

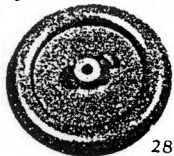
## Some Australian Systems

I met Jim Osborne from Victoria when he was over here on holiday, and though his main interest is MECCANO rather than OS, he very kindly, when he returned home, send some material that he had, and got friends to contribute as well. These notes are based on the sum total, so thank you everyone, including Max Crago, Tony Press, and all those who wrote letters about the Australian systems to *The Australian Hornby Collector* magazine (TAHC). Also to Don Blakeborough and Gary Higgins for additional material.

### BETTA-FIT

A B&W photo of an unused No.5 Set shows it packed in a wooden box (about 12\*16") with internal partitions. The metal sliding lid has a label showing 2 boys and what looks like a very oversize model of a Crane on Wheels, and the slogan 'For YOUNG MECHANICS'. The manual looks like the one in MCS and mentions Sets Nos.1 to 5. Another booklet, believed to be about BETTA-FIT, has 'Young Engineer's Set' on it.

BETTA-FIT is thought to date from soon after WW2, and had 34 parts in all, mostly looking like MECCANO. The unusual ones that can be seen in the Set are like the illustrations in MCS and include: • **Trunnions** like M126,a but with diagonal slots instead of cut outs. • Flat and Curved Plates, called **Radiator Plates**, which have just a row of 5 holes along each long side, and are reported to measure 2 3/4\*2 1/4". • The **Road Wheel** opposite with no coned centre and the boss on the outside. The 'tyres' of the ones in the Set look white, as they are described in MCS. • A 2" Ø **Pulley** with a solid disc. • The **Screwdriver** looks flat and not made of wire as in MCS; it scales at a little over 3 1/2" o/a and is the same general shape as the LYNX one top right in 16/440, but without the 'necking'. [It can't be seen in the photo if the 5\*11h Flanged Plate has the 1/2" long cross slot in it.]



The No.5 Set looks to be quite small, though well endowed with wheels, viz. 4 Road Wheels, 4x 2" Pulleys, and 4x 1" Pulleys with narrow Tyres for them. Other parts include a 5\*11h Flanged Plate, 2x 9h Flanged Sector Plates, a Bush Wheel, 2 each of 1\*3\*1 & 1\*5\*1 DAS, and 1 each of the Flat & Curved Radiator Plates.

### BUZ BUILDER

Another system, which like EZY-BILT, was made in New Zealand late on. It had many parts similar to MECCANO but a number of 'specials' including 5\*5 & 5\*9h Flanged Plates, and Trunnions with semi-circular tops. There were ultimately 94 parts in the Australian phase including Angle, Flat, & Braced Girders, a good range of Gears, and a sideplate Electric Motor.

BUZ was made by a firm called Buzza Products owned by August A. Kraus. He had emigrated from Germany during the depression and eventually set up in business making Morse sets near Clarence Street, Sydney. (The sets had buzzers, hence Buzza.) He was interned at the beginning of the war and then released when the Australian Army discovered their need for Morse keys. After the war the range of products was widened and included BUZ BUILDER. A small selection of parts was probably being produced soon after the war, and a No.9 Set, the largest ever made, is reported to have been bought around 1950. A new factory was built at Artarmon near Sydney, at 80 Hotham Parade, during 1955-6. Mr Kraus died in 1975 and his wife closed the business in 1977. The manufacture of BUZ may have ceased in 1974 - the last Price List to hand is dated 1972, and it shows the full range of sets and parts, and 2 Morse Telegraph Sets. Production in New Zealand, by Tri-ang Pedigree (N.Z.) Ltd., is said to have begun in 1976 and to have continued until at least 1983.

**Early Days** The original p3/4 of MCS shows what looks

like an early Illustrated Parts List. It contains only 26 parts and they have letter designations, such as W.B. for Bush Wheel, rather than the later PNs. Most of the characteristic BUZ parts were included and are shown opposite. Later the 2" Pulley had cut outs like the MECCANO one. The Axle Clips were made of fibre. One part in that was never listed afterwards is the Brass Pulley, 1/2", Fast.

