## ITEMS FROM LETTERS

1. On p46 of OSN 3 there was mention of a CONSTRUCTION set C17 and T.W.Comins has written to say that this was an error and the set in question was in fact C13.

## 2. From Don Redmond

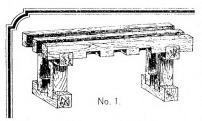
Chinese and Japanese ( $\overline{\text{OSN}}$  no.4, top of p.72) unfortunately cannot easily be treated in the same way as Slavic or Greek alphabets, because they are syllabic rather than alphabetical, and there are so many (thousands) of syllables or of character names (in the case of Chinese) that only someone familiar with the language can readily provide a roman-alphabet equivalent. The process is called romanization, rather than transliteration (because it is not letter-by-letter).

Sorry, we seem to have done it again. Having got VINTIK I SHPUNTIK right, unfortunately KONSTRUKTOR-SHKOLNIK has got a P inserted (no.4, p.70. third column of list in item 1). MCS transliterates it correctly, except that it should be SHKOL'NIK with the "soft sound" mark after the L; a shkol'nik is a schoolboy. And that incredible ghost YMEAEU from MCS turned up again in your very good notes on re-arranging MCS (p.73, under Merkur). YMEAEU appears to have been a garbling of the second word in the name of a system of which the manual cover says KOHCTPVKTOP HOHBIM YMEAEL, which transliterates KONSTRUKTOR YUN'II UMELETS and means "young craftsman constructor". Whether the system should be listed under K or Y would seem to depend on how the words are used on box lids and elsewhere, because "KONSTRUKTOR" on the manual cover is placed so far away from the other two words.

Evidently BRAL (is the firm still Braglia?) seems to have a policy similar to Meccano SA, judging by Page's note (no.4 p.72), concentrating on sets to the exclusion of supplying spares. No answers have come to me from enquiries both direct to Milan, and through Rodolfo Piazzoli of the GAMM (Italian Meccano group), though BRAL seems to be in good supply with Merryland Toys, a firm with outlets in Toronto and Ottawa. BRAL prices are about a third of equivalent current Meccano prices in Canada.

[Guilty as charged m'Lord, except that I am not quite sure about YUN'll. From the Alphabet in OSN 4 there seems to be no "I" in the Russian alphabet but there is a "bl" which transliterates as "Y". So that would give YUNYI. What do you think?]

3. From John Hanby, "I was rather fascinated by the TRIX clockwork Moteur 2170 [p53, OSN 4], it would appear to have a reversing facility i.e. two levers, and as the shaft (output) is at right angles to the main spring it would be interesting to know the configuration.



Enclosed are some photocopies of THE A-L JOINTED-BARS BUILDING BOX, an educational outfit by E.J.Arnold. I picked this up recently but we had them in the Infants when I was at school in Littlehampton, West Sussex in 1928, so I am assuming that they were available between the wars. The photocopy of the Bars shows all that were in the box, the one crayoned in yellow is enclosed for your retention. The black holes you can see are by wood worm — who fortunately departed I would think a long time ago. I have

made a simple model which is reasonably effective and ideal for 4-6 year olds. [The set consists of various lengths of wooden bars, all with the same cross-section of about 7mm square, some of which can be seen in the model above. PCs of the box lid, the parts, and the manual, 6 in all, are available from the Editor.]

- 4. In reply to a question I had asked, André Barbe wrote that the French system MECANIC was put on the market by JEP (Jouet de Paris, 1902-1968) in 1921 and was withdrawn in 1923 after legal action by Hornby. The Strips and Angle Girders were nickel plated, as were the Pulleys, all the gears were brass, and the Plates were finished dull black. In 1931 JEP brought out FORGEACIER but it wasn't a great success because of the need to continually buy new lengths of the Strip material. [There was an article on FORGEACIER in INFOS JOUETS No 13 which I hope to return to in a later issue. For the record slightly different dates were given, MECANIC was said to have been launched in 1925 and FORGEACIER in 1932-33.]
- 5 Ashok Banerjee confirms that the META BUILD set mentioned in OSN 4 (p72) is the METAL CONSTRUCTION OUTFIT of OSN 3, p41. There are two versions of the META BUILD, a JUNIOR and a SENIOR outfit, the former will be fully described in the next issue and of the SENIOR Ashok writes, "I have examined the set but it does not seem to follow from the JUNIOR set, it has some square/rectangular plates with 4 flanges and a few additional parts".

