker cast around its top face.

• The Eccentric, A-126, is shown in the 1947 Manual with 6 holes, in '48 it has an additional 6 radial slots; both are 2 $\frac{1}{8}$ " diameter. The two versions are shown in MCS but the 6 hole variant is said (incorrectly I think) to be in a later Parts List.



• Similarly the Manuals show the two versions of the Motor shown in MCS (see opposite), the first has an open worm drive to a cross shaft; the later one has an enclosed gearbox in which the worm drives two cross shafts and each of these carries a pinion which can mesh with a (zinc) gear on a the sliding output shaft. The later is long enough to allow the Universal to be connected to it and carries two cone Motor Pulleys A-149, against the two simple Pulleys (A-106?) of the '47 Motor. The two motors, both painted red, also had slightly different air vents in their front and rear faces. The motor which again Bill very kindly contributed, was the second type and ran at about 40rpm on 50 cycles.

• Bosses are .313" o/d, single tapped 6-32, with a bore of .164" (but up to .172 in a few). Axles and the like are .156" (3.96mm) dia; A-102,103,122,140 are 1-3/4, 4, 7, 15" long. N&B are threaded 8-32, the hex Nuts are .34 A/F, 1/8" thick, the round Bolt heads are .30" dia.

• All the parts are accurately made and free from sharp edges. The nickel parts, if they have not gone rusty, look as bright as new; the paint finish is less good with small runs and blemishes here and there, and some parts look as if they were dipped. But although some of the painted parts look well used there is very little rust even where the paint is missing.

THE MANUALS. The Manuals have a bright, fresh look to them, with line drawings of the models and the painted parts shown in solid colour. It is easy to see how to make the small models but the details of some of the larger ones are not always clear; in the '48 Manual a Parts List for each model gives additional help. Many of the models are of fairground subjects and though not much detail is incorporated they generally look quite well. The other models vary and though some of the small ones which are mostly strips, look quite attractive to me, many are partially clothed by the large plates and suffer from the lack of any small plates to fill the gaps. Mechanically the models are generally simple with for instance no luffing in any of the cranes, or any way to lock the winding gear, and in a realistic looking Drill Press the large 6 spoked handwheel that should lower the drill, just turns without doing anything at all. To try the system I made the Merry-go-Round shown in MCS/FB: the drive through the Barrel worked well and the finished model worked smoothly although there were some problems. The base Tray was made of thin, .016" steel and was not really stiff enough to form a good platform. Adjustment of the friction drive to the Crankshafts to keep the Tyres in contact with the Eccentric Plate through the whole 360° was very difficult. Finally as the Crankshafts came to tdc the Piston Rods would fall off them sideways, and there seemed no way of overcoming this within the parts of the system - resort had to be made to MECCANO Spring Clips. The cement mixer Barrel by the way is used as such in one model, mounted on a lorry trailer.

HISTORY. Al Sternagle wrote on The CONSTRUCTIONEER in the April 1987 issue of YesterDaze Toys. Immediately after WW2 steel was in short supply but the Urbana Mfg Co., unlike ERECTOR, had some available and decided to launch a constructional system. The first sets were on sale in 1946 and a little later more parts were added and the #12 Set was added to the range. Production ceased in the early 1950s for commercial reasons but by that time ERECTOR were also threatening legal action, presumably for patent infringements. It would be interesting to know what relevant valid patents ERECTOR had at that time.

AMENDMENTS TO MCS (as necessary, depending on version). HOLE SPACING: 11.1mm (exactly 7/16"). COLOUR: Nickel Strips, Pulleys, Brackets; other parts painted red, yellow or blue - the same part is often in more than one colour. MOTORS: C/W in Set 6; 110v Electric (Wasp) in Sets 8,12. PERIOD: 1946 to early 1950s. MANUFACTURER: Address: Urbana, Ohio. U.S.A. COMMENTS: All parts were included in Set 12. AMENDMENTS TO INDEX IN OSN 6: SPCE: 11.1. DAXL:3.96.

SUMMARY OF MANUAL. #Name: The CONSTRUCTIONEER. #Details of maker: Urbana Manufacturing Company, Urbana, Ohio. U.S.A. #Dates &/or Ref Nos: IFC: Copyright 1947. #Page size: 146x222mm deep. #No of pages: 24 inc covers, unnumbered. #Language: English. #Printing: Cover is brown halftone photo with some parts of model in colour, and bottom orange panel/yellow lettering. Models are black line drawings with some parts coloured. #Page Nos of Parts List & highest PN: 20-21, B-136. #Page Nos of Set Contents & highest PN: 22[names of parts in sets, not parts count], B-136. #Sets covered: 4,6,8. #No of models for each set: 19,31,15. #Name, Model No, Page No of first & last model of each set: [No Model Nos.] 4: DIVING TOWER,4; CABLE SPAN,6. 6: DUMP TRUCK,7; TRAVELING CRANE,19. 8: ELEVATOR,11; CONVEYOR,14. #Other notes: The #8 models using the early type Motor, are on the centre 4 pages.

SUMMARY OF MANUAL. [Details which are as above are not repeated] #Dates &/or Ref Nos: IFC: Copyright 1948. #No of pages: 32 inc covers. #Printing: as above but red bottom panel. #Page Nos of Parts List & highest PN: 30-31, A-155. #Page Nos of Set Contents & highest PN: None. #Sets covered: 2,4,6,8,12. #No of models for each set: 11,13,24,10,14. #Name, Model No, Page No of first & last model of each set: [No Model Nos.] 2: RAILWAY HANDCAR,3; CARRY-ALL,4. 4: TANK CAR,5; STEAM SHOVEL,7. 6: JEEP,8; LOADING CRANE,13. 8: DRILL PRESS,14; BEACON,18. 12: TRACTOR TRAILER CEMENT MIXER,19; HORSE RACES,29. #Other notes: The Motor shown is the later version with the enclosed gearbox.



isn't certain what the system was called in Australia.