**The 1950s** The c1950 No.9 already mentioned was packed in a lockable case measuring 27 3/4\*12 1/2\*4" made by Wattle Travel Goods, Chippendale, N.S.W., and its hinges were 'remarkably like' the ones in the set (#89, opposite, another unusual BUZ part). Included in the Set was a leaflet offering membership of the BUZ Builder Club. The address was Box No.3814, Sydney.

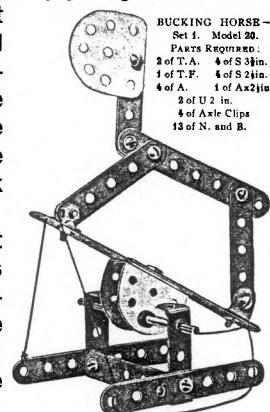
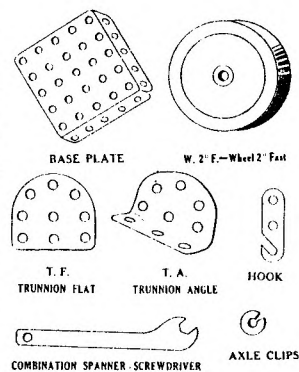
Next an early manual for Sets No.1 to No.7/8. (No.7/8 was a No.6 with an Electric Motor.) The manual consists of 39 punched leaves, tied with red cord between thick card covers that have a blue watered silk finish, and BUZ & ALBUM of MODELS in gold on the front. No date or address are given but some of the parts in the models are early versions - many of the Flexible Plates are shown with sharp corners, and the 6-7/8 models have solid 2" Pulleys, whereas this part in the smaller models has the cut outs. Also the Motor in the models is quite unlike the later one: both are shown on the facing page.

The Illustrated Parts has 60 items and additions include Angle, Flat & Braced Girders; the Hinge, Curved Strip, Crank, & Bell Crank (no boss); 3 Flexible Plates; Tyres for the 1" & 2" Pulleys (actually Rubber rings); and a Coupling (2 Screws and no cross bores), 57t Gear (solid disc), & Worm (no Pinion). All are in the original MCS p3/4a, but in addition 5 parts not mentioned anywhere else are listed, but not illustrated, in this Manual. They are 1\*9\*1 & 1\*13\*1h DAS (#18 & 19); 5 1/2" & 7 1/2" Flanged Braced Girders (#29B & 29C); and 3 1/2\*3 1/2" & 5 1/2\*3 1/2" Flat Plates (#42 & 43). PN42 was subsequently used for the 4 1/2\*2 1/2" Flanged Plate.

**SUMMARY OF MANUAL** •Name: BUZ •No maker, dates or Ref Nos. •Page size: 250\*187mm deep. •No. of pages: 71+7 unnumbered, all looseleaf, in board covers. •Language: English. •Printing: halftone models for Sets 1-5; line drgs for Set 6 or 7/8. Blue covers with gold BUZ // ALBUM of MODELS on front. •Page Nos. of Illustrated Parts List & highest PN: iv-v,141. •No Set Contents. •Sets covered: 1,2,3,4,5,6 or 7/8. •No. of models for each set: 30,28,32,36,35,15. •Name, Model No., Page No. of first & last model of each set: 1: TABLE AND CHAIR, 1; SCALES,30,8. 2: TABLE,31,9; GATE CROSSING,58,16. 3: HALL STAND, 59,17; SLIPPERY DIP,90,26. 4: GUILLOTINE,91,27; COAL LIFT & LOADER, 126,38. 5: GUARDS VAN,127,39; TRUCK & TRAILER,161,55. 6 or 7/8: LIFTING SPAN BRIDGE,162,57; FIRE ENGINE,176,71. •Other notes: inside covers & end pages ii,iii,vii are blank.

The Intro to this & other BUZ manuals of the time starts, 'When a boy is given a watch, the first thing he does is to take it to pieces, ...' I wonder how many youngsters learnt the hard way that you shouldn't act on everything you read. Each model page has a fact, or improving remark at the top: for example, 'There are 50,200 tons of steel work in the Sydney Harbour Bridge.' & 'A little push may make a stumbling block into a stepping stone'.