## L'INGÉNIEUR CONSTRUCTEUR, ÉCÉPÉ, et MÉCANIC

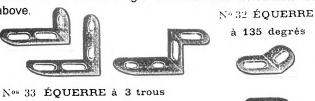
There is a piece on these systems in the French CAM Magazine No.47 and as many readers won't see it, I'll give an outline here. All three were made at Montreuil just outside Paris by Jouets de Paris (J.d.P or J.de.P), which later became Jouets en Paris, (JEP), part of la Société Industrielle de Ferblanterie (SIB). All were basically the same system under different names, but the range of parts grew with to finally reach about 80. L'INGÉNIEUR CONSTRUCTEUR (LIC here) was the name used in 1912/1913, ÉCÉPÉ during 1914/1919, and MÉCANIC in 1920/1923. All dates are approximate but production definitely stopped in 1923 after Meccano had won a legal action, started when the name MÉCANIC was first used.

With a good number of exceptions the parts look much like MECCANO and the hole pitch is 1/2". The diameter of Axles is given as 3.9mm and the holes as 4.1mm. However those in some 3x4h Architraves to hand are up to 4.3mm. Some of the non-MECCANO looking parts are illustrated in MCS; the Architrave, nicely shaped with no cutouts; the 2-bladed Propeller; a Signal Arm and Discs; an 8-spoked Wheel; 14h Strips (and 4x42h listed for a Tour Eiffel); and a Sector Plate with no flanges and a centre row of 8 holes, the middle 6 of which are elongated lengthways.

a care a 29 30 INGENIEUR

In the ÉCÉPÉ set above those fully perforated backing boards, some 28x20h are presumable made of card. The 2 sizes of the 8-spoked Wheel scale at rather under 2" and 3" diameter. Other parts are 15 and 16h Strips, and 28h A/Gs, so an artist's hand may have been at work. The full list of MÉCANIC Parts includes some not in MCS and these, with other points of interest, are as follows:

- A 'wide' Double Bracket, 1x5x1 and 3x5x3 DAS, a Double Bent Strip.
- 2x1h and 2x2h Angle Brackets with 2 slotted holes in one arm of each. The 2x2 is also shown as a 2x1x1 Reversed Angle Bracket, with the slots in the 1x1 part.
- · An Obtuse Angle Bracket with a slot in the longer arm and a shorter slot in the other. The ordinary Angle Bracket is similar, like the one shown in MCS.
- Flat forms of the Angle Brackets with holes/slots as above



en gradins 35



Nos 54 RACCORD PLAT à 55

 A 25mm Loose Pulley with 3 holes in its face, a 70mm Pulley with 6 holes interspersed by 6 radial slots, a Pawl, and a Universal Joint. All these parts look of similar design to those in MCS under FORGEACIER, a later JEP product. But note that the FORGEACIER Axle size is thought to be



TRANSMISSION CARDAN

Nº 19 CLIQUET





46 POULIE A GORGE de 25 m/m

POULIE UNIVERSELLE de 70

Braced Girders (25,11,7,5 hole) which scale at 1½" wide.

· A Double Arm Crank with one round hole in each arm. A Coupling that looks just like the s/t MECCANO #63. A 34mm Flanged Wheel.

52 RACCORDEMENT pour tringles

28



27 ÉLÉMENT CROISILLONNÉ de 25 trous

Nº 16 BRAS DE BIELLE

48 POULIE plate à rebord de 34 m/ à vis

5

Mag

· Two Gear Wheels with 50 and 56 teeth: the one shown appears to be

the larger, with two holes in its face. There's also an unusual looking Gear Segment, and 4 can be bolted onto a Bush Wheel to

make a large gear. There are 28 teeth on the one illustrated but one I've had

for years, and not known what it was, 74 SECTEUR DENTÉ has 25. In either case the end teeth would overlap if a gear wheel was formed. My one was stamped from .031" brass.