6. On **THE CONSTRUCTIONER** (see 9/206), Orion DreamDancer wrote that the B-135 single-bend Bases in his oldest #8 set have no groove and are one hole longer than those with the groove that were in a newer #8. Also, it seems that all the Bases get thinner with time, through the 'old' & 'new' #8's to the thinnest in a #12. Of these three sets only the old #8 has the older style Eccentric with just the 6 holes. On N&B, the old #8 has Phillips Screws & hex Nuts, the newer #8 has slotted Screws with both square & hex Nuts, and the #12 has slotted Screws & hex Nuts. All the Screws have rounded heads and the quantities of N&B found seem to indicate that they were probably originally in the sets concerned. The larger Tire in the newer #8 set has grooves around the outer edge; all the rest of the Tires, large & small, are just rings. All the sets came with manuals: the old #8 is a © 1947; the other two are © 1948. The latter have the part count by the models, and show A/G's & the newer type of Motor/gearbox with the enclosed gears.

7. From Werner Sticht. Ansgar Henze has had the good fortune to find a **WALTHER'S INGENIEUR** set, and kindly passed some details for OSN. The Set is in 'unplayed with' condition, though without a manual, and has no set number anywhere on it. The box is wooden, about 30cm square, with a sliding lid, and quite deep to accommodate a small model, which was included, ready-made, from some of the parts in the Set. The box has 2 wooden partitions and most of the parts are strung to 3 pale green cards. The label, 26*17cm, on the top of the lid has the name with 5 models underneath. All these are in the manual that was with the No.12 set described in 19/550 (but possibly it was from a No.10 outfit). Another label on the underside of the lid has the set contents with illustrations of most of the parts.

The contents of the Set do not relate well to those of Sets 11 (see 7/164) & 12, in that though there are fewer different parts, there are more of some types, particularly the metal ones. For example the Set has 40 A/Gs against 22 in the No.11, and 11 Perf. Plates against 6. Among the parts are 2 Hanger Strips & a Wire Crank Handle, parts which are needed for models in the manual with the No.12 set (they can be seen in OSN 19), but which were not listed in the Set Contents of the No.12. They are included and illustrated in this set's Contents, and for this reason it may be later than the 11 & 12.

As well as there being fewer types of wooden parts,

The OSN Web Site: www.OSNL.freemove.co.uk
Colour pictures of some of the illustrations in OSN 2-11 & 17-26 are now included, and also lists of contents for Nos.1-26.

several have different dimensions. The main differences are that the Base is 75mm square instead of 120*80mm, and one Plate is 35*25mm instead of 35mm square. For the metal parts the most noticeable thing is that there are no Strips or A/Gs longer than 7 holes. Also 6 Screwed Rods with 25 Nuts are included against only one, with 5 Nuts, in Nos. 11 & 12.

A few of the wooden parts are unpainted; the others are variously red, dark blue, dark green, brown, or black. The metal parts are bright nickel plated on one side and black on the other.

Werner added that the metal parts in the No.12 of OSN 19 have the same nickel/black finish, and that the House Wall Panels in that set have a red brick finish, with a cutout in one as a doorway and a white oblong on another as a window, with the window frame outlined in black.

8. More from Don Redmond. • On the absence of the name **Hudson** from the 'Hudson' manuals (25/737), perhaps there is a misunderstanding about the word 'Hudson'. It is the designation of the 4-6-4 locomotive type, which is known in the UK as the Baltic. The 'Hudson' name was probably used by the New York Central Railroad because its main line from New York ran along the Hudson River to Albany (and thence westward).

• And in reply to a query about **KONSTRUKTOR VOENNAYA TEHNIKA** (25/718), the maker's name is actually ЧЗАЗ which transliterates to CHEAZ. [The address in Cheboksary is: I. Yakovleva Avenue, 5.]

Baukästen This excellent book (see 21/601) has been remaindered and at the time of writing (end of February) the hardback edition was available from www.zweitausendeins.de at DM 24 + postage (DM 16 for UK, and the same if 2 copies are ordered at the same time). Thanks to Thomas Morzinck for this information. The site is German of course but has an English language option. Payment can be made by credit card. The copy I bought didn't have the errata slip in it that was in the original, but it only has 10 items on it and I can copy it for anyone who needs it.

EXTRA MCS SHEETS Each Sheet costs 15p + postage if the whole batch as listed in each Issue of OSN is ordered at the same time. That makes £1.80 for the 12 below, plus postage. For all other purchases each Sheet costs 20p + postage if copied double-sided like the originals, but 7½p per side + postage if copied single-sided. All back Sheets can be supplied.

MCS Amendments, List No.10 [1 Sheet]
BILD-A-KIT: X1.1,2/5 [1 Sheet]

DURALUMINUM CONSTRUCTION SET: X1.1,2,4,5 [2 Sheets]
ELECTRIC: X2.3a/5a/6a,5b,7d,7e [2 Sheets]
FRAMUS: X1.1/2,4/5 [1 Sheet]
HANDY SET: X1.1,2/5/6 [1 Sheet]
KITPOCK: X2.4/6,5 [1 Sheet]
TOY TOWN: X1.1,2,4/6,5 [2 Sheets]
WALTHER'S INGENIEUR: X3.5a,3b/4b/6b [1 Sheet]

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EDITORIAL A record 25% or so of subscribers sent comments on the 'new' OSN, and reactions were mixed. Nearly all liked the colour & the better quality B&W photos, but over half strongly regretted the passing of the folded, double-sided, stapled sheets. To them I can only say 'me too', but I'm afraid that single-sided A4 is the only practical way I can see of continuing to produce the N/L. No one mentioned the increased price, the new rates are given overleaf.

One point of detail. For my convenience all the pages of the last N/L were collated face up so the wide margins were to the left & right on successive sheets. The idea was that the recipient would turn over every other sheet so two printed sides could be seen at a time with the wide margins innermost (and then two blank sides, etc). This seemed a good idea but not everyone thought so, and I have found myself that more often than not I open to blank pages and then have to turn over a page to see a page number (Sod is alive & well). It would be easy to have the wide margin on the left on all pages and if you feel strongly about this, one way or the other, please let me know.

