

## 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 8 3/4" 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.



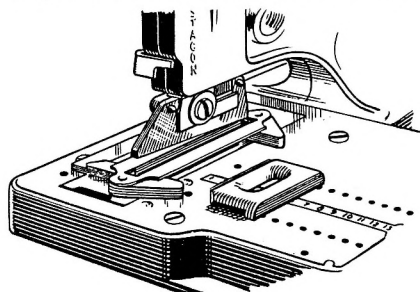
2. From David Hobson: • The **GILBERT NEW WHEEL TOY** was available in Britain well before 1921 (see 13/360): it is the subject of full page Gilbert ads in the Dec. 1919 and March 1920 Boys' Own Paper. [3 sets were mentioned, at £1.19.6, £3.7.6, & £5.5.0. The middle outfit had 'gears and pinions', and 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 1/2, 1, & 2" Strips into any length from 3/4 to 12".

• A system called **DORFAN**, or DUFAN, 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 Dorfman 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 **PYFYL** (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.

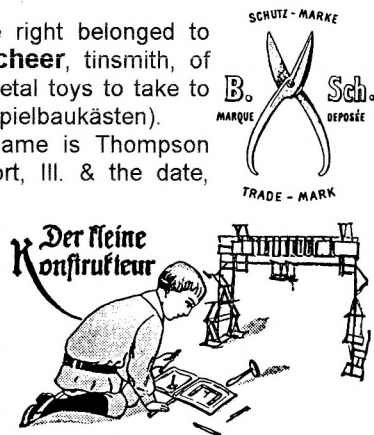
• For **BANGAROO** (see 9/235) they are Alfred James Bartlett of Gloucester, and 1908 (although a later entry shows 1922). The toy is described as 'detached pieces to join together'.

• 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 **CONSTRUCT-O-CRAFT** Model 100 set, which is packed in a tube with a screw top, 3 1/8" Ø by 9 5/8" 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 **eb**s 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 it's 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 'fiddly' 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

**CONSTRUCT-O-CRAFT** This small American system appeared in 1946, soon after BUILD O (see 27/796), and they had certain features in common. These included detachable Hubs, an Eccentric, & smaller than usual N&B. C-O-Cs other obvious feature is the impressed pattern of bracing on all the Strips.

This account is based on several incomplete No.500 outfits, parts from a No.800 set; & notes on two No.100 sets.

## Revised MCS Entry

**Name** CONSTRUCT-O-CRAFT

**Country** U.S.A.

**Maker** Boxar Tool & Mfg. Co; from 1948: Hedge Tool & Mfg. Co. Both of 2240 W. Ogden Ave., Chicago 12, Illinois.

**Sets** Nos. 100, 300, 500, 800.

**History** 1945 is mentioned in MCS but the first manual is ©1946, and only the No.500 set is mentioned in it. 1947 saw a new manual and the introduction of the 300 & 800 sets (though an example of the 300 has yet to be seen). The only known No.100 outfit is from Hedge Tool, and its Model Sheet is © 1948 - it is the only known set from that company but the 300, 500, & 800 outfits are advertised on the No.100 Model Sheet. No later material is known.

**Hole dia.** 4.0mm.

**Hole pitch** 12.7mm.

**Colour** Most parts are plated, perhaps with zinc, and the finish now varies from bright to very dull. All Plates though, except the Flanged Plates, are painted black on one side (#530 on both). The non-painted side is sometimes found gold lacquered. The Fibre Plate #505 is black.

**Bosses** The normal boss is only used on certain parts in the No.800 set. It is brass, 9.5mm Ø, 3.95mm bore, with a narrow, shallow ring of peening, and is single-tapped 6-32. Some are zinc plated.

The detachable Hub, #529, is brass or aluminium, 16.7mm long o/a, with a 4.0mm bore. The hexagonal body is 9.5mm A/F, 7.2 mm long, & is single-tapped 6-32. The pigot is threaded ¼"x32tpi.

**Fixing** 6-32 N&B. Various different N&B are found. Often found are steel Bolts, 8.9mm u/h, with a 5.7mm Ø very shallow mushroom; and 6.4mm A/F, square, brass Nuts, 2.5mm thick. Both are dull plated. Others known are zinc plated brass, hex Nuts, 6.3mm A/F, and steel RH Bolts, 6.3mm Ø, either untreated & 7mm u/h, or zinc & 8mm u/h.

The Hub screws into the formed upset centre of the Pulley Disc, #520.

**Axles** 3.75-3.83mm Ø with square ends.

**DP** 30.

**Motors** one 110v.

**Remarks** The Hub/Disc method of making pulleys is labelled 'Patent Pending' in the manuals but no actual patent is known at present.

**PARTS** All the parts and their names are shown opposite – some supplementary notes follow:

- The **Crank Handle**, #503, is 13½cm long o/a with a 2½cm handle.

