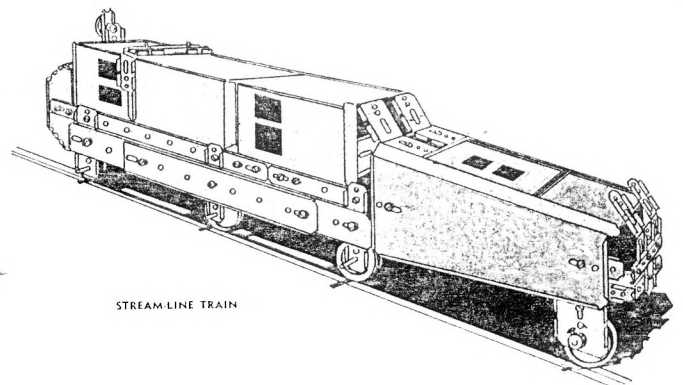
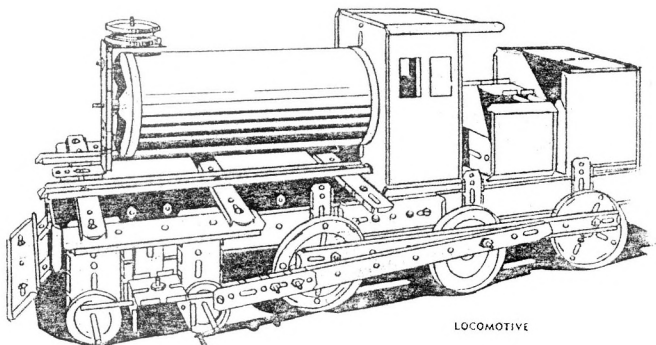


EDITORIAL I had intended to include notes on AUTOMAT in this Issue, but for lack of space they've had to be deferred until the next. Many AUTOMAT parts aren't shown in MCS and quite a number of Extra Sheets will be needed to cover them all: since there aren't over many Sheets relating to this Issue I've added a batch which show all the AUTOMAT parts at an early stage, when they were made in Switzerland, and frameworks were made from Angle Girders.

Some details of GEOBRA were included in OSN 19, a

set with parts that were probably intended to allow only one model to be made from them. Another such is the P'WER HOUSE Ferris Wheel Set described briefly in this Issue. For GEOBRA I offered to prepare MCS Sheets if there was a demand for them, but no-one has taken this up. So I'll assume, unless my doing so provokes an outcry to the contrary, that single model sets should not be included in MCS. Should they be mentioned in OSN? On the whole I think yes, but again I'd be interested in readers' opinions.

STEELBUILDER
Notes on this 1930s
American system
appear on pp562-3

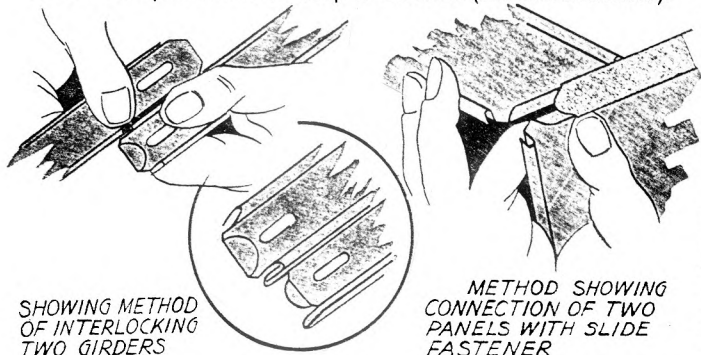


STEELBUILDER Richard Symonds kindly sent photos of the parts in his No.5 Outfit, a few samples from them, and photocopies of the Manual, and a Supplement to it, which were with the Set. The Manual includes a List of Parts to go with the illustrations in MCS, and more details of how they are joined together; the Supplement features the Motor and models driven by it. STEELBUILDER has been bracketed with MORECRAFT as 'boltless' systems, but in fact STEELBUILDER parts are more often than not bolted together. The two systems are about the same size though, with between 60 & 70 different parts in each, and with STEELBUILDER making much of its 'boltless' features, no doubt the two were competing for the same market.