On another matter, several readers have reminded me that my OS Database is now very out of date. Perhaps I'll be able to produce a new version in 2004 and I'd be glad to hear if anyone has thoughts about improvements to it. Bear in mind though that new material will increase its present 44 pages considerably.

FROM READERS

1. From Don Redmond. On **THE CONSTRUCTIONER** (9/206, 26/779), the hole spacing between the 2 centre lengthwise rows of holes in the Plates is $\frac{1}{2}$ " instead of the standard $\frac{7}{16}$ ".

THE CONSTRUCTIONER: S1

[29/845]

2. From Don Redmond, some additional notes on **Phase 2 MODELIT** (see 15/186) from a recently found Set E. The Gear does have 50 teeth and meshes with the 16t Pinion at 2h centres, giving a DP of 38, as in Phase 1. There are no Sprockets in Set E, but a 45" length of Chain was found in it which appears to fit over every other tooth of the Gear. Its pitch is .18". Strips are 10.5mm wide. Both arms of the A/G are 14.5mm and in each the holes are toward the edge. Some Crank Handles have a hole $1\frac{1}{2}$ " from the bend (like the Phase 1 parts, see 8/186) but others, if they are genuine, don't.

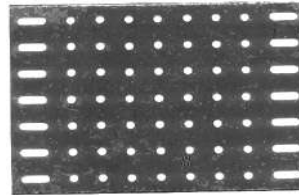
MODELIT (b): S1

[29/845]

3. David Hobson showed me a French **CONSTRUCTOR** lot of parts, and they seemed to fall into two groups. The first correspond to those for the 'Early to Mid 1920s' shown in 24/701, and the Strip parts are 8.0-8.1mm wide, very near the 8.2mm of Period B.

In the second the Strip parts are 10.1mm wide and so are nearest to the 9.8mm of Group D. They generally correspond to those described for 'About 1930' in OSN 24 except for the Flanged Plate. It has the usual feet at the corners but is 9h long instead of the later (presumably) 11h

type, and its ends, and end holes, are extended by about 6mm. Below a plan view – the length overall is 112mm (120mm for the 11h type) and the slots are 10.6mm long. The flanges are similar to the 11h type but the end slots match those on top and the depth along the sides is a little less, typically $9\frac{1}{2}$ against 10mm. Of the Lozenge parts only some



$\frac{1}{2}$ -Lozenges were present and these, and the Flanged Plate are dark red (like late 1920s MECCANO). The Strip parts, the 12h Wheel Disc, the A/B, and the flat Hook (as in MCS, 17.6mm long with a 2.7mm hole) are nickel. The brass parts are the Pinion (#25 in MCS, with 19t, Mod. 0.6), the Flanged & Grooved Wheel (#27, 32mm o.d., turned with a slightly tapered integral boss), and the Loose Pulley (#31, again turned, 22mm o.d., and 3mm thick).

3 Nuts found with the parts are brass, square, 5.6mm A/F, and 1.8mm thick.

CONSTRUCTOR [1]: S1

[29/845]

4. Another lot courtesy David Hobson, this time the model leaflet and parts from a **MASTER BUILDER** No.25 set, complete except for 2 A/Bs, & a few Nuts. The Strips have the large radius ends noted in 16/450 & 19/554, and the thread of the N&B is 8-32; otherwise the parts are as described in OSN 16, but the following details may be of interest: • The holes are 4.3mm except in the A/B. • The end radius of the Strips is about $\frac{7}{16}$ " and there is only 3mm of metal outside the end holes. • The 4h Wheel Discs are 24.0mm Ø and the holes are on a $\frac{5}{8}$ " pcd (if the o.d. had been a little larger to accommodate a .7" pcd, the part could also have served as a corner bracket). • The A/B, typically 12.4*12.6mm, is 12.4mm wide. It has a 4.5mm hole in one arm and a slotted hole 4.9mm wide & 7.2mm long in the other, both with only about 2mm of metal outside them. • The N&B are nicked, the Nut is square, 8.8mm A/F & 3mm thick, the Bolt has a roundhead, 7.6mm Ø, & is 6.6mm u/h.

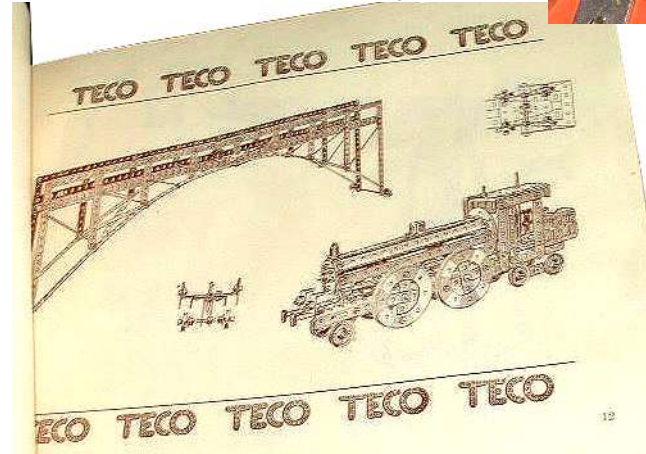
The Model Leaflet is one sheet 203*490mm folded into 4, & is nearly identical to the Wetzell one described in 16/451. The Intro, which couldn't be seen clearly before, speaks of 16 successive sets which build 95 models using 58 separate parts, & the address under it is 468 B'way, N.Y.City. It is identical to the one in the No.10 Leaflet in 16/451. The significant differences are that the front has no Acorn logos (on either side of 'THE' at the top), and has been rubber stamped 'REMOVED TO BUSH TERMINAL, BUILDING No.6, BROOKLYN. N.Y. Notes on the addresses & logo were given in 18/495.