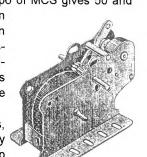
- 25, 11 and 7-hole Flat Girders.
- A 5x7-hole Flat Plate that's the 'petite' version in MCS.
- Windmill Sails are listed (also  $_{
  m 49~POUTRELLE~perforée~de~25~trous}$ in MCS) but not illustrated. Like- 50 wise 50 and 60mm Roue Vernie 51

(Spoked Wheels I assume though 'verni' probably means lacquered). Notice that the list on p6 of MCS gives 50 and

70mm, and In another illustration the small Spoked Wheel is shown with 6 spokes. Also a Spring, Ressort de Rappel, which might possibly be a spiral spring, the name was used for springs employed to centre small bells.

· There are two clockwork motors, No.1 Small and No.2 Large. They have governors and a start/stop lever, but nothing is said about re-

Nºs 76 MOTEUR "MÉCANIC" Nº 1. petit modèle versing.



Nº 2, grand modèle

11

- All the parts have PNs, 1-77 including the Motors: there are none in MCS.
- The parts were of good thickness and quality, though the paintwork wasn't very durable. Various finishes were used on the steel parts at different times, tin plating, metallic black (acier bruni), nickel plating, and for some black paint. Certain parts were made of copper, aluminium, brass, and brass plated steel, with some of the changes due to the war.

No details are available of the LIC sets that were marketed; for ÉCÉPÉ there were outfits A,B,C,D,(E), and linking sets A bis, B bis, C bis, (D bis). It isn't explained what the brackets signify. The same range (with no brackets) for MÉCANIC and in addition BB, CC, DD, EE. The latter were sets B to E with a motor added, No.1 for B and C, No.2 for

D and E.

The MÉCANIC manual, which covered all the sets, was developed from the ÉCÉPÉ one, and changed from year to year. The manual mentioned had 52 pages of models against 30 for the one in MCS. The Set Contents were the same in both. There were also leaflets which showed some models.

**ACKNOWLEDGEMENTS** The material above is published by kind permission of the Magazine of the *Club des Amis du MECCANO*, of the *Section Champagne* of the Club, and of the *CONSTRUCTORAMA* Archive. My thanks also to André Leenhardt, Editor of the CAM Magazine, for the additional material he sent.

AJUSTO This is another French system but rather an unusual one. There isn't much about it in MCS, but now thanks to David Hobson, much more has come to light. He came across a manual and a No.1 box, empty unfortunately, but the manual explains all, see the illustrations below. Semi-circular section wooden rods, grooved along their flat side are clamped together by push-on steel clips (A, Fig 1). Other clips push into the hollow centre of the united rods to allow them to be joined lengthwise (using clip C, Fig 4) or at right angles (B, Fig 3). As in Figs 4 and 9 the clips C and B can be bent to give an angle between the rods joined. BB is like B but is dimensioned to allow rods to rotate in it, H is similar, and E provides a bearing at 90° to a rod (Fig 6). G allows cross rods be joined in-line (Fig 7), and D allows a 3-way junction (Fig 5). F is just a hook.

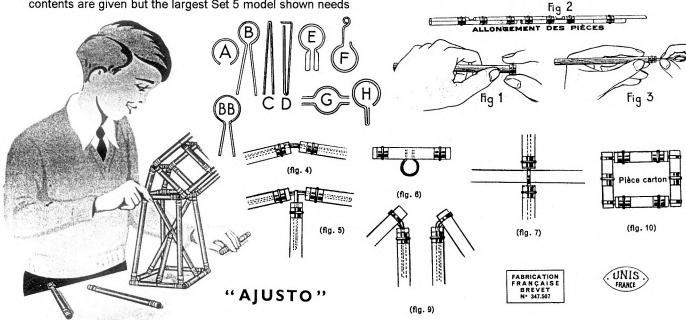
There are 10 different rods from 3 to 30cm long, in steps of 3cm, and each has a No. which is its length in centimeters. Then apart from the 9 clips, the only other part is a pulley wheel, possibly wooden but it doesn't say so. A larger disc is shown in one Crane but there's no reference to it anywhere as a part. It might be card - rectangular pieces of card are shown in some of the models but it isn't clear whether they came in the sets: it is explained that they were held in the gaps in the clips A, suitably aligned (Fig 10).