The PARTS • DATA (in mm). •hole pitch/dia, often 25.4/3.2 (in Connector & Disc Wheel). **BOSS**: •o/d, 8.0; •i/d, 3.23; •brass; •single-tapped. **THREAD**: 4-36. **AXLE DIA**: 3.06. **NUT**: hex 6.2 A/F; **BOLT**: roundhead 5.2 Ø; both grey plated steel.

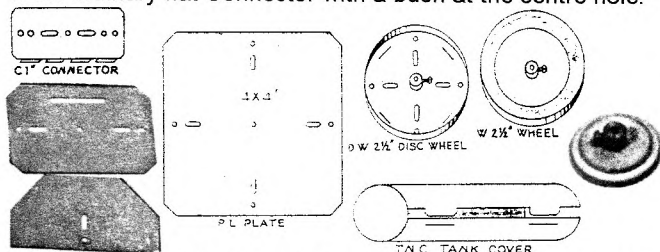
The main parts are described below.

- **Girders** are strips flanged on the long sides, with each flange then formed outwards into a 'U' (see below), and tabs on the ends bent up at 45°. They are up to 10" long and there are two widths, ½" & 1", inside the flanges. The holes in the longer ones are at 1" spacing. Below two are shown joined by being pushed together. Both widths are also bent up to make 3" deep **U Girders** (Double Brackets).



- **Panels**, edged like the Girders, but with no holes, although 3 are pierced to represent windows. They range in size from 2*1" to 3*3" & 2*4", and there are also 6" long Tapered Panels, one reducing from 3 to 2", & one from 2 to 1". Two Triangular parts called Peaks are used in making the gable ends of buildings, but I can't see their edges. Two Panels are shown above joined at right angles by a **Slide Fastener** engaging the 45° flanges. The Slide Fasteners are from 1 to 6" long and ¾" wide, with a flat lug at one end as shown, and the one at the other bent up at 90°.

- ½" & 1" wide **Connectors**, 2¾" long, are mainly used, attached by N&B, to join Girders end to end or at 90°. A flat one is shown below left, and the part was also supplied formed as Angle & Obtuse Angle Brackets, and as a Double Bracket. The 2 pairs of lugs at each end simply serve to locate the part. The **Connector with Bushing** (½" & 1" wide) is an ordinary flat Connector with a bush at the centre hole.



- **Plates**, from 3*1" to 3*10", & 4*4" (above), with angled corners and some holes/slots. Parts are known without the centre hole, and the piercing of Richard's 3*2" (above left) differs from the MCS part. Under the 3*2" is a Hood Plate used as a car radiator. The Plates are mainly held by sliding them into the U edge of 2 or more Girders or Panels.

- As well as a 1¼" **Pulley**, there is a **Single Wheel** (above right), a boss attached to one of the Pulley's discs,

giving a flanged wheel. The two 2½" **Wheels** are shown with the Plates - the flange of the **Disc Wheel** is about 5mm wide, and the outside of the **Wheel** looks as if it is formed to crudely represent a tyre. The 5 **Axles**, 2-7", have sheared square ends, there's a **Crank Handle** with 90° bends, about 6" long o/a, and a **Connecting Rod**, about 3½" long with ½" bends at 90° at each end.

- The other large part is the **Tank Cover** (again shown with the Plates), a cylinder about 5" long & 2½" Ø, so that a Disc Wheel can fit over the end. There's also a **Disc**, P, shown in the Supplement, which has the same holes as the Disc Wheel but none of the slots, and is a little smaller in diameter. Its purpose is to sit between a pair of Disc Wheels to form a Pulley. It is made of 3mm thick card.

- That leaves the **Collar** which looks like the bosses, and the N&B, which have the unusual 4-36 thread. The 2 Bolts are ⅝" & ⅜" u/h. The small **Screwdriver** has a red handle and is about 3" long o/a, and there's a single-ended **Spanner** in Richard's set, but not listed, which is grey, some 2" long, with what looks like a small hole at the end.