Bearing in mind that No.7/8 Set had only about 80 N&B, the models aren't bad, and certainly owe nothing to any other system. A few like the one opposite are a little unusual; most are more conventional like the





## More from AUSTRALIA

The notes below add to those in 19/540. Since then several readers have sent more material and information, including Frank Beadle, David Hobson, Jim Osborne, & Tony Press (who passed on items from Alf Croucher & Jack Little) - very many thanks to all. For ease of reference 2 lots of 'mystery parts' from Australia are also described here.

### BETTAFIT

Some parts now to hand from Frank are described below. There is nothing to positively identify them but they look just like illustrations in MCS, and include the unusual parts. The name BETTAFIT was incorrectly spelt with a hyphen in OSN 19.

• **DATA** (in mm) **Strip** (15-hole): •Hole pitch/dia, 12.65/4.3 •width, 13.0; •thickness, .97; •ends fully radiused. **Boss**: •o/d, 9.5-9.6; •i/d, about 4.4mm; •brass; •single-tapped. **Thread**:  $\frac{5}{32}$ " BSW, but see below. **Axle Dia**: 4.05. **DP (Mod)**: N/A. **Nut & Bolt**: see below.

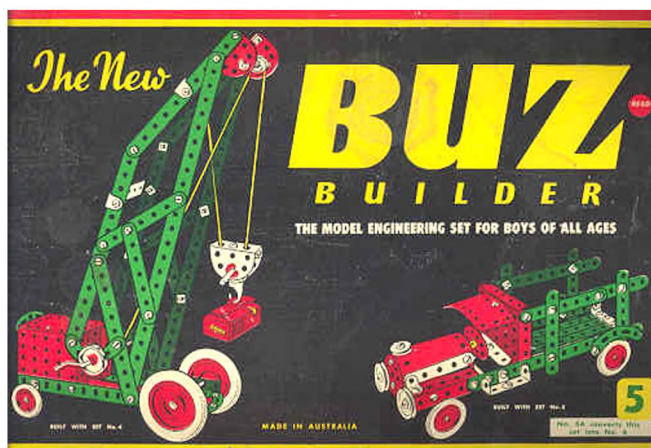
• The holes in the 15,7,5h **Strips** & the 3h **DAS** are at slightly less than  $\frac{1}{2}$ ", 12.6mm in some cases. The **Curved Strip** is very similar to M90a but is not stepped; the holes in it are 4.2mm Ø. • The bends in the **Flanged Plate** are not as sharp as M52 and the flanges are deeper by, typically, 1mm. 2 examples have the  $\frac{1}{2}$ " slot but a third hasn't and is of thicker, 1.15mm, steel. The **Flanged Sector Plate** is similar to M54 except again, the bends are rounder, and the holes in the flanges are not elongated. These holes can't be seen clearly in MCS. • The **Radiator Plates** are  $2\frac{3}{4} \times 2\frac{1}{4}$ " and are rigid, not at all flexible. Corners



are near fully rounded. • The slots in the **Flat Trunnion** (left, 50% scale) are at 45°, and are not quite parallel with the edge. • The **Flat & Double Brackets** are MECCANO pattern, dull plated. • **Pulleys**. The 2" is made from heavy gauge steel. The 1" is 27½mm o.d. and is only 3mm across the 'V'. The Loose 1" is the same diameter but is even narrower at 2-2½mm (it is badly made), and has an eyelet boss. The **Road Wheel** (see OSN 19) is 2½" Ø, and is made from 2 identical, sturdy pressings, held together by the boss. This gives a full tyre contour, 11½mm wide outside the flat centre area. The **peening** of all these bosses (except the Loose Pulley) is a narrow ring of 7mm o.d. The **bore**s are very sloppy on the Axles - that of the Loose Pulley is 5.1mm. The **Set Screws** are rusty, RH, &  $\frac{1}{4}$ " u/h. • **Axles**, 2 & 3½", have square ends. • In the MCS Parts List the **N&B** are both described as  $\frac{5}{32} \times \frac{1}{4}$ ", but the (rusty) N&B with these parts are  $\frac{1}{8}$ " BSW, with a RH Bolt,  $\frac{1}{2}$ " u/h, and a thick hex Nut,  $\frac{1}{4}$ " A/F. It seems unlikely that they are original unless nothing else was available at the time. • **Quality**. Except for the faults already noted, and a certain amount of burr along the edges of Strips and around some holes, the parts are reasonably well made. The paint on many parts is somewhat the worse for wear but was probably acceptable originally. • **Colour**. The Strips, DAS, Flat Trunnion, and Radiator Plates are mid-green; the Flanged Plates, and Pulleys, red. The Road Wheel's centre is red and the 'tyre' white. The red is rather lighter than a mid shade, and the Flanged sector Plate is light red.