- The **Fibre Plate**, #505, is .25mm thick and was rolled up for packing in the set. Perhaps it was somewhat squashed in doing so judging from the examples seen. The corner holes are at 8.2 & 5.45" centres, and so the equi-spaced holes along the short edges are at about (a rather useless) 1.35"

pitch. This doesn't actually matter in the manual models.

- The **Strips**, #506-511, are 12.7mm wide and .8 to 1mm thick. The embossed pattern looks quite attractive in some models and no doubt adds a little stiffness, but the edges of many of the Strips are slightly wavy from the stamping process. The flat ends usually allow a neat 1 hole overlap joint but longer laps are untidy if both raised sides face in the same direction. The flat ends prevent the 'vees' from interlocking.

- The **Flat Bracket**, #512, is 11mm wide, and the **A/B**, #516, is made from it.

- All the **Flanged Plates** have square corners. Not shown in the illustration are 7 shallow, impressed grooves, 3mm wide, in the top face of the Sector Plate.

- The centre of the **Pulley Disc**, #520, is upset on the concave side to carry the thread.

- The **Loose Pulley**, #522, is brass, 12.7mm o.d., 5mm wide, and the bottom of its vee is flat.

- The **Plates**, #525-527 & 530, are just thick enough to be rigid. The black paint on those zinc on the reverse side chips off easily, but is much more durable on the 2 examples of the gold lacquered type to hand. Both incidentally have narrow brown stripes running across the gold lacquer.

- The **Hook** is 25½mm long o/a & is made from 1.2mm wire.

- The **Screwdriver** is 110mm long o/a, and the wire is 3.6mm Ø. The **Spanner** is 72mm long o/a and 1.3mm thick. The small end is hexagonal and just fits the Nuts; the jaw width of 9.5mm at the other end is slightly too small to fit the Hub. The jaw gaps are the same as those in the BUILD O Spanner, and the two are very similar, but the C-O-C is noticeably wider at the large end, 22mm across against 19.

## The '800' Parts

- The 5\*7h **Flanged Plate**, #532, has, like the other Flanged Plates, flanges with round holes & square corners.

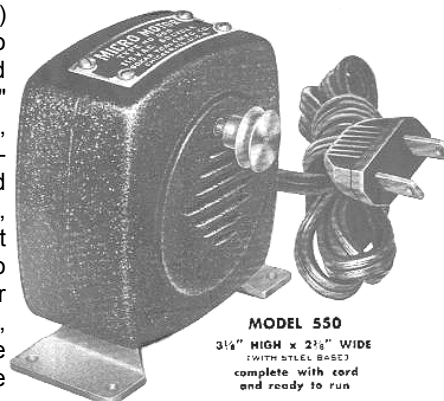
- The 45t **Gear**, #533, 39.3mm o.d., is dull plated brass with a peened in boss. The 15t **Pinion**, #534, 13.9mm o.d., is plain brass machined from the solid, with a 3.4mm face width. The two are a little tight running together at 1" centres. The teeth of the Pinion have less taper than is usual.

- **Pulleys**. The ½" o.d., #535, is solid brass. The 1" & 1¼" (#536 & 537) have aluminium or steel discs of exactly those diameters, joined with brass bosses. Their vees are about 4mm wide and are parallel at the circumference, like some ERECTOR Pulleys.