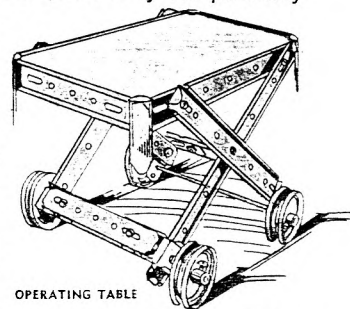
- **Colours**. The Girders and Panels are painted a dark blue, the Plates and Tank Cover yellow, and the Slide Fasteners are nickel plated. The Connectors, 1¼" Wheels, and the N&B have a dull grey metallic finish. The 2½" Wheels are red in the Set, and in the Supplement, but in the Manual they are shown the same colour as the 1¼" Wheels.

- A half page of the Supplement is given to the picture of the **Motor**, and it can be seen driving the Windmill on the facing page: it is shown blue with the centre band of the body yellow. No details are given, not even the voltage, but it has been that it is 110v. In one of the models it looks about 4-5" wide and about the same in height.

The SETS In the Price List in the Manual are 3 sets, Nos.1,3 & 5, priced at 1,3 & 5 dollars. The No.5 is packed in a quite large, flat, wooden box, with a label very similar to the Manual cover (on the front cover of this issue), but with some differences. The blue parts are shown orange for instance, and the letters in the name have no shadow. Some parts found without a box were tied or clipped to card.

The MODELS SUMMARY OF MANUAL •Name: Steelbuilder Book of Models •Details of maker: STEEL BUILDER COMPANY, Inc., 2-24 Orange Street, Newark, N.J. Division of ACME METAL GOODS MFG. CO. •Dates &/or Ref Nos: © 1934 on FC. •Page size: 270*186mm deep. •32 pages inc covers. •Language: English. •Printing: cover (as in MCS) & models, blue, yellow on white. •Page Nos. of Parts List & highest PN: 30-31,WPA. •No Set Contents. •Sets covered: 1,3,5. •No. of models for each set: 24,27,36. •Name, Page No. of first & last model of each set (no Model Nos.: 1: WHEEL BARROW,3; BRIDGE,8. 3: JINRIKISHA,9; STATIONARY PUMP,18. 5: BEDROOM SET,16; GUARD HOUSE,27. •Other notes: •Details from photocopy. •#3 models on p18 follow pp16-17 with #5. •Constructional methods on pp28-29. •A Supplement printed as above but also with red, has 8 unnumbered pages; the first 2 of the 8 models are for the #3 Set, the BAND SAW & GOVERNOR on p1, & the rest for #5, from a WATER WHEEL on p2, to a FERRIS WHEEL on p7 (though the pages may not be in order). p8 shows the Electric Motor & the models in the main manual that it can drive.

The **Manual** is nicely produced with a good sized picture of each model in colour, and a list of the parts needed for it, though not the number of N&B required. There is a good selection of not unattractive models, and they are probably quite sturdy where the parts are bolted together. The main 'boltless' assemblies are the Panels and Plates used in buildings, and the 'flanged plate' used in some of the smaller models, such as the No.1 Operating Table, right: the 3*6" Plate is held in a frame of Girders, joined at the corners by Slide Fasteners.



The **No.1 Set** models are mostly quite simple, with for example, a Bridge, a Mooring Mast, items of furniture, trolleys & hand trucks using the four 1¼" Pulleys in the Set,

and the 8" long Traveling Crane below.

The No.3 adds 4 Wheels and these are used in various simple Trucks like the Tow Car (bottom left) - the front might look like the one in the No.5 Rack Truck above it. The 2 Disc Wheels in the Set are used as eccentrics to operate a Trip Hammer, and an Automatic [Railway] Hand Car. The most complex model is the Steam Shovel below.

The No.5 probably contains all the different parts and the models start with some sets of furniture: 6 pieces for a Bedroom, followed by the same number, but better looking, for a Living Room. Then after a number of other small models including a Flower Vase and a pair of Book Ends, the more 'serious' ones. There's another Steam Shovel which runs on the 1/4" Single [Flanged] Wheels, a part not included in the lesser Sets, and the Locomotive on the front cover of this Issue. Most of the rest are similarly eye catching, like the Train on the cover. The Steering Gear, below right, is from the one vehicle so fitted.