MASTER BUILDER: S1

[29/845]

5. Notes from Don Redmond on **BUILD-X & DELTA-X** (see 11/288), and David Hobson lent me some of his parts. In OSN 11 I missed the fact that the bosses of some at least of the plastic circular parts have '**D**' section bores. Those seen are the 21mm Wheel, P-006, & the Compound Gears, P-003-5. The 19mm Pulley, P-008, has a normal circular bore though. The round Axles with my parts are most likely

under them (perhaps like the 'C' in TECO). They may be simplified versions of STABIL Inventor Set parts. ●2x 25h A/G. ●2 **Double Brackets**. ●A **Double Bent Strip**. ●2 **Corner Brackets**. ●4x 5h Ø **Flanged Rings**. ●2x 8h **Wheel Discs**. ●2 **Circular Plates or Rings** (under the Wheel Discs). They have extra holes in the outer ring as in the 'O' in TECO. ●4 **Flanged & Grooved Wheels** (inside the Flanged Rings). ●4x 2h Ø **Pulleys** (with no face holes) fitted with **Tyres**. ●2x 5h & 1x 11h **Slotted Plates**. ●1 each of 14 & 28t **Gears**, similar to the Bakelite version but they look like metal painted gold. ●4 **Collars**. ●The non-STABIL **Screwdriver** & 2 **Spanners**. ●The light blue **Flexible** (presumably) **Plates** on the separate card: 2 each of 5h*3,5,11h. Only the inner end holes are slotted. ●In the **N&B box**: Hex **Nuts** & RH **Bolts** of various lengths up to an



estimated 3cm. **A/Bs**. 2 **Reversed A/Bs** with a longer than usual centre section. 2 of the little **Grooved Cylinders** (the later STABIL type). A **Wire Crank**. ●No **Axles** or **Screwed Rods** can be seen anywhere.

The manual cover is like the '48' and the one inside page shown (p12 left) has 2 STABIL Nr.51 models on it, the Loco on the cover & a Bridge. The pages are again single-sided.

DATES None have been found but most of the 'imitation' Argentinian sets appeared in the decade after WW2. STABIL Flexible Plates were introduced in 1953 so that may be a pointer. The TECO/STABIL models shown are in both pre- & postwar STABIL manuals, but the Loco & Crane are the prewar versions - Flexible Plates were used in them later. The MÄRKLIN Digger mentioned earlier was probably introduced in 1957 but I've not seen earlier post-WW2 editions.

TECO: S2

OSN 34/1028

Snippet – The EDUCATIONAL METAL BUILDING SET

All the Ebay photos are shown here and the parts in the box are immediately recognisable as being similar to THE CONSTRUCTIONEER (see 9/206 & 26/779), a system made by the Urbana Manufacturing Company, Urbana, Ohio. No more detailed address is given in any of the the material to hand. The company on the envelope below is the Urbana



No.4 had only one Large Flanged Plate (the No.6 had 2 but more Pulleys & Tyres). Photos of later No.4 & 6 sets show them to contain two 11h A/Gs, and it's possible that these are hidden from view at the bottom of the box.

The 2 top photos on the sheet below the Set appear to be the lid (on the left) and the open box. (It's possible that the darker line along the bottom centre of the box are the pair of A/Gs - they were usually painted yellow.) The models below could well be made from THE CONSTRUCTIONEER parts but I've not found any that look similar in the two manuals to hand: an early edition, ©1946, with a boy playing with a Mobile Crane on the cover, and one, ©1948, with a boy, a girl, & a Chair-O-Planes model, as in OSN 9. So perhaps the



Engineering Co., 631 (or similar) Carwin Street, Urbana, Ohio. So an allied enterprise no doubt. From the parts that can be seen in the box it looks to have a similar content to a No.4 THE CONSTRUCTIONEER, except that the

models on the Sheet were created especially for the EDUCATIONAL METAL BUILDING SET.

THE CONSTRUCTIONEER: S2

OSN 34/1028

THE CONSTRUCTIONNEER This was an American system launched soon after WW2; it was unusual in its range of parts & in having holes at $\frac{7}{16}$ " pitch. Some notes on the parts & manuals appeared in 9/206, with a little more on the parts in 26/779 & 29/845. The aim now is to complete the description of the manuals with the 1946 edition, and to describe what can be seen of the sets in the numerous Ebay photos which have accumulated over the years.

The MANUALS The copyright 1947 & 1948 editions were described in OSN 9 but to make it clear, the cover shown was the 1948 version; the 1947 was virtually the same but without the yellow oval bottom right – the words in it were printed in the bottom panel but with no price.

The 1946 edition had the completely different cover below, & 16 unnumbered



FIG.1

pages, 152*228mm, plus covers. p1 has an introduction which speaks of 'a ... set', & 'this set', with no mention anywhere of different sets, or set numbers. The main parts needed for the manual models, and as will be seen, the same parts in the only known 1946 set, correspond to those in what was later called Set No.6. 50 models are shown on pp2-13, from DUMP TRUCK to FLAT CAR. As later there is a line drawing of each model with the painted parts shown in solid blue or red. A number of the models, particularly the larger ones, were carried forward into the 1947 edition, but by no means all of them. p14 has the Illustrated Parts, and p15 is an order form for them. p16, C2, C3 are all blank, also C4 except for the maker's name & address, & 'Copyright 1946'.