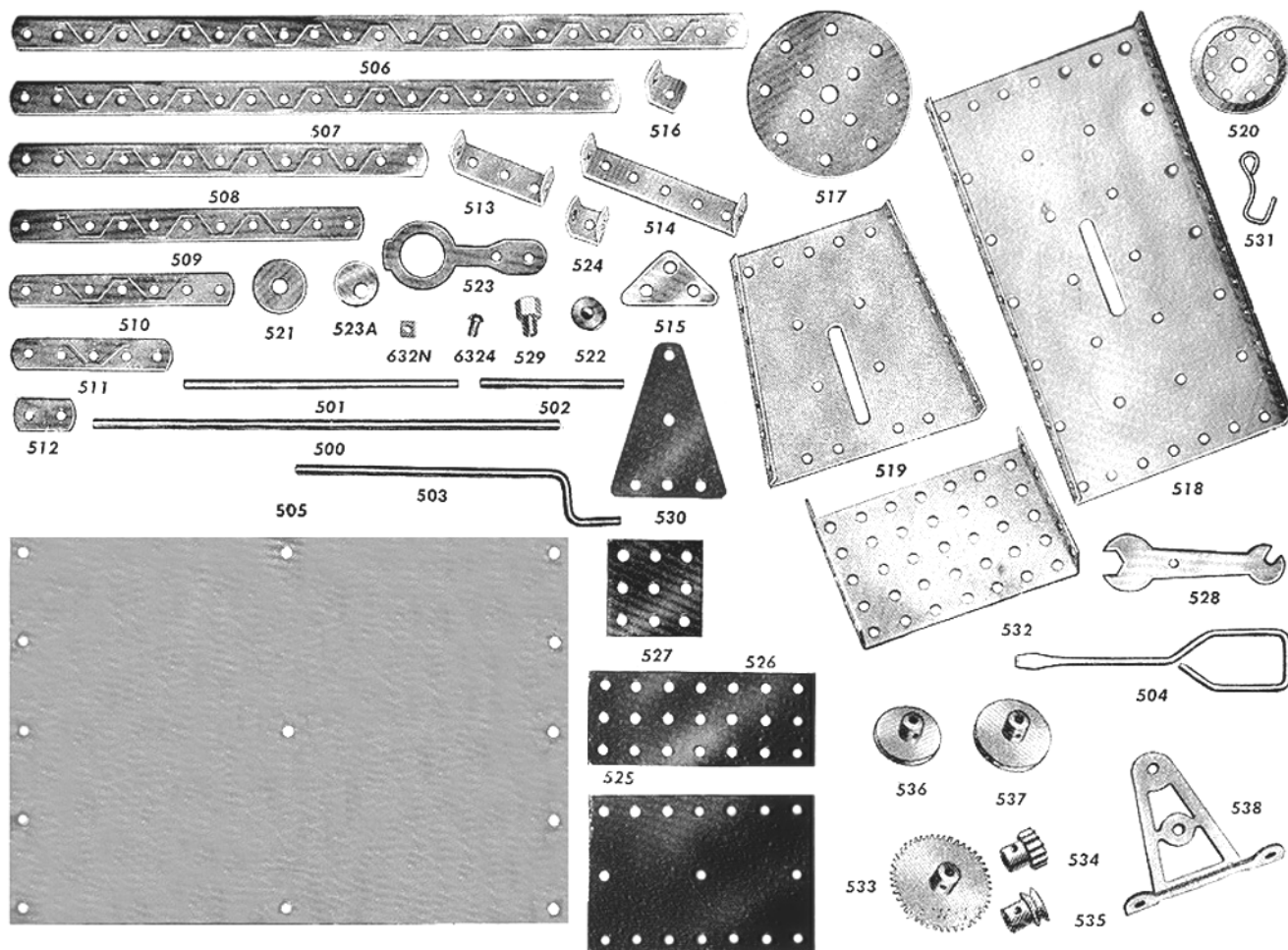
- The **Shafting Standard** too may be steel or aluminium. The base holes are at 2" pitch and the top holes are at 1" to take the Gears. In the example to hand the top holes look as if they have been opened out to 4.3mm Ø, perhaps to allow the Gears to run sweetly.

- The **Motor** (right)

is called the Micro Motor in an ad, and is described as 3⅞" high by 2⅜" wide, fully cased in aluminium, with a baked black wrinkle finish, and louvres front and back. A photo of an actual Motor shows bright feet, and a bright grille instead of the nameplate on the top. The Motor's shaft is ⅞" Ø and the Motor Pulley for it has a blind bore. It is







Parts for Models 800, 500, 300

| Model 800<br>No. of Pcs. | Model 500<br>No. of Pcs. | Model 300<br>No. of Pcs. | PART<br>NO. | DESCRIPTION                  |
|--------------------------|--------------------------|--------------------------|-------------|------------------------------|
| 2                        | 2                        | —                        | 500         | 7 1/4" Long Shaft            |
| 4                        | 2                        | 2                        | 501         | 4 1/4" Long Shaft            |
| 4                        | 4                        | 2                        | 502         | 2 1/4" Long Shaft            |
| 1                        | 1                        | 1                        | 503         | Crank                        |
| 1                        | 1                        | 1                        | 505         | Vulcanized Fibre Plate       |
| 4                        | 4                        | —                        | 506         | 11 1/2" Long Girder—23 Holes |
| 6                        | 6                        | 4                        | 507         | 9 1/2" Long Girder—19 Holes  |
| 6                        | 6                        | 4                        | 508         | 6 1/2" Long Girder—13 Holes  |
| 10                       | 8                        | 4                        | 509         | 5 1/2" Long Girder—11 Holes  |
| 15                       | 12                       | 6                        | 510         | 3 1/2" Long Girder— 7 Holes  |
| 20                       | 16                       | 8                        | 511         | 2 1/2" Long Girder— 5 Holes  |
| 16                       | 14                       | 4                        | 512         | 1" Long Strap—2 Holes        |
| 6                        | 6                        | 3                        | 513         | 1 1/2" Long Channel Bracket  |
| 6                        | 6                        | 4                        | 514         | 2 1/2" Long Channel Bracket  |
| 8                        | 8                        | 4                        | 515         | Triangular Plates            |
| 24                       | 20                       | 10                       | 516         | Angle Brackets               |
| 4                        | 4                        | 4                        | 517         | Large Discs                  |
| 2                        | 2                        | 1                        | 518         | Base Channel—Rectangular     |
| 1                        | 1                        | 1                        | 519         | Base Channel—Triangular      |
| 12                       | 12                       | 10                       | 520         | Dished, Threaded Wheels      |
| 3                        | 2                        | 2                        | 521         | 3/4" Diameter Washers        |
| 2                        | 2                        | 1                        | 522         | 1/2" Diameter Brass Sheaves  |
| 1                        | 1                        | 1                        | 523         | Eccentric Arm                |
| 1                        | 1                        | 1                        | 523A        | Eccentric Arm Washer         |