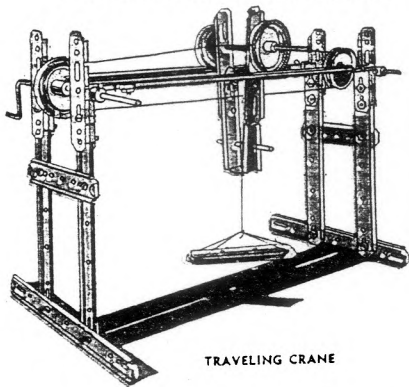
The models in the Supplement are all powered by the Motor, and all need the card Disc to make 2 1/2" pulleys from the Disc Wheels. 3 mechanisms are included: a Governor, a Speed Inserter and Reducer (using Pulleys), and the Forward and Reverse Friction Drive shown below. From the Parts List for it, it seems that the pulley on the left is made of a Disc between two Disc Wheels, the other wheels on the same axle are both a Disc Wheel with a Disc bolted to it, and between them on the other Shaft, a Wheel. The parts needed for the Drive were offered for \$1 and they probably included those for the framework - as spares the whole lot would have cost \$1.14 plus the 3 Discs, which aren't in the Price List. At the time the No.1 Set also cost \$1. The mod-

els include the Beam Engine shown in MCS, a 4-car Ferris Wheel, and the Windmill opposite, in which most of the joints in the structure are made without N&B.

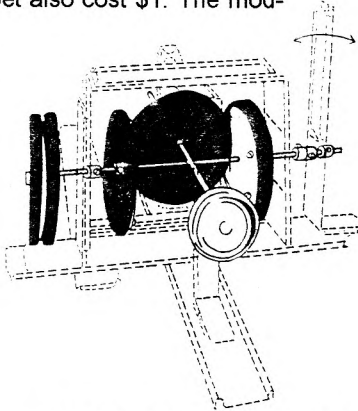
The Manual cover on the front of this Issue shows two 'supermodels'. The House looks very well, although that's partly because the roof, made from 1" Girders, is shown as blue-green, and so creates a contrast with the blue & yellow parts of the walls that wouldn't exist using the actual parts. It is a little over 12" long. The Ferris Wheel must be over 30" high and again it has been 'improved' by colouring alternate cars blue & yellow. The cord drive to the hub isn't as good as the one in the Supplement where the cord runs around Pulleys on the ends of the arms.

Richard wrote, "You may like the look of the models built with this Set, but the parts are poorly painted, and it's a so-so system meant for easy assembly; it's limited in many ways in terms of adjustments, and the versatility of the parts. But very different and fun to work with all the same." He sent a photo of a nice Elevated Jib Crane that he'd made from his parts.

HISTORY All that is known for sure is the 1934 copyright date on the Manual cover, and the name & address of the manufacturer. No doubt the Supplement, which isn't dated, came later. I have a note giving 1938 as a date for the system. It is said in the Manual's Introduction that 'the punched and grooved girders and panels with their interlocking corner-pieces are patented', but no patent number is given.