### BUZ BUILDER

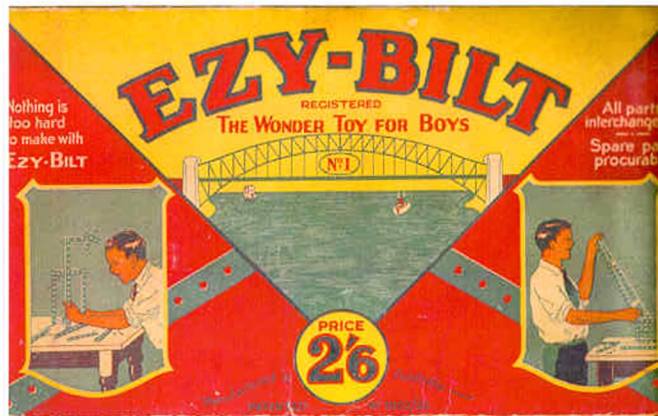
Jim wrote that there were in fact 2 **Kraus brothers** involved with BUZ. He also sent an empty **No.5 box**, white with a red lid,  $14\frac{3}{4} \times 10\frac{3}{4} \times 1\frac{1}{2}$ ". The centre  $11\frac{3}{4} \times 7\frac{3}{4}$ " of the lid (at the top of the next column) is similar to the picture inset in the 1960s manual cover (see 19/542), but in colour, black with r/g models, & BUZ in yellow. The Crane is labelled as a Set 4 model & the Lorry as Set 3. On the side of the lid is '71 MODELS ILLUSTRATED', so if the Set were concurrent with the OSN 19 manual, it would mean only 13



models for Sets 3-5. On the parts, Don Redmond wrote that the holes in an A/G of his (stamped BUZ) are at a pitch of 12.714mm.

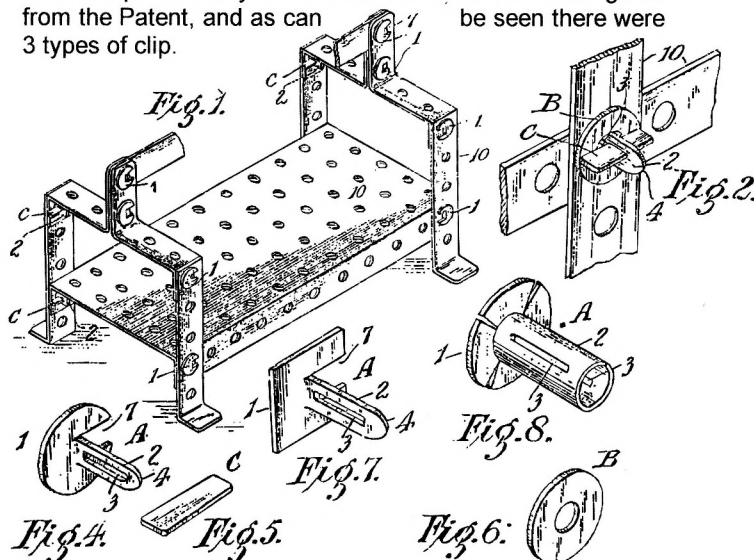
### EZY-BILT

Tony wrote of the research carried out by Jack Little and Alf Croucher. The system was first made in Melbourne in about 1935, and a 1936 ad from *The Sun Hobby Book* lists 3 sets at 2/6, 5/- & 8/6. The brightly coloured, yellow, red & green label (below) is from a 2/6, No.1 Set, thought to be from



very early production, and it measures about 12\*7". The small 'No.1' is on the side elevation of the Sidney Harbour Bridge, and either side of the price, at the bottom, is 'Manufactured in Australia', & 'Patented' & 'No.7007/22'. The boys in the frames right & left are making a Crane, & (what might be) a Windmill, respectively.