There were 5 outfits, numbered 1 to 5, and packets and boxes of extra parts were said to be available. No details of contents are given but the largest Set 5 model shown needs

over 300 clips and over 200 rods. The Set 1 box lid measures 19.5x14.3x2.5cm and is very nicely coloured with a stylish looking lad and two models, a bridge and a van. Rods and wheels are red and the panels of the van are dark red-brown. The models are the ones shown in MCS but it's a different boy.

The manual has 8 pages and all the models in it can be made with Set 5. The front cover shows the different parts, and, as on the lid, a logo 'UNIS FRANCE', and a Patent No.347.507. On the next page is the name and address: Établissements LÉON LEVILLE, 48, Faubourg du Temple -PARIS (XI°), and on a leaflet that was with the manual, this firm is given as the wholesale supplier. 75 numbered models are shown, 1-70, and then, on the last page, Nos.73 and 75-78. Those on the front cover of this Issue are typical: it isn't said which models can be made with which Set. The clips other than A and B aren't used very often and 'D' isn't called up at all. In just one model (the Moulin) pulleys needs to be fixed to their axles, but it isn't clear how this could be done.

Some idea of the diameter of the rods can be obtained by scaling from the models in the Manual but the answers from the 4 or 5 I tried, vary from 8.5 to 11.5mm - 10mm sounds a good round figure. On dates, MCS/FB says the ad shown is from 1933 - the manual gives no information but the boy on the box lid does look like a 1930's boy. Perhaps someone could find out the date of the Patent.



The LITTLE GIANT MODEL MAKER There were a number of UK, French,

& German 'DIY' systems but up to now none from America have been recorded. The LITTLE GIANT Tool (left)

was recently auctioned at the ebay.com web site and its description ran, 'Little Giant Model Maker by Yeager "Hy" Products Co., Williamsville, N.Y., patent applied for.' That is probably what is on the label on the base (right), which also shows a steamboat passing under a bridge. The description

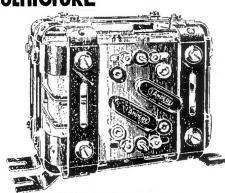
goes on, 'This is a neat little tool - it bends, cuts, shears and punches metal & wire for models, like an erector set but you make your own parts. No box or metal stock, just the tool.' The tool appeared to be painted red.

**MULTIMOTORE** This was the Italian version of the French MULTIMOTEUR (see 20/585). It dates from around 1947, and was mentioned in 15/426; now Jeannot Buteux has kindly sent a copy of a Leaflet which describes briefly a range of 12 Sets from 3 Groups. The name of the firm on the Leaflet is G.E.M.M.A., VIA BORGAZZI, 4, MONZA, and no doubt it was made under licence by them, or perhaps they imported the sets or parts. The logos of the two systems are very similar.

One side of the Leaflet has the Motor opposite, and an introduction to the system, with talk of the possibility to 'realizzare 100,000 construzioni'.

The sets are listed on the back and in Gruppo I, "ELEMENTI", are P6 (5 different Bells with an illustration of the one in 20/585); P7 (Telegraph with a key & buzzer); P8 (2-way Telegraph with 2 keys & buzzers); P9 (Optical telegragh, as in OSN 20, with 2 units); P12 (4 Motors with square frames, probably similar to the one shown in 12/304); and P13 (4 Motors with square & circular frames, no doubt the





Set in OSN 12.). Each set is said to contain a manual.