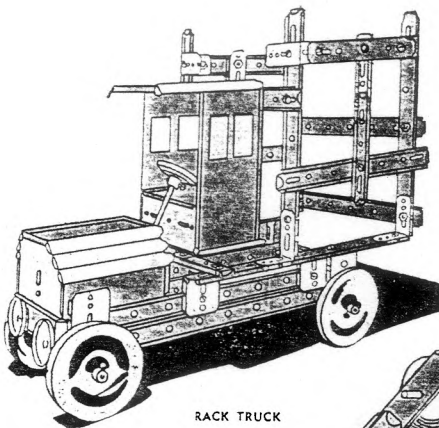
TRAVELING CRANE



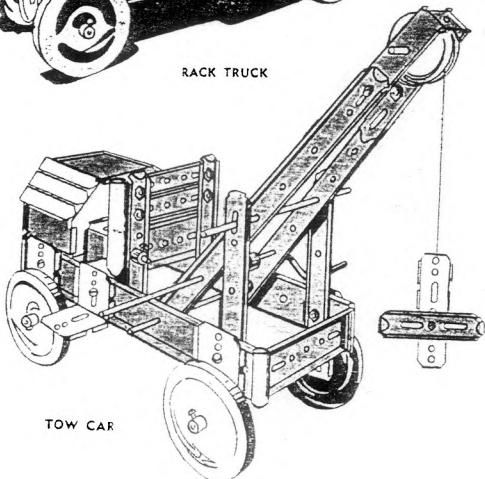
FORWARD AND REVERSE FRICTION DRIVE

PARTS FOR FRAME

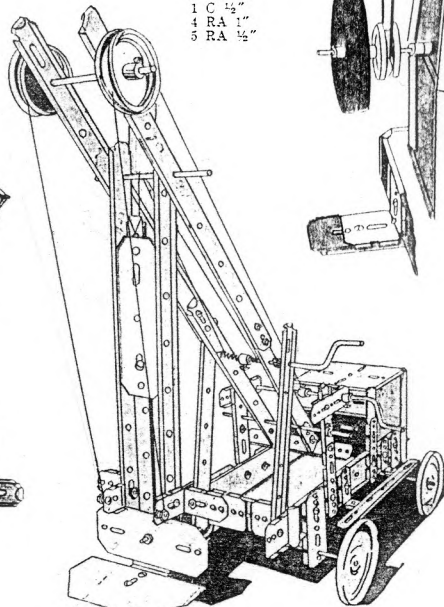
- 3 G 1x3"
- 1 G 1x4"
- 2 G 1x3"
- 2 G 1/2x4"
- 3 G 1/2x3"
- 2 CB 1"
- 1 C 1/2"
- 4 RA 1"
- 5 RA 1/2"



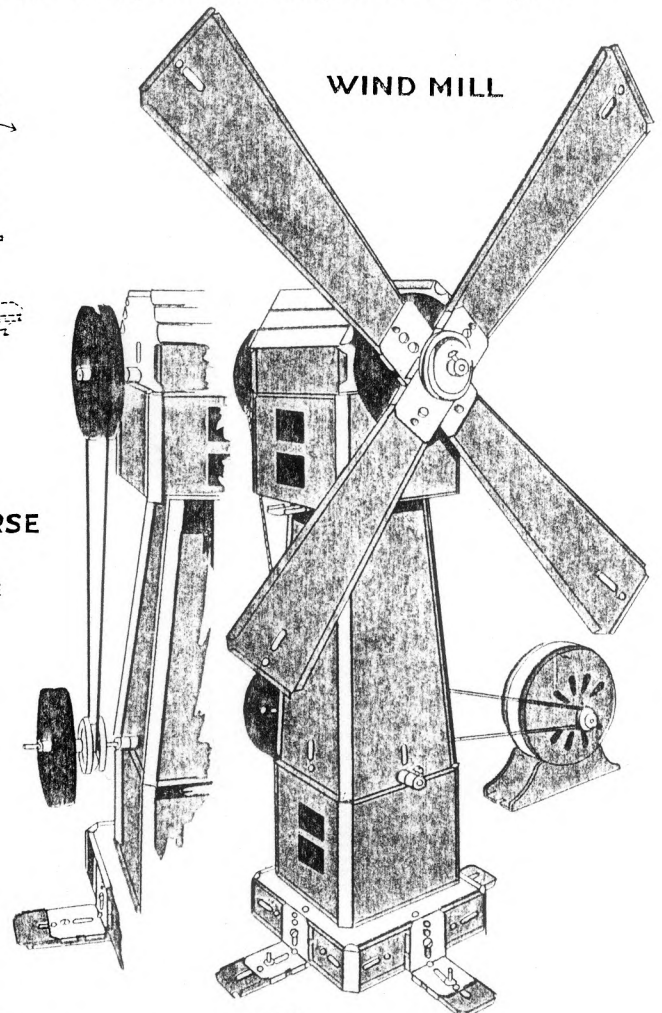
RACK TRUCK



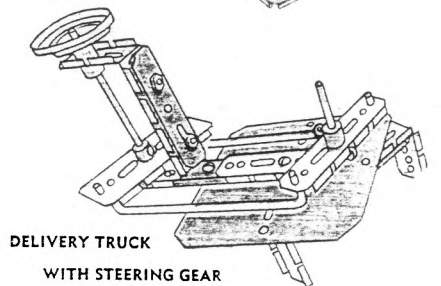
TOW CAR



STEAM SHOVEL



WIND MILL



DELIVERY TRUCK WITH STEERING GEAR

ITEMS FROM LETTERS

1. On **STEELBUILDER** (20/562) David Lawrence has recently acquired a No.1 Set and wrote 'What I hadn't realized, because the manual doesn't mention it, is that the Strip's doubled edge has a pip on the inside at one end, so that you have to press it to snap it in.'