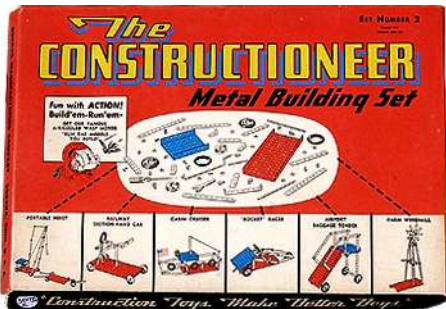


FIG.3 1948 Set 2 Lid & Parts

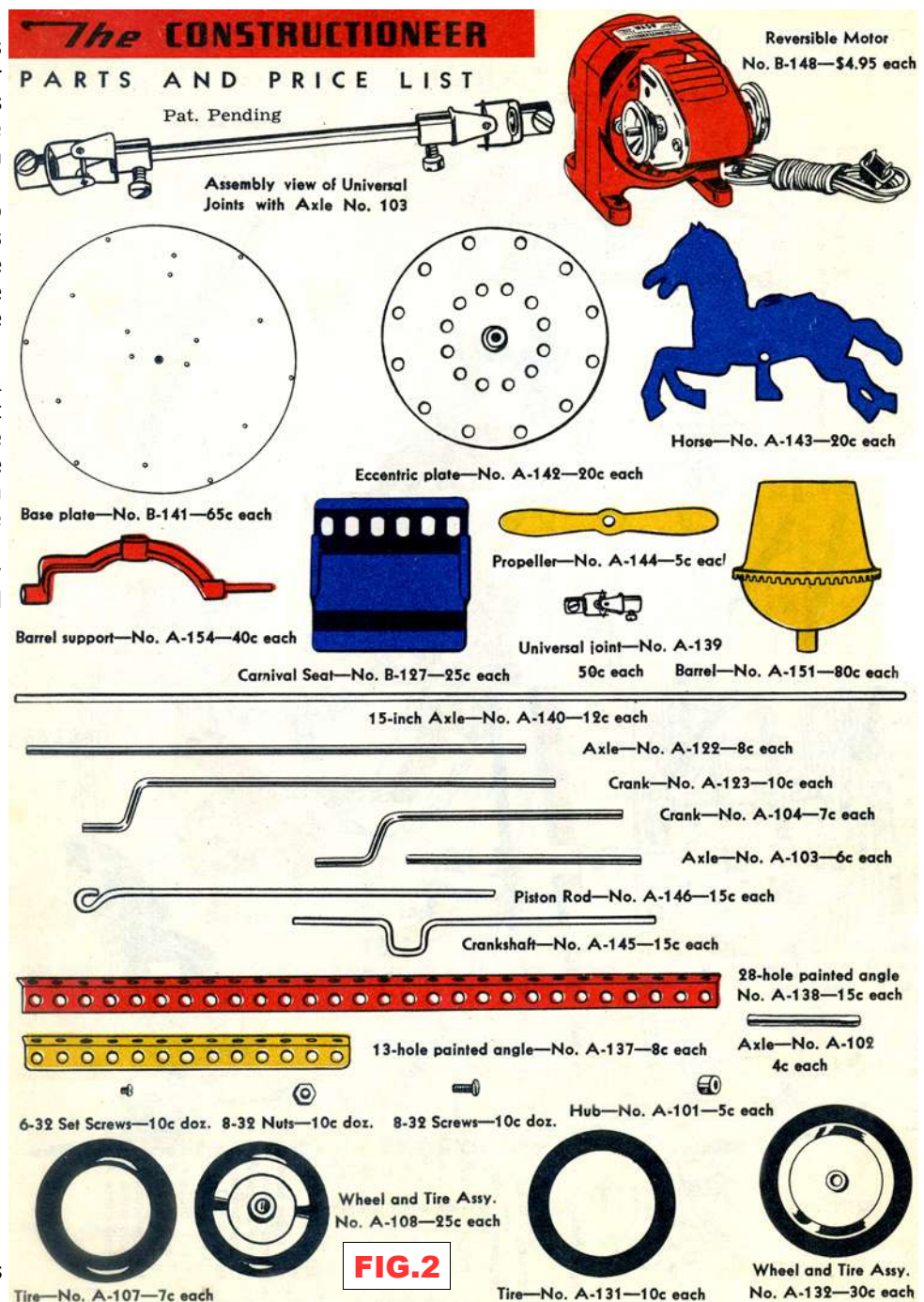


FIG.2

THE PARTS Figs.2 & 6, mainly taken from the 1948 manual, show all the parts in the system. **Finishes:** Strips, Wheels, & Brackets were nickelled. The zinc diecast 'barrel' parts #A-151-155 were often not painted. Virtually all the painted parts may be found in red, blue or yellow.

1946 There were just 21 parts as follows: 5,7,9,10,12,15h Strips; 3*2h A/B; 1*7*1h DAS; Flanged Plates: 2-bay Long Base, B-119, & 1-bay Short Base, B-118; 1 1/8" Ø Pulley & Rubber Ring; Short and Long Axles (1 3/4" & 4"), A-102, A-103, & Crank Handle; Collar; Set Screw, 6-32 x 3/16"; 8-32 Hex