Gruppo II, "APPARECCHI E MOTORI", has 3 sets. D1 is the basic outfit and a Motor quite similar to the 'P' ones is shown but with an octagonal frame and shaped pole pieces for the field coils. D2 & D3 are add-on sets, and the Motor opposite is made using all 3 sets. Each has a manual, called Album I, II, & III respectively.

"TRASFORMATORI" is Gruppo III's title, and again there is a basic set T40B and 2 add-ons, T41B & T42B. 2 manuals are mentioned, Album I for the T40B, and Album II for the T42B. The models would no doubt work at low voltages and '4 e 14 Volt' are mentioned. Opposite the model illustrated in the Leaflet; '1 AMPERE' can be seen on the 2 diagonal elements on the front (fuses, connecting plugs?).

Jeannot also wrote that MULTIMOTEUR was still on sale in 1949 from a College of Electricity in Paris.

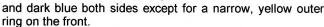
More on MÉCANIC David Hobson kindly lent me an 'A bis' conversion set that he had come by. It contained some parts, though not all would have belonged to the original set, and the notes below add to those in 12/314.

The box is a very dark red, 27½\*15\*2cm, and blue-grey inside divided by integral partitions. The label below is very attractive in full colour, & there's a similar one inside the lid, but without the 'A bis' so it's like the manual cover in MCS.

The Parts • <u>DATA</u> (in mm) <u>STRIP</u> (11-hole): •hole pitch/dia, 12.7/4.3; •width, 12.7; thickness, 1.2; •end radius, 6.7. <u>BOSS</u>: •o/d, 9.2; •i/d, 4.22; •brass; •single tapped. <u>THREAD</u>: <sup>5</sup>/32" BSW. <u>NUT</u>: sq 6.4 A/F; <u>BOLT</u>: cheesehead

5.4Ø; both natural brass.

- The 4-7h Strips are .8mm thick, the 11 & 14h 1.2mm.
- The Flat Sector Plate is as shown in MCS with slightly curved ends. The holes are 4.2mm Ø, a little smaller than those in the other parts, & the slotted holes are 9mm long. It is painted a dullish black.
- The 36mm Pulley is 38mm o.d. and the discs are made of unpainted aluminium, with "MECANIC" and J. de P. stamped on the outer disc in a circle around the boss. The top of the boss is slightly radiused.
- The Signal Square & Disc (right) are both made from sheet brass. The side of the Square is 57mm: the front is red & yellow, & the back plain red. The Disc is 56mm Ø,



- The Propeller is 105mm o/a and 18mm wide at the tips.
- The Angle Bracket is about 11\*14mm, with a 6mm long slotted hole in the short arm and a 9mm in t'other.
- The Spring Clip has narrow wings and is virtually identical to the equivalent MECCANO part.
- The Bolt, 8mm u/h, is nicely machined and has a deep,
   3.5mm, head; the Nut is pressed its thickness varies from
   2.4 to 2.6mm. Both look as shiny as new.
- Finish. The parts are well made and, apart from those mentioned above, are nicely nickel plated.



## **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 1<sup>st</sup> Nov. 1901 [thus predating Hornby's patent by nearly a month], & the German patent was granted on 14<sup>th</sup> Jan. '02.

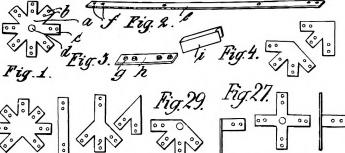
5. From Jeannot Buteux. • The French **CHARPENTO** patent (see 21/617) was No.589377 and a Roger Marie-Joseph Biard applied for it on 2 Feb. 1924. It was acquired by CIJ, who also produced a set for Citroën, and it bore the CITROËN name. Standard CHARPENTO parts were used but painted red & green, and 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.]

Fig. 7. White Fig. 1 h Fig. 3 Fig. 2

• 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.