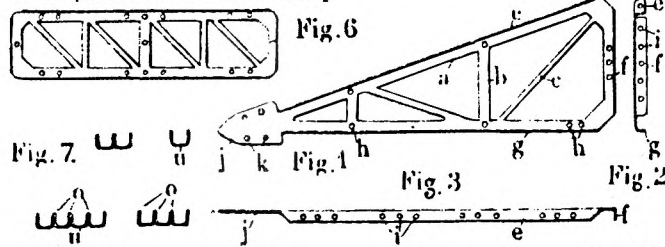
2. From Kendrick Bisset on the **Flanged Sector Plates in U.S. MECCANO** outfits, 'From what I have been able to gather the single row of holes version was used through at least 1927. I have seen two 1928 outfits with the three row variety, and they are shown clearly in contemporary illustrations. BUT later outfits reverted to the single row version. They are in my 1929 #20 & #30 outfits, and in the subsequent New Haven GILBERT-MECCANO outfits. [The history of the sets was given in 12/317.] Is it possible that Elizabeth was making the single row type, and had the tooling? Then when the new version came out [in the UK in 1927] perhaps they were made in England and shipped over until new tooling could be put in place - but this plan was interrupted when Gilbert bought U.S. Meccano?'

3. D. Courdoux wrote that production of **TEMSI** stopped for good in May 1999, and that in future no **MÄRKLIN** spares will be sold, only one or two 'theme' sets. Also that there is a question mark over **STOKYS** because letters to them remain unanswered.

4. Thomas Morzinck wrote that there was a good picture of a **STABA** set on the German ebay site. That's the STABA with the 'outline' Strips, see 8/194. The Set was a No.00 and the contents seem to correspond to those in MCS. The box is red and has 'STABA Constructor' on the lid; the manual doesn't seem to have a proper cover - the front page has just 'STABA' at the top, with '00' in the top right corner, and text underneath. The parts look like those described in OSN 8 except that the 21mm Pulleys are red instead of nickel.

On the **Korbuly patents** (see 22/623), the date of the Austrian one (with gearwheels, connecting rods, etc.) was 1st Nov. 1901 [thus predating Hornby's patent by nearly a month], & the German patent was granted on 14th Jan. '02.

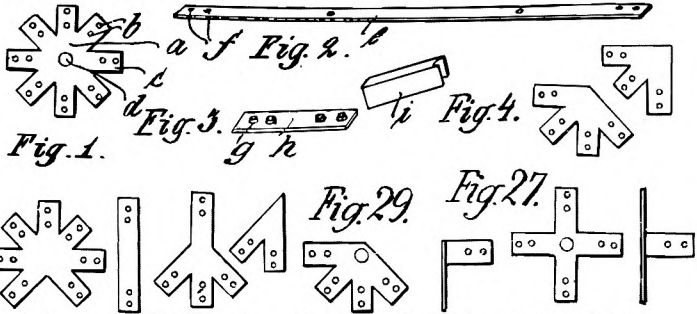
5. From Jeannot Buteux. • The French **CHARPENTO** patent (see 21/617) was No.589377 and a Roger Marie-Joseph Biard applied for it on 2 Feb. 1924. It was acquired by CIJ, who also produced a set for Citroën, and it bore the CITROËN name. Standard CHARPENTO parts were used but painted red & green, and various Garages could be made from the Set. It is extremely rare. [The Patent shows Trusses similar to CHARPENTO but an additional one with a spade end (Figs.1-3) is included, and the Beams have a different pattern of bracing (Fig.6). Various Wire Staples (Fig.7) were also proposed as an alternative to N&B. All these parts are shown below.]