FIG.4

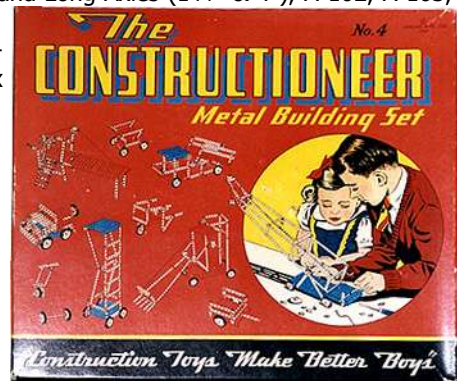
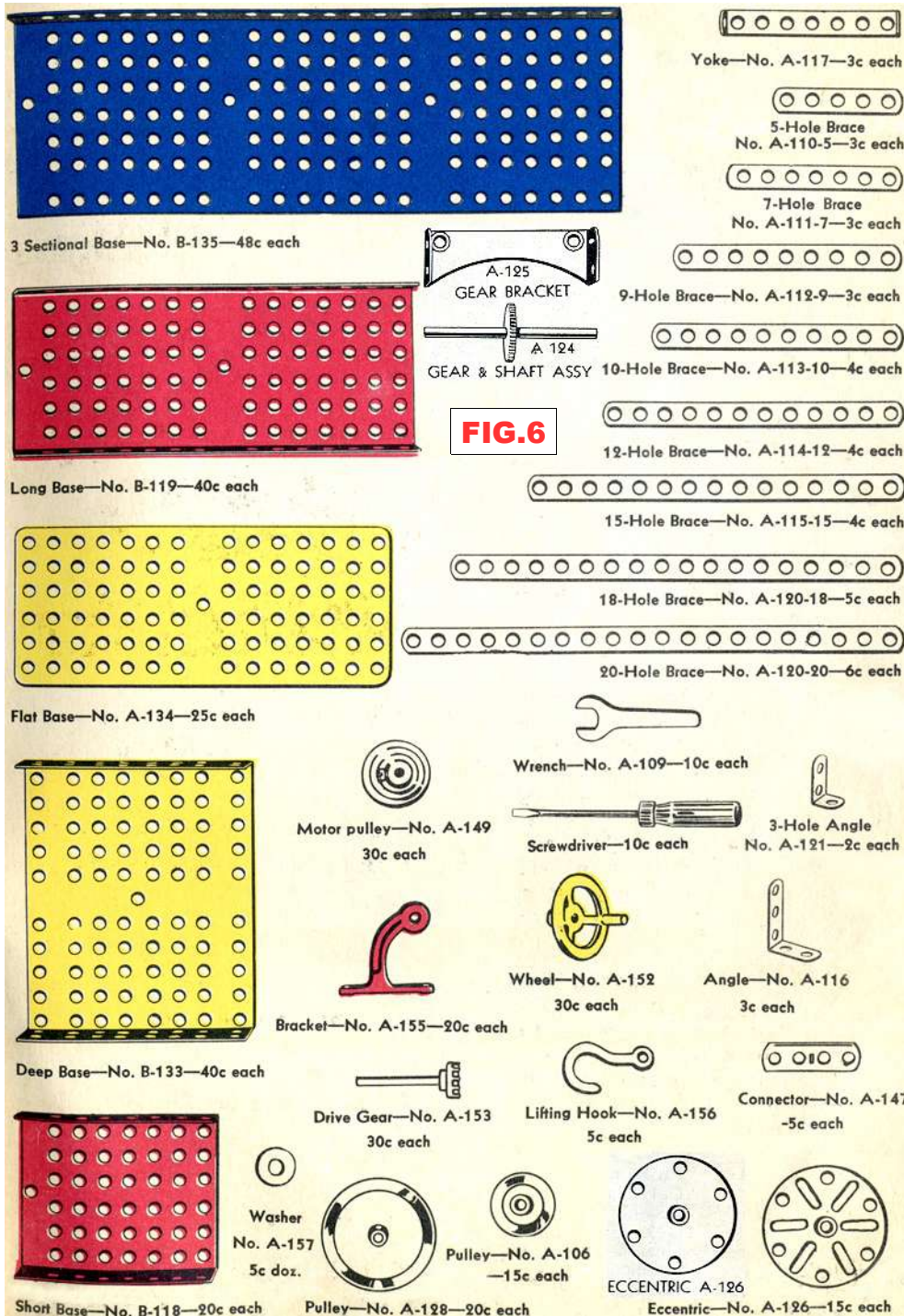


FIG.5 1947 Set 4 Lid



Nut & 3/8" roundheaded Bolt; Spanner & Screwdriver.

1947 The parts now included all the Plates in Fig. 6 and the other new parts were: 18 & 20h Strips; Carnival Seat B-127; longer Axle (7" A-122) & Crank Handle A-123; 1*2h A/B; 2" Ø Pulley A-128 & Tyre A-131 (those seen have circumferential ribbing). Also the (6-hole pattern) Eccentric Wheel A-126; the Motor, with unguarded reduction gearing, & the separate parts for it : A-124 & 125.

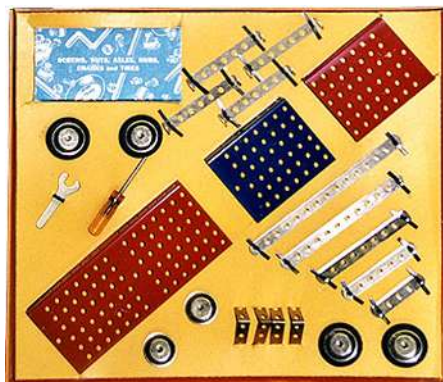


FIG. 7 1947 Set 4 Parts



FIG. 8 1946 Set 6 Lid & Parts FIG. 9



1948 The range now included the yellow 13.9" Ø Circular Base B-141 (with a 5/16" flange & a central boss); the red 3.9" Ø Circular Plate A-142; the Propeller; the 13 & 28h A/Gs; the Universal; the 15" Axle A-140; the Hook, and the zinc die-cast parts associated with the Barrel (A-151 to A-155, see Fig. 13).

Two parts were modified: 1) slots were added to the Eccentric A-126; 2) the 3-bay Single Flanged Plate, B-135, was shortened to eliminate the single end hole & a lengthways stiffening groove was added between the outer two rows of holes.

THE SETS As already mentioned there were 3 manuals, © 1946, 1947 & 1948, and sets will be identified by which manual was with them.

As said earlier the 1946 manual covered only one unnumbered set. The 1947 edition covered Sets 4, 6, & 8, and the 1948 version added Sets 2 & 12. It has been said that sets were made after 1948 but if so the 1948 manual continued to be used.

Packaging Sets 2, 4, & 6 had cardboard boxes and each had a distinct lid design which remained unchanged. Examples are shown in Figs. 3, 5 & 8, together with their open boxes. Sets 8 & 12 were in metal boxes, either red or blue, with a contrasting oval red or blue label. The parts were in a tray, on a card in the lid, & in the bottom of the box. Some details are shown in Figs. 10-12 & 14-16, though the one or two other sets seen have some of the parts arranged slightly differently. The mixes of colours in the sets shown are typical but variations occur. A common one is the interchange of red & blue for the Flanged Plates.

1946

The only known set, see Figs. 8 & 9, has a box 18*14*1 1/4". Printed in the bottom left corner of the lid, in tiny characters, is '©' surrounded by 'URBANA MFG. CO.', with underneath what is probably '1945'. Most of the parts are clipped to the card.

1947

The lid of the **small parts box** which was black in 1946 is now blue.

The No. 4 box is 15 1/2*13 1/2" and the lid (Fig. 5) has 'No. 4' top right. There may also be a copyright date top right. The parts are again clipped to a card (Fig. 7).