| Model 800<br>No. of Pcs. | Model 500<br>No. of Pcs. | Model 300<br>No. of Pcs. | PART<br>NO.          | DESCRIPTION               |
|--------------------------|--------------------------|--------------------------|----------------------|---------------------------|
| 10                       | 8                        | 5                        | 524                  | U-Type Brackets           |
| 4                        | 4                        | 2                        | 525                  | Plates                    |
| 2                        | 2                        | 2                        | 526                  | Plates                    |
| 4                        | 4                        | 3                        | 527                  | Plates                    |
| 6                        | 6                        | 5                        | 529                  | Brass Threaded Studs      |
| 4                        | 4                        | 2                        | 530                  | Fan Blades                |
| 1                        | 1                        | 1                        | 531                  | Wire Hook                 |
| 1                        | —                        | —                        | 532                  | Transmission Base         |
| 1                        | —                        | —                        | 533                  | 45-Tooth Gear             |
| 1                        | —                        | —                        | 534                  | 15-Tooth Gear             |
| 1                        | —                        | —                        | 535                  | 1/2" Pulley               |
| 2                        | —                        | —                        | 536                  | 1" Pulley                 |
| 1                        | —                        | —                        | 537                  | 1 1/4" Pulley             |
| 2                        | —                        | —                        | 538                  | Transmission Bracket      |
| 1                        | —                        | —                        | 550                  | 110 V.A.C. MICRO MOTOR    |
| 200                      | 170                      | 98                       | TOTAL — COMPLETE     |                           |
| 95                       | 90                       | 49                       | 6324                 | Screws                    |
| 95                       | 90                       | 49                       | 632N                 | Nuts                      |
| 390                      | 350                      | 196                      | TOTAL — MAJOR PIECES |                           |
| Included with every set  |                          | 1                        | 504                  | Screw Driver              |
|                          |                          | 1                        | 528                  | Wrench—for Studs and Nuts |

9.3mm o.d. with an 8.5mm Ø boss single-tapped for a 4-36 Grub Screw.

**A '100' Part** A 9\*5h Flanged Plate with square corners, only included in the No.100 outfit.

**SETS** The **No.500** is the most commonly found outfit and is packed in a box 14\*18", with the lid below. The parts are mostly clipped to a red backing card but a few are held under slits in it. The N&B are in a small black & grey card box with the name & SMALL PARTS on it; the Brackets are in a clear plastic tube about 6" long.



The **800** is in a deeper box of about the same size with a similar lid except that the background is green. Half the box is taken up by the Motor in one corner and the '800 only' parts clipped to a red card alongside it. The other parts are on 2 layers of red cards in the other half. The small parts box is like the 500 one but stamped '800' on the top.

The two **No.100** sets known, both from Hedge Tool, have different packaging. One is in a normal box, 13½\*11\*1¼", and its label is rather like the photo part of the manual cover in the next column. It has the same boy & Bridge but the background is red, the 3 parts of the name are one under the other, and 'Model 100' is in the black squiggle at the top. Text on the right side replaces the centre oblong, and claims 96 steel & brass parts, with the major parts heavily plated.

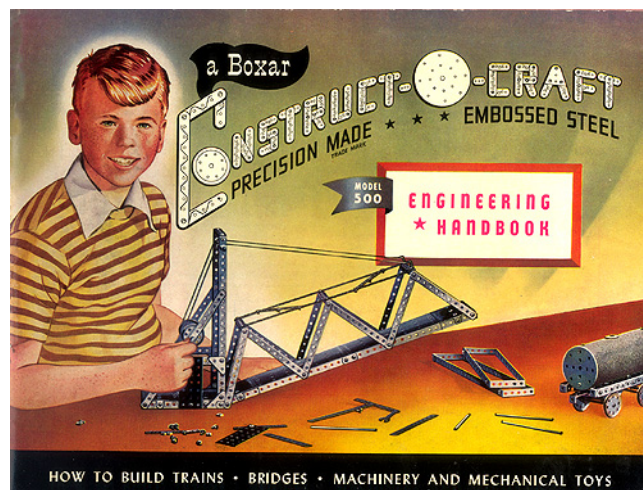
The other set, in a tube, was mentioned in 18/522. Its wrap around label is like the box one, but with black bands top & bottom bearing a slogan & the company name.