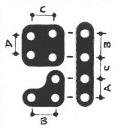
• The **Black Country Miniature** parts (21/619) really are small, a MECCA-MINI Strip will pass through a hole in a MECCANO Strip, and a BCM Strip will pass through a MECCA-MINI hole. • The contents of **Graham's patents** 125890 & 138824 (see 14/372) are all in one French patent, No. 520081, which was 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 ½" 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 ½" 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 prewar 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

**A MÉCANIC Manual** A general account, but mainly about the parts, of this early 1920s, 1/2" pitch French system, was given in 12/314 & 21/603. Of the manuals all that was available were the few pages of an early one which were used for the original MCS entry, and a few pages from a later version which were the basis for the MCS Extra Pages. A manual now to hand lies, chronologically, between these two. Each of these three manual has models for all the five sets produced, A – E.

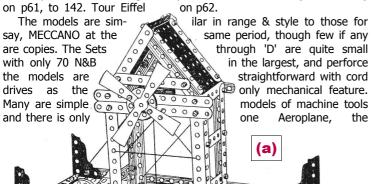
MÉCANIC followed ÉCÉPÉ and the early manual followed on from the ÉCÉPÉ edition. An Ebay photo shows that the back cover of the early manual still included references to ÉCÉPÉ and features the set illustrated in 12/314, but with the MÉCANIC name under it, where 'ÉCÉPÉ' would have been. (In passing this Ebay lot was a Set C with the Manual, and also a leaflet which explained that production of ÉCÉPÉ had been halted during the war and that now it was to resume under the MÉCANIC name, with the promise of future 'extensions et perfectionements'.)

The later (third) manual has many more pages than the early one, 64 against 32, and many more models, 142 against 85. It also shows more parts, though the contents of the sets remained unchanged.

**The present manual** is very similar to the later one with the same number of pages, and the same number of pages for the models from each set. One difference, probably the only significant one, is that the Illustrated Parts does not include the 2 clockwork Motors shown in the later edition. The Manual's 64 portrait format pages (including covers) are 156\*240mm, but the front cover, identical to the lid label in OSN 21 except that it doesn't have the red set letter panel in the top left corner, is printed landscape. The back cover shows 9 of the manual models printed in dark blue - it is similar to its later equivalent but that has one more model, and the models are arranged around the panel in Fig.1. (Not all of the small parts in it can be seen clearly and not all of the large parts are shown - of the latter those missing are the 5\*11h Perforated Plate, the Square Signal Disc, & the Semaphore Signal Arm. The Arm and both types of Disc can be seen in Fig.2b.) The Illustrated Parts are on pp3-6, and the Set Contents are on p60.

The other pages are given over to the models, as follows:

- Set A: 26 models from 1. Tableau noir (Blackboard) on p7 to 26. Scie à métaux (Mechanical Hacksaw) on p14.
- Set B: 30 models from 27. Passage à niveau (Level Crossing) on p15 to 56. Traineau à glace (Sledge) on p24.
- Set C: 38 models from Balançoire (Child's Swing) on p25 to 94. Escarpolette (Swing) on p37.
- Set D: 21 models from 95. Maison (House) on p38 to 115. Indicateur de directions (Train Destination Indicator) on p46.
- Set E: 23 models from 116. Presse à friction (Friction Press, though the action seems to be a driven vertical shaft) on p47, to 138. Potence à signaux (Signal Gantry) on p59.
- Finally 4 models needing extra parts, from 139. Etabli (Work Bench) on p62.



Nº 112. — Petit Moulin sur plate-forme

Bandes perforées de :	
11 trous	6
7 trous	
6 trous	1
5 trous	6
Cornières de 25 trous	2
Cornières de 11 trous	6

PIÈCES NÉCESSAIRES Cornières de 7 trous...81 Equerres ..... 5 Grandes plaques rectangulaires.....2 Petites plaques rectan-