The **Patent** covered the use of clips, held by flat wedges, to hold the parts together 'in lieu of bolts and nuts, now generally or largely used, which latter are relatively expensive to produce and in addition are inconvenient to handle and adjust,...'. The application was made in May 1922 by James Perrott, 43 Madeline Street, Carlton, Victoria, and was accepted in May 1923. Below are some of the Figures from the Patent, and as can be seen there were 3 types of clip.

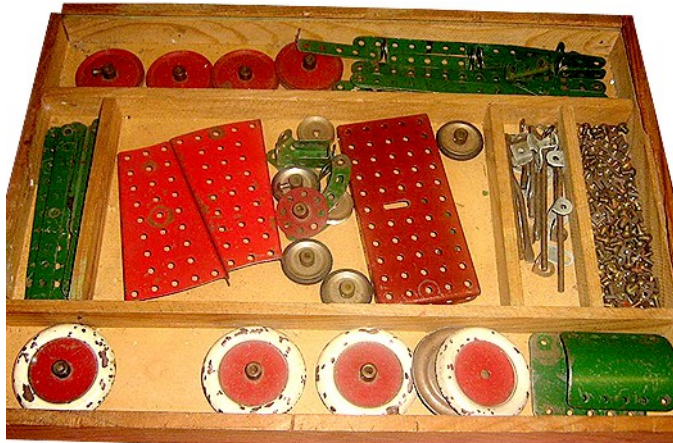




**BETTA-FIT** Some notes on this Australian system were given in 19/540, 22/636 & 26/753. In OSN 19 a **Set 5** was mentioned and below the Ebay photos of what is probably such an



outfit. The righthand Road Wheel is missing its boss which holds the 2 sides together. Notice the  $\frac{1}{2}$ " long slot in the Flanged Plate. Also, in the original it is possible to see that the **Trunnion** has diagonal slots, the '**U**' Piece is the 2h high Double Bracket type with sharp corners, & the handle of the wire **Screwdriver** is, as shown in MCS, somewhat less wide than most. The **Nuts** are square, perhaps plain steel & probably  $\frac{5}{16}$ " A/F, while the **Bolts** are roundheaded with a brass finish.



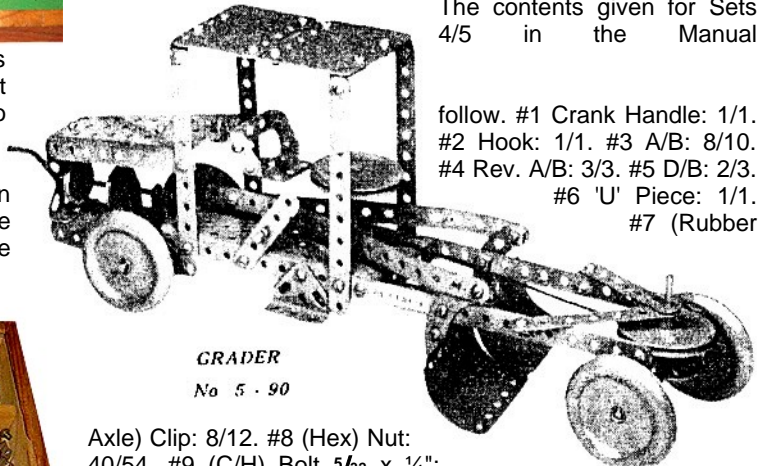
The cover of the manual with the OSN 19 No.5 was the BETTAFIT (no hyphen) one described later. With this No.5 only the top of a BILD-A-KIT manual (see 31/912) can be seen, below the open box. There was also a Model Sheet. It had no name but its 21 simple models are those for Set 1, on pp3-5, in the YOUNG ENGINEER'S SET manual described in 22/639. They are not in the same order and run from Garden Edge Lawn Cutter to Travelling Crane (a model shown in OSN 22). All the Trunnions in the models are the 7h type with no diagonal slots, but as mentioned in previous notes there are similarities between YOUNG ENGINEER'S & BETTA-FIT.