The 22 different parts in the Set are shown on the Model Sheet (with the boxed set), but without quantities. These parts, with their possible numbers (from the model 'parts required') in curly brackets, are 5, 11, & 19h Strips {8,4,2}; 3 & 5h long DAS {2,2}; the Pulley Disc & Hub {4,4}; the 5h Ø Disc, & ½" Loose Pulley {1,1}; the Corner, Angle, Double & Flat Bracket {2,4,3,4}; 2¼ & 4¼" Axles, and the Crank Handle {2,2,1}; a RH Bolt, square Nut, & Hook {25,22,1}; the Spanner & Screwdriver {1,1}. The other part in the Set (and used in the models) is the 9\*4h Flanged Plate {1}, but the 7\*5h (#532A) is shown in the Illustrated Parts. No Flanged Plate or Model Sheet was in what remained of the tubed outfit.

**MANUALS** Apart from a Model Sheet for the No.100 outfit, copyright 1948, only two manuals are known. The first, copyright 1946, for the 500 set, is described in the Summary below. The other, copyright 1947, is similar but with some changes & additions to cover the 300 & 800 sets. The main changes are listed after the 500 Summary.

**Summary of the 1946 Model 500 MANUAL** •Name: Construct-O-Craft Model 500 Engineering Handbook. •Details of maker: Boxar Tool & Mfg. Co., 2240 W Ogden

Ave., Chicago 12, Illinois. •Dates &/or Ref Nos: © 1946 on p1 & C4. •Page size: 276\*210mm. •No. of pages: 32+covers. •Language: English. •Printing: Cover below; models are B&W photos with pink surrounds. •Page Nos. of Illustrated Parts & highest PN: C3,6324. •Page Nos. of Set Contents & highest PN: 32,6324. •Sets covered: No.500. •No. of models: 69. •Name, Page No. of first & last model (no Model Nos.): PLAYGROUND SLIDE,2; HEAVY DUTY RADIAL DRILL PRESS,29. •Other notes: • parts needed for models on pp30-31. • templates for card parts on p32.



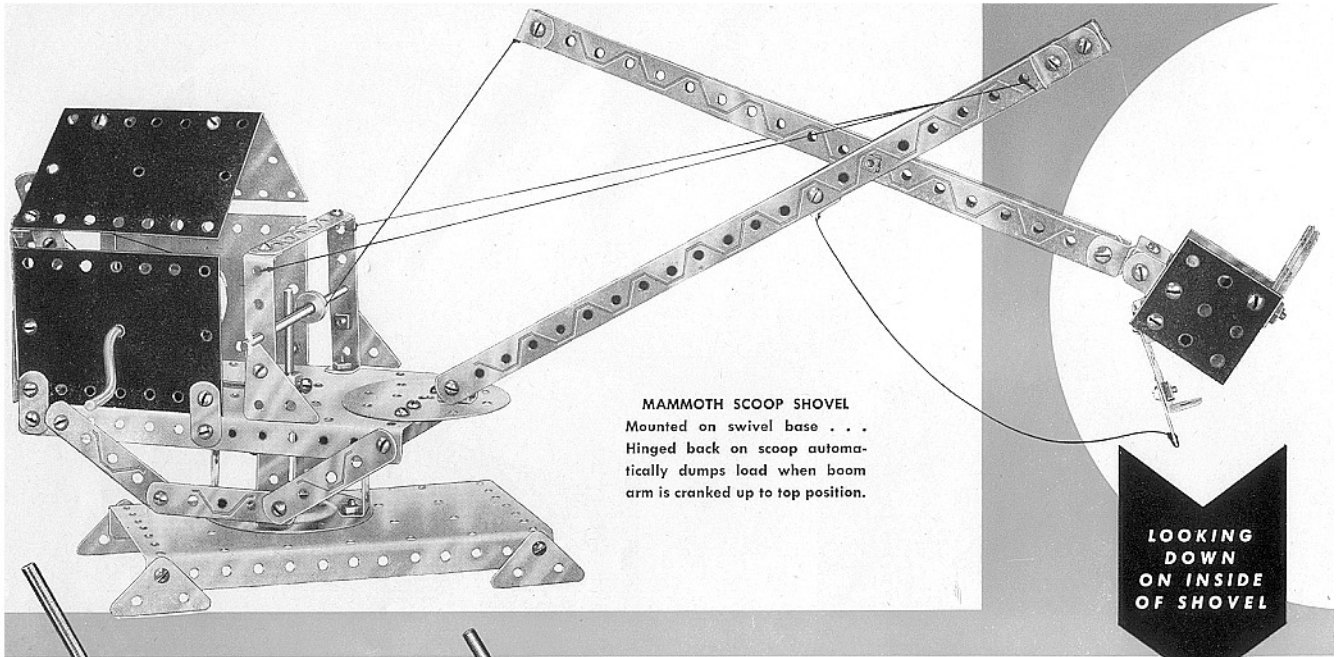
**Changes in the 1947 Model 500 MANUAL** • The cover is as above but with the centre oblong orange, and '(ALSO USED FOR MODELS 800 & 300)' in small letters under 'ENGINEERING HANDBOOK'. • C2 has an ad for the Motor instead of a letter from the 'boss'. • p1 & C4 have '1<sup>st</sup> Edition copyright 1946 & 2<sup>nd</sup> Edition copyright 1947'. • In the Parts Required pages the models that can be made with the 300 set are asterisked, from Playground Slide to Drill Press. Also tips are given in the model pages for adapting some other models to the 300 contents. • The Set Contents now include Sets 300 & 800, and the new parts are shown in the Illustrated Parts. • The colour surrounds for the models are light green. • The 800 set is the subject of a centre supplement of 4 unnumbered pages, with orange surrounds to some of the illustrations. 'ENGINEERING HANDBOOK SUPPLEMENT NUMBER ONE' is on p1 together with a Line-shafting model. p2 shows a Lathe, and p3 a Countershaft model. p4 describes gearing-down using Gears & Pulleys.