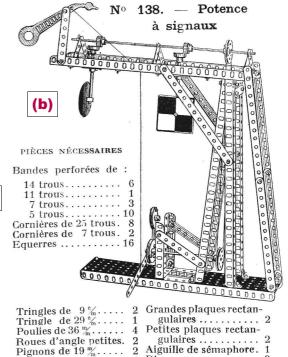
Tringles de 11 \% 5.. 3 Poulies de  $36 \frac{m}{m} \dots 4$ Poulies de 25 m... 2 Roue de barillet . . 1 Bagues d'arrêt.... 2 Vis et écrous.... 69 1/2 Frontons..... 4



model on the cover, and only one motor vehicle, the Car in Fig.3a. The inclusion of 2 Spoked Wheels in all the Sets, and 4 of the Architraves (1/2 Frontons) from Set B onwards, serve to improve the appearance of some of the models. Both the Windmill (Fig.2a) and the Car are from Set D.

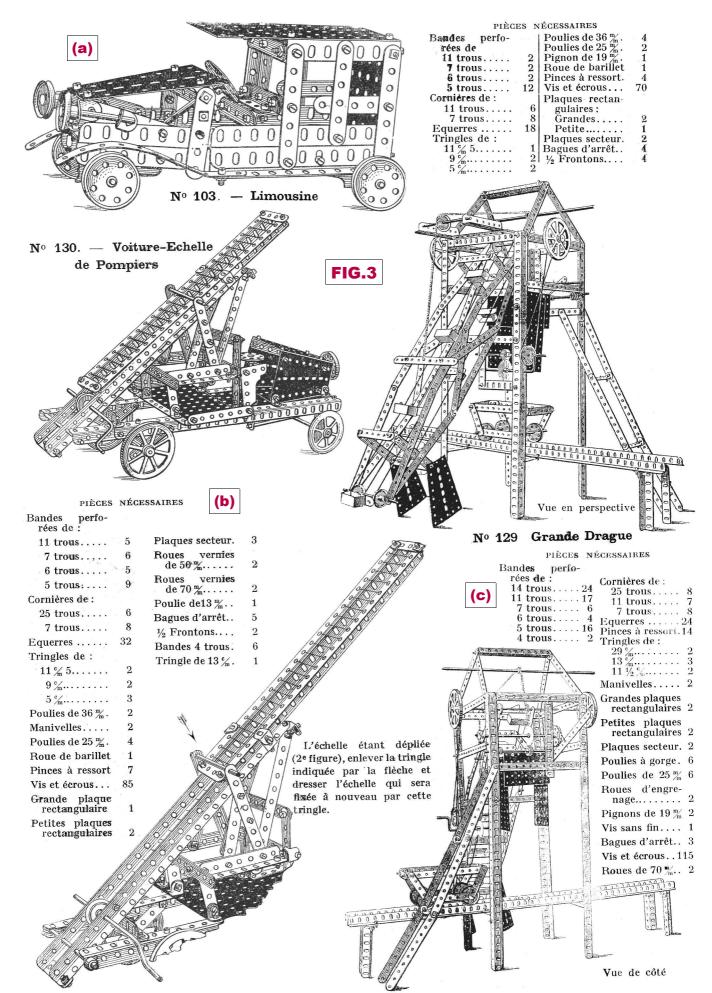
Set E has 120 N&B & 9 Gears, so the models can be a little more ambitious. They include a Transporter Bridge, several motor vehicles, & the other models illustrated here. The Tour Eiffel, one of the manual models which needs extra parts, looks the part and is well over 1m high. None of the Vehicle have any form of steering. The many parts in the system which were not included in the Sets would have allowed much more advanced models, and I wonder if the Model Leaflets mentioned in 12/315 included any such.

One line drawing & list of parts is provided for most of the models, with an extra view for a few of the larger ones. This is not adequate for the more complicated models – it is not easy to work out how the Dredger in Fig.3c works, for example. (All the drawings here are at their original size,



Disques ...

FIG.2



and all of the original detail can be seen. The only explanatory note given is about the ladders in the Fire Engine.)

Finally one point about the parts: a Windmill Sail, called Ailes de Moulin, but not illustrated, was mentioned in 12/314, but this is in fact

the Propeller (called just Aile). It is used in the Monoplane on the cover and two are used as the sails in small Windmill models – as in Fig.2a for example.