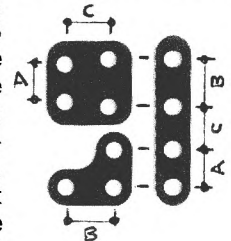
• **EIFFEL** parts (see 19/491) are red & green. • **CLIFFIX** (see 21/596) was patented in France in 1945. • On **STANDARD L.R.** (21/590), the French patent was not quite the same as the UK one. And the order in which the different coloured parts appeared still isn't known. • The name **PETIT GÉANT** (Little Giant, see 21/603) was used for a French system in the 1950s, but it had parts to make a variety of spring & electric motors. • On **MÉCANIC** (21/603), in each large set was a Plate in the bottom of the box, painted matt black, which could be used as a base for various models. It has now been established that its predecessor, **ÉCÉPÉ** (see 12/314) was marketed from 1913.

• The **Black Country Miniature** parts (21/619) really are small, a MECCA-MINI Strip will pass through a hole in a MECCANO Strip, and a BCM Strip will pass through a MECCA-MINI hole. • The contents of **Graham's patents** 125890 & 138824 (see 14/372) are all in one French patent, No. 520081, which was applied for in July, 1920.

Jeannot also sent a copy of a **Danish Richter Patent** Nr.20642, dated 1915. The original German version was from 1913. 28 parts are illustrated in the Danish one, including Figs.1-4, 27 & 29 below. The unlabeled 6 parts below are examples of the other 22 parts - they are like Fig.1 but without the centre hole and with various combinations of from 2 to 7 arms. I can't see how the parts hold together but the idea of hubs with strips attached is similar in principle to **IMPERATOR/ANCHOR ENGINEER** (see 17/486). As far as I know these parts were never produced.



6. From David Hobson. • Snooks's Toy Shop in Bath has a new stock of **CONSTRUCTION** sets: Nos 15, 20, 65, 67, & 77 (at £45,25,7,7,40). Nos.15 & 65 seem to be as described in 14/383 & 22/622 respectively. The others are: No.20 with 365 parts to make space models; No.67 with 214 parts for small space ships; and No.77 (460 parts) for various solar-powered models, and marked as 'new'. Another item is a Parts Pack '**C113 Adapterplatte**', price £3.99. It contains 8 each of the 3 parts right (50% full-size), and they are meant to allow 1/2" pitch parts to be used with those having the 10mm CONSTRUCTION spacing. The dimensions A, B, C are respectively 10, 12.7, & 11.5mm. The latter would be about half the width of 2 Strips, one 1/2" wide & one 10mm. On p151 of *Baukästen* it



is said that these parts were introduced in 1998 'to put more pressure on the MECCANO system in the marketplace' [My free translation]. • On the 'Matchbox' set **CLOU** (see 6/130, 13/345), Werner Sticht kindly provided a translation of a note about it in a March 1932 German toy magazine. It was made by Gebr. Schmid and had recently been introduced. The Discs which push on the wooden Rods were made from pressed sawdust; and the Set sold for 25 Pfennigs.

7. From Tony Press: • A copy of the front cover of a **MONTEX** model leaflet in Dutch, PR 7/632/12(IP), which Alex de Jong had put on the Spanner network. A Spanish system called MONTEX was described in 11/296, but in this case it is one of the names that was used for **BRITISH MODEL BUILDER**. The MONTEX cover of this type in MCS has the same layout as the Dutch one, with the 2 boys & Derrick Crane at the top, but it is in Spanish. MONTEX was no doubt a name that could be used in many different markets, and so perhaps leaflets in other languages were produced. Incidentally it may not be clear in all copies of MCS, but the MONTEX Leaflet there has a PR of 13/1035/2, and its price is in 'Argentina pts.'

• News of a 'new' system called **BIG-JOY**. It was a pre-war Australian made copy of **TRIX**. The parts seen seem to be nickel or chrome plated, but are rather inaccurately punched and have a somewhat ragged finish.

• 2 photos, courtesy Jack Little, of a made-up **GEOBRA** model (see 19/552, 22/631), and the set's box. The parts look to be as already described and are the same colours. The box is shown at the top of the next column, and is red with: *Geobra* in a circle top right; some parts in the panel