**The 1948 MODEL SHEET** This is a sheet about 18\*28", printed on both sides in B&W, and folded into four. On the front is the heading 'MODEL 100 CONSTRUCTION MANUAL and MODEL PARTS LISTING'. Under it are the parts needed for the different models, and illustrations of the different parts in the Set (including the 5\*7h Flanged Plate, but numbered 532A, presumably the PN of the 9\*5h version used in the models). At the bottom is 'MANUFACTURED EXCLUSIVELY BY HEDGE TOOL & MFG. CO., 2240 WEST OGDEN AVENUE, CHICAGO 12, ILLINOIS, U.S.A. © 1948 H.T.&M. Co.' On the reverse side is an ad for the Motor, and another for the 300, 500, & 800 sets.

There are 21 models on the front side, from SUN DIAL to FLAT CAR, and on the back are 27 more, from RADAR TOWER to SAW HORSE.

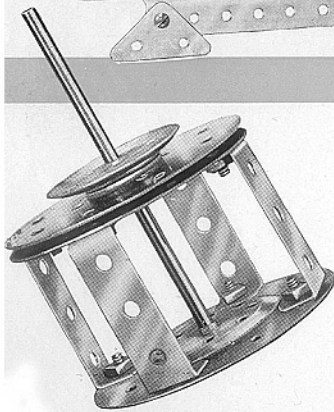
**MODELS** There is one large photo of each model, with additional views of details in a few cases. The 69 '500' models range from simple domestic items and other small models, the Bomber opposite for instance (but how are the wheels held on?), to the Shovel above right. This and a few other models have a simple band brake. In a handful of



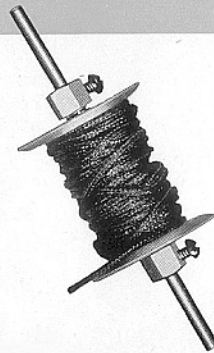


**MAMMOTH SCOOP SHOVEL**  
Mounted on swivel base . . .  
Hinged back on scoop automa-  
tically dumps load when boom  
arm is cranked up to top position.