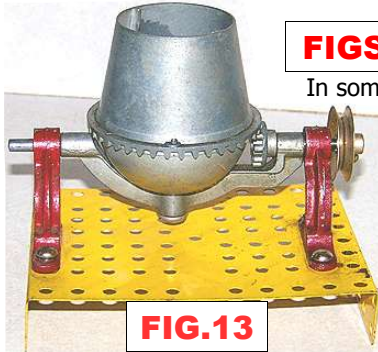
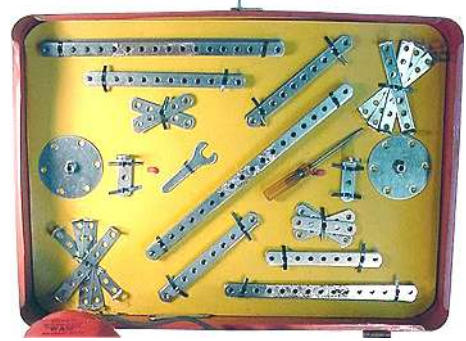
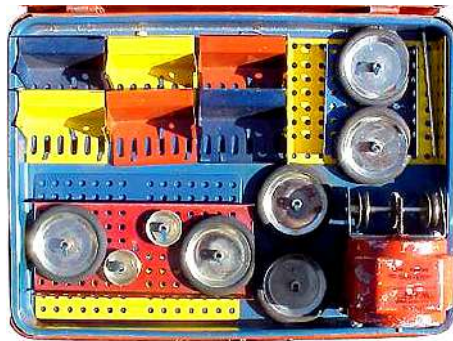


FIG.13

FIGS.10-12 1947 Set 8 Box, Tray & Lid Card

the small parts box and, under it, the Motor. The

In some sets all 6 Pulleys are fitted with a Rubber Ring.

The No.6 Its lid is as Fig.8 but with 'No.6' in tiny letters top right. The contents were as in 1946 but on a yellow backing card.

The No.8 Its metal box was red, 14*10" (Fig.10). Inside the parts

other parts were held by pressed through tags. The Universals were at either end of a 4" Axle mounted alongside one of the Long Bases in place of the 2 Pulleys, the latter deleted or in the small parts box.

Later the Motor & the cutout in the base for it were removed and an oval label was stuck on to fill the space. At the same time 4 yellow 11h A/G's were added with 2 in a 'V' (as in the No.4) of top of each of the Long Bases.

None of the manual models show the C/W Motor, and none of those for the No.6 need the Universals, except that for one Crane it was suggested that the model could be powered by the Wasp Motor using them.

The No.8 Its metal box was now blue with a red oval label, and inside the metal tray was red. No 13h A/Gs can be seen is any of the sets seen but 4 are needed for some of the No.6 manual models. In one set the small parts are in a plain brown envelope rather than the usual blue box.

The No.12 has a similar metal box to the No.8 but red and at 14*18*4", larger. Most of the parts can be seen in the figures below. Again there is a cutout in the tray for the Motor, near the centre of one long edge.

A No.12 model is shown below and 2 others in Figs.18 & 19, all at their original size.

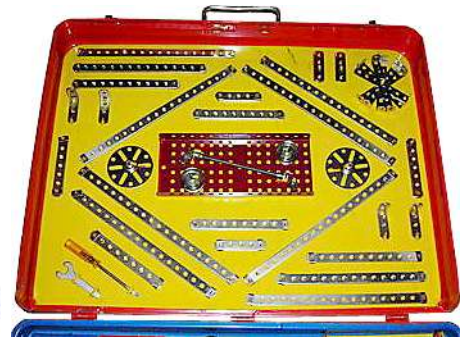
were either clipped to a card in the lid (Fig.12), tagged to a blue metal tray with a cutout for the Motor (Fig.11), or sat in the bottom of the box (not shown – the photos to hand show a jumble of Plates, Strips, etc.)

1948

The No.2 lid (Fig.3) has 'Set Number 2 | Copyright 1947 | URBANA MFG. CO.' top right. The models shown on it were all in the 1948 Manual.

The No.4 remained unchanged except that 2x 11h A/G's were added in 'V' formation on the Long Base, and in one set the backing card looks red.

The No.6 was changed by the addition of a C/W Motor (see 9/206) & 2 Universals. The backing card was replaced by a yellow pressed steel base with cutouts for



FIGS.14-16 1948 Set 12 Base, Tray & Lid Card

SUGGESTIONS FOR SET No. 12

TRACTOR & POWER TAKE OFF

- 2 - 28-hole angles A-138
- 1 - motor
- 3 - flat bases
- 2 - 4" axles
- 2 - 7" axles
- 1 - 1 3/4" axle
- 4 - large wheels
- 6 - small wheels
- 2 - hangers from cement mixer
- 7 - 5-hole angles
- 8 - 3-hole angles
- 4 - 7-hole braces A-111-7
- 3 - 12-hole braces A-114-12
- 2 - 10-hole braces A-113-10
- 1 - cement mixer
- 10 - hubs
- 1 - hoke
- 2 - eccentrics
- 50 - screws
- 50 - nuts

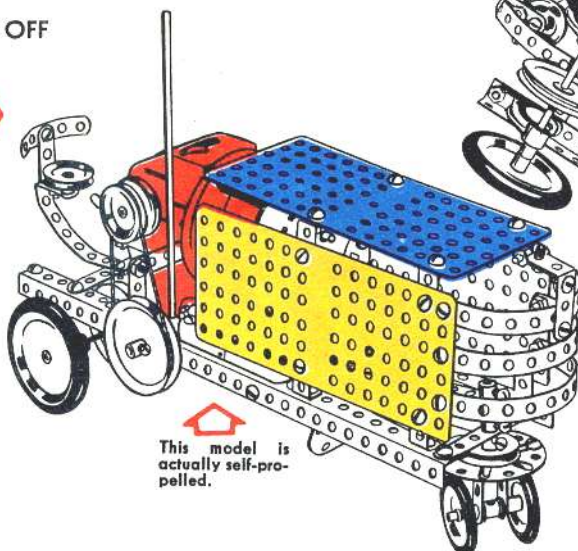
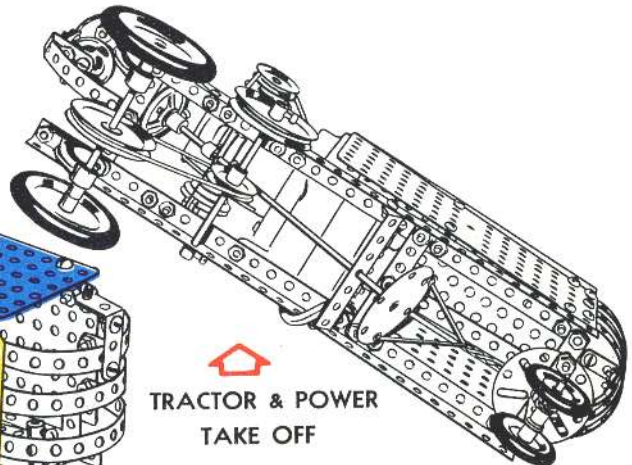


FIG.17

This model is actually self-propelled.