Vern Ellis kindly sent a photocopy of a **BETTAFIT** manual. It appears to be the one used for the front cover & Illustrated Parts in MCS. Ignoring blank pages, it has 19 portrait, un-numbered sides, 144\*252mm, plus a missing back cover. p1 (C1) has 2 boys & a Tower, with 'AN R.K.M. PRODUCT' along the top. p2 says that the set is a high class toy but is also useful to artisans, and urges 'Buy Australian'. At the bottom is 'Manufactured by The R.K.Morgan Engineering Works, Glenroy, Victoria. p3 is the title page; p4 has the Crane right, 70% f-s, & pp5-6 show the Illustrated Parts. pp7-14 have 65 small models from No.1 GARDEN SEAT to No.65 DRILLING MACHINE, with a small photo of each. No sets are mentioned but these are without doubt the Set 1-3 models. Strangely p7 also has the No.5 Set Contents amid models 1-5. pp15-16 have 12 models for Set 4, from No 4-66 PICNIC TRUCK No 4-77 CORVETTE, again with one photo of each, but a little larger.

The 17 models for Set 5 on pp17-20 go from No 5-78 FIRE TRUCK to No 5-94 POWER DRIVEN LATHE, again with one photo of each, & again a little larger. p21 has the No.4 Set Contents in a table which also shows the overall dimensions for each No.4 model and the quantity of each part used in it. Perhaps there was a similar table for Set 5 models on the back cover.

The supposed models for Set 1-3 are similar in style & size to those on the Model Sheet with the No.5 set but none are identical. All the Trunnions shown are the 7h type. The No.4 & 5 models are also original but they have the slotted Trunnions. Perhaps there were originally only Sets 1-3 and later the Trunnions were modified, the parts on the second page of the Illustrated Parts (#27 onwards) added, and Outfits 4 & 5 introduced. Some of the No.4 & 5 models are rather rudimentary but usually have a little character. Witness the Grader left, full-size. The No.5 model on p4 (below) is credible except for the Base Plate used in the under-carriage.

The contents given for Sets 4/5 in the Manual



follow. #1 Crank Handle: 1/1.  
#2 Hook: 1/1. #3 A/B: 8/10.  
#4 Rev. A/B: 3/3. #5 D/B: 2/3.  
#6 'U' Piece: 1/1.  
#7 (Rubber

Axle) Clip: 8/12. #8 (Hex) Nut: 40/54. #9 (C/H) Bolt  $\frac{5}{32}$  x  $\frac{1}{4}$ ".  
40/54. #10  $3\frac{1}{2}$ " Axle: 2/2. #11 2" Axle: 2/4. #12 Flat Brkt: 6/6.  
#13 Bush Wheel: 1/1. #14 1" (Pulley) Wheel, less Boss: 2/2.  
#15 1" (Pulley) Wheel, with Boss: 4/4. #16 1" Tyre: 4/4. #17 ( $\frac{1}{2}$ ") Pulley Wheel: 1/1. #18 Angle Trunnion: 2/2. #19 Flat Trunnion: 2/2. #20 Screwdriver: -/1. #21  $2\frac{1}{2}$ " Strip: 10/10. #22  $5\frac{1}{2}$ " Strip: 4/6. #23  $7\frac{1}{2}$ " Strip: 4/4. #24 Curved Strip: 4/4. #25 ( $1\frac{1}{2}$ "x1h) DAS: 4/4. #26 Base Plate: 1/1. #27  $3\frac{1}{2}$ " Strip: -/2. #28 White Rim Wheel: 2/4. #29 2" (Pulley) Wheel with Boss: 2/4. #30 Flat Radiator Plate: 1/2. #31 Curved Radiator Plate: 1/2. #32 Sector Plate: 1/2. #33 ( $1\frac{1}{2}$ "x1h) DAS: -/2. #34 Hank of Cord: -/1.