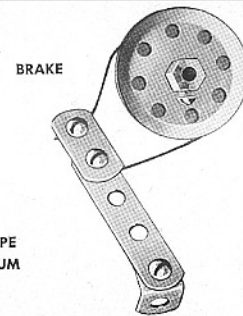
LOOKING  
DOWN  
ON INSIDE  
OF SHOVEL



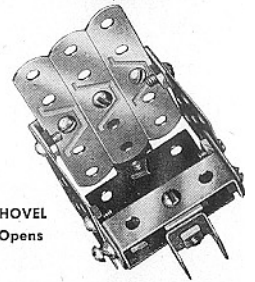
**TURNTABLE**



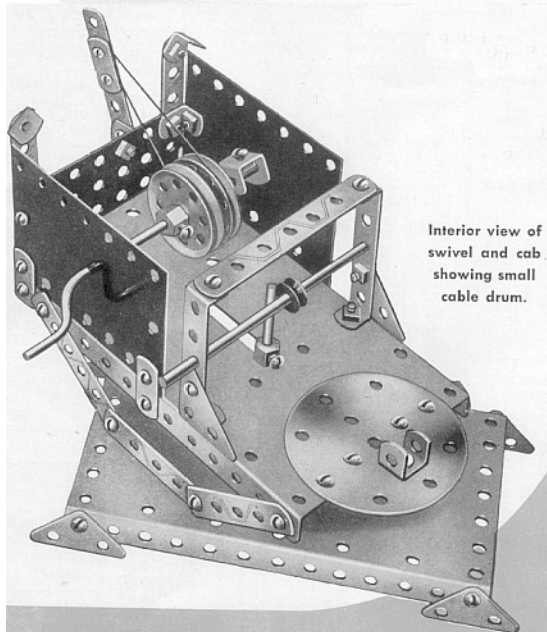
**LARGE TYPE  
CABLE DRUM**



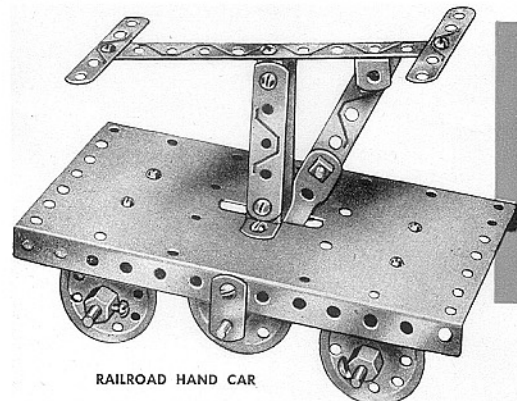
**BRAKE**



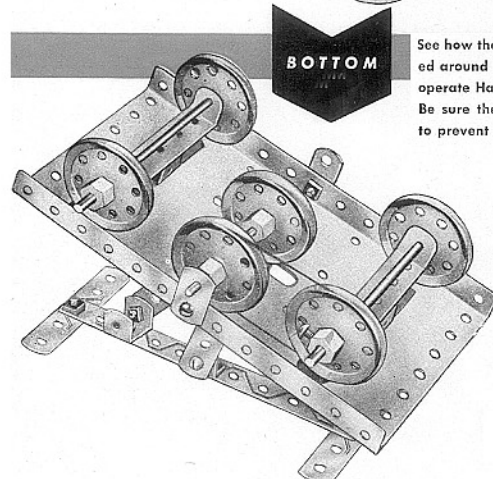
**SCOOP SHOVEL**  
Actually Opens



Interior view of  
swivel and cab  
showing small  
cable drum.

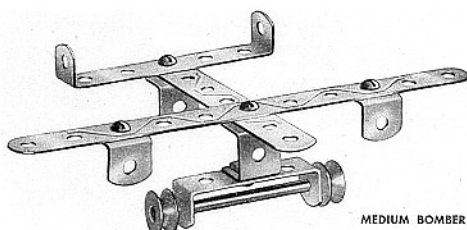


**RAILROAD HAND CAR**



**BOTTOM**

See how the cord is pass-  
ed around the wheels to  
operate Hand Car drive.  
Be sure the cord is taut  
to prevent slipping.



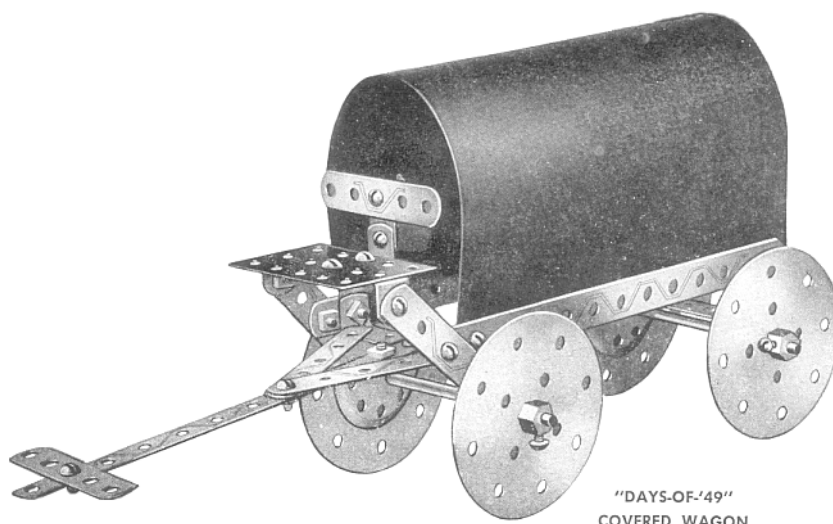
**MEDIUM BOMBER**

models the Eccentric is used to provide reciprocating motion, as in the Hand Car on the previous page. Those cases, some cord drives, and centre-pivot steering, are the main mechanical features. The unusual Fibre Plate is used as the casing of tanks & boilers, in a Loco for example, and in the Covered wagon right.

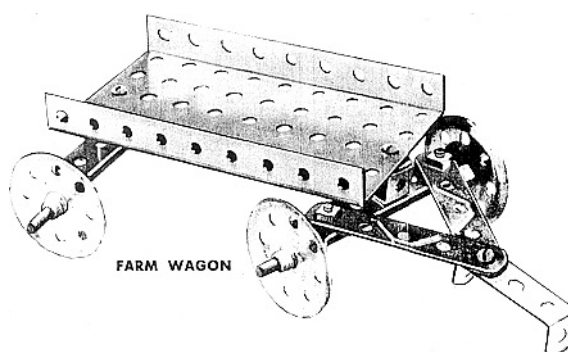
The three '800' models are rather disappointing. The Line-shafting merely shows all the new Pulleys on a geared countershaft, with a cord drive from the Motor. The Motor isn't used in either of the other models, nor any of the new parts. The Countershaft is labelled as a Special Model and shows straight & crossed cord drives between pairs of pulleys. It needs many more parts than are in the Set but the functionality of the model could easily be achieved with those in the 500 outfit. The third model is the Lathe below. I don't think it has any working features other than the pulley drive to the main spindle.

The 48 small '100' models are mostly new and while not very exciting, they are a fair selection from a small set, with most of the usual favourites present. The Farm Wagon opposite is not the best model but does show the 5\*9h Flanged Plate clearly.