TRACTOR & POWER TAKE OFF

A model with unusual steering.

POSTSCRIPT There is no official list of the contents of any of the T C sets and though the main parts can be seen in the smaller outfits, Sets 8 & 12 are a problem. But in discussion with Jacques Pitrat he mentioned that he has a No.12, probably the one shown in Figs.14-16, which has unused parts still in their original position, and seems complete. He kindly offered to compile a list of the parts in it, as follows (R B Y denotes red, blue, & yellow):

10x A-101 Hub; 1x A-102 Axle 1 3/4"; 5x A-103 Axle 4"; 1x 104 Crank (short); 8x A-106 Pulley (small); 6x A-107 Tire; 1x A-109 Wrench; 10x A-110 5h Brace; 10x A-111 7h Brace; 6x A-112 9h Brace; 10x A-113 10h Brace; 10x A-114 12h Brace; 12x A-115 15h Brace; 16x A-116 Angle; 10x A-117 Yoke; 16x A-120-18 18h Brace; 16x A-120-20 20h Brace; 15x A-121 3-Hole Angle; 4x A-122 Axle 7"; 1x A-123 Crank (long); 4x A-126 Eccentric; 6x A-128 Pulley (large); 6x A-131 Tire (large); 2B+2Y A-134 Flat Base; 0x A-137 13h Angle; 4R+4Y A-138 28h Angle; 6x A-139 Universal joint; 1x A-140 15-inch Axle; 1R A-142 Eccentric plate; 2B+2R+2Y A-143 Horse; 1B+1R+1Y A-144 Propeller; 6x A-145 Crankshaft; 6x A-146 Piston Rod; 12x A-147 Strip Connector; 2x A-149 Motor Pulley; 1x A-151 Barrel (not painted); 1Y A-152 Steering Wheel; 1x A-153 Drive Gear; 1x A-154 Barrel support (not painted); 2R A-155 Bracket; 1x A-156 Lifting Hook; 14x A-157 Washer; 1B B-118 Short Base; 1R B-119 Long Base; 3B+3R+2Y B-127 Carnival Seat; 2Y B-133 Deep Base; 2B+2R B-135 3 Sect-ional Base; 1Y B-141 Base plate; 1x B-148 Rev-ersible Motor; 42x 6-32 Set Screws; 140x 8-32 Nuts; 144x 8-32 Screws; 4x 8-32 Screw long; 2x Large Screw for the Barrel; 1 Screwdriver. [Question: why was the prefix 'B' used for a few of the part numbers?]

Notes from Jacques. • The blue tray is used as a very large base for the Merry-Go-Round. • Two parts were not listed in the manual: Long 8-32 Screw with

15mm of thread instead of 8; and Large Screw for the Barrel. It is 6.0mm Ø & 8mm long and is used in the threaded hole at the bottom of the Barrel, to fasten it to its Support in the Tractor Trailer Cement Mixer (below). 2 were found in the Set but only one is needed. • Of the 6 Universal Joints found only 3 are used in any of the models. • The parts lists for one or two of the models call for more parts than were found in the Set but as far as can be seen these are errors. • There are other errors with too few parts listed in some cases, and some incorrect part numbers. • Curiously, as in the No.8, there were no 13h Angles in the Set although 4 are needed for one model, the Draw Bridge. As many of the Set 6 models use them, but none of the No.8, perhaps this part was only in the No.6, and the Draw Bridge was a mistake. 13h Angles would have been helpful in many Set 8 & 12 models though, and if they were not in those sets it also means that the progressive nature of the system was lost in 1948. There is perhaps a hint of this in the manuals because in the 1947 edition the No.6 models are headed 'For Sets Nos. 6 or 8' whereas in 1948 the heading was simply 'For Set No.6'.

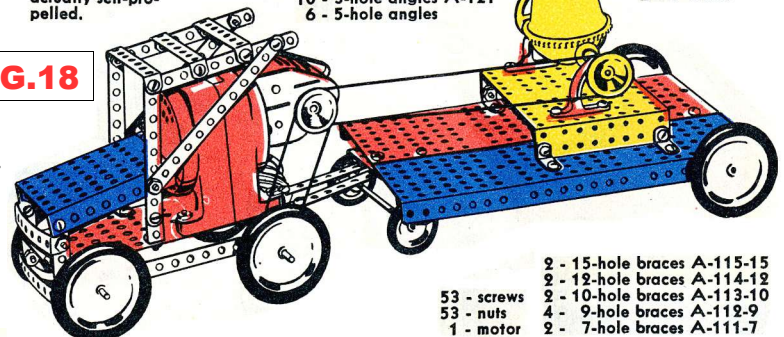
TRACTOR TRAILER CEMENT MIXER

This model is actually self-propelled.

- 2 - long red single bend base
- 1 - short blue double bend base
- 1 - blue flat base
- 1 - deep double bend yellow base
- 1 - cement mixer assy. with pulley
- 10 - 3-hole angles A-121
- 6 - 5-hole angles

- 7 - yokes A-117
- 6 - large wheels
- 2 - small wheels
- 1 - pulley A-128
- 2 - 7" axles

FIG.18



- 53 - screws
- 53 - nuts
- 1 - motor

- 2 - 15-hole braces A-115-15
- 2 - 12-hole braces A-114-12
- 2 - 10-hole braces A-113-10
- 4 - 9-hole braces A-112-9
- 2 - 7-hole braces A-111-7