I made a Derrick Crane from my 500 set without too much difficulty, although a few problems arose. The main one was that there is no Collar or Axle Stop in the system – the Hub or Double Bracket (with a N&B through the base hole) can be used but they are often needed for other purposes and in any case often prove to be over large for



"DAYS-OF-'49"  
COVERED WAGON



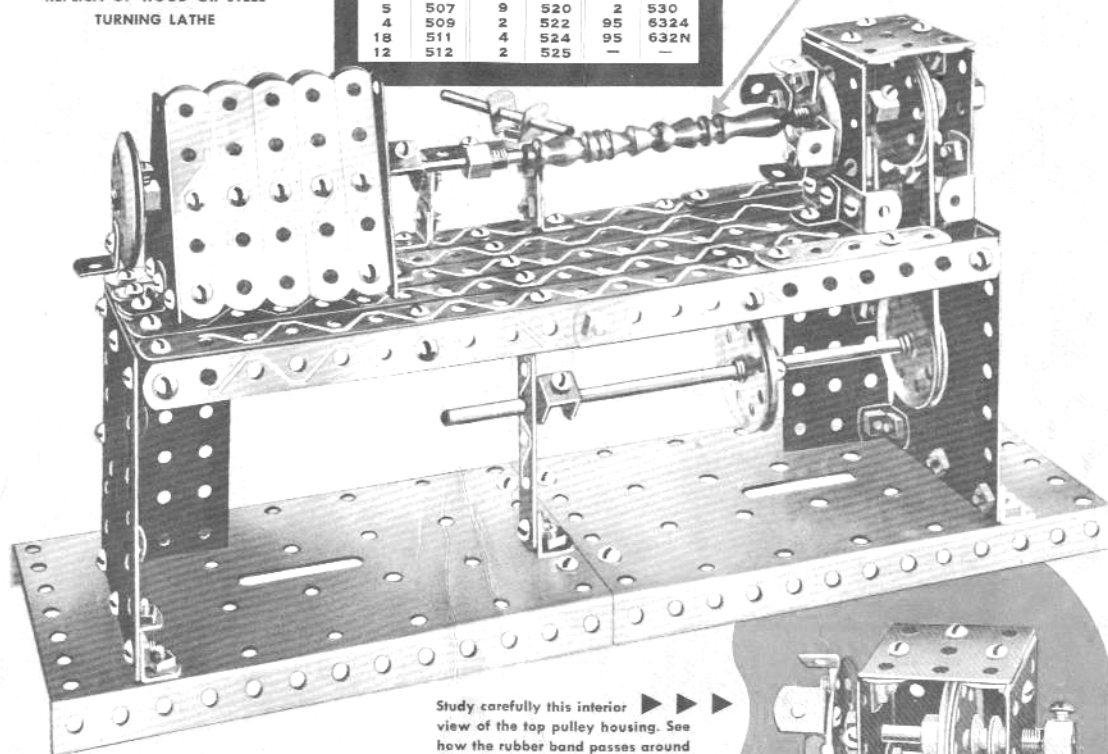
FARM WAGON

## ENGINE LATHE

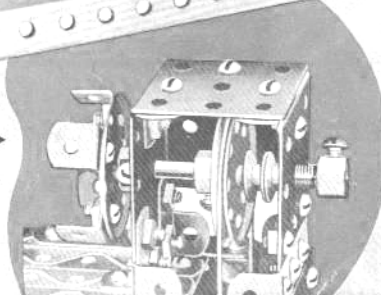
REPLICA OF WOOD OR STEEL  
TURNING LATHE

| NO. OF<br>PCS. | PART<br>NO. | NO. OF<br>PCS. | PART<br>NO. | NO. OF<br>PCS. | PART<br>NO. |
|----------------|-------------|----------------|-------------|----------------|-------------|
| 1              | 500         | 3              | 513         | 2              | 526         |
| 1              | 501         | 24             | 516         | 4              | 527         |
| 2              | 502         | 2              | 518         | 6              | 529         |
| 5              | 507         | 9              | 520         | 2              | 530         |
| 4              | 509         | 2              | 522         | 95             | 6324        |
| 18             | 511         | 4              | 524         | 95             | 632N        |
| 12             | 512         | 2              | 525         | —              | —           |

TURNED MODEL SHOWN HERE  
NOT FURNISHED WITH SET



Study carefully this interior  
view of the top pulley housing. See  
how the rubber band passes around  
the pulley. And don't overlook those  
two #522 sheaves placed right next  
to the pulley for spacing purposes.



the job. BUILD O provided Fibre Washers, which worked quite well. Having the Hub screw into the Disc was satisfactory when making pulleys but when other parts are used on the Hub the Disc acts as a nut, and in that case it is not as neat as the real Nut in BUILD O. The design of a few of the parts could be improved, notably the Triangular Plate & Corner Bracket where the excess metal outside their base holes often interferes with adjacent parts.

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