**'New' System: A Different EUREKA** This EUREKA is Spanish, made by Celsa (Valencia). As will appear this is an interesting system, unusual is several respects. It's not known when it was made.

The details here are mainly based on material kindly supplied by Angel Rodriguez Palacios. It can be seen on Timothy Edwards' 'Other Systems' web pages.

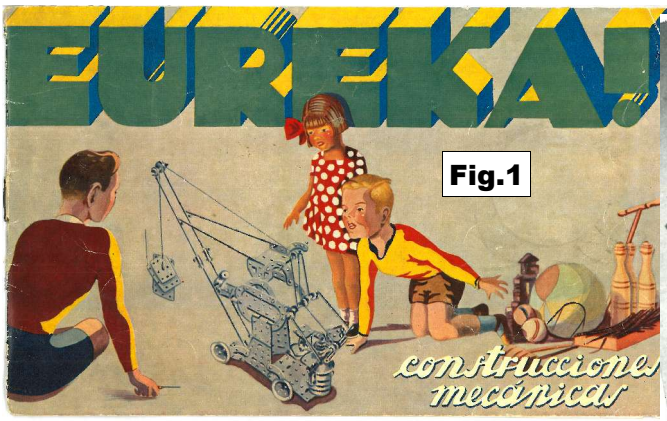

Fig.1

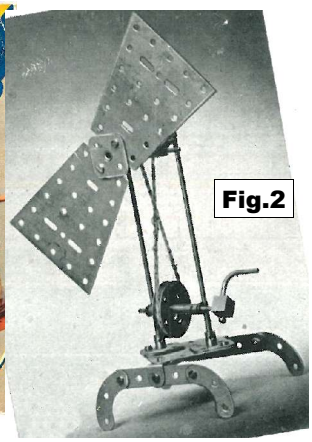
Fig.2

**The PARTS** All are shown in Figs.3 & 4, and many can be seen in Figs.6 & 7. Holes are 3.9mm Ø at 15.7mm pitch, Axles are 3.6mm Ø, & the thread is M3.5.

For a system of this size there is a good selection of Pulleys, Gears, and other 'mechanical' parts. Notice the several Rod & Strip Connectors (#39-42), the rectangular Coupling #50, and the other rectangular part #53, which is described as a 'Suspensión pendular'.

The range of constructional parts is unusual with very few Strips & A/Gs, the longest of which is the 5h, 8cm Strip. So it's not surprising to see that the framework of the model in Fig.1 is composed mainly of the Rods.

Other points: the 90° Rod looks a useful part; only one of the rectangular Plates has a centre hole; its an interesting idea to have the two types of Curved Strip; there are very few slotted holes but Celsa 'splashed out' to have the decorative but rather useless side cutouts in the Trunnions; the discs of the Pulley #62 are held together by 4 face tabs and the Rubber Ring #76 fits on it.

In 2 of the 3 sets seen the parts have a bright finish. All the limited number of types of part in the third are coloured with dark red Strips & Trunnions, and dark blue Plates. Pulleys, Discs, & bossed parts are mostly dark green but the large Pulley #63 is blue and the Pulley #62 is a deep yellow.

**The SETS** There were Nos.1, 2, & 3 plus linking sets I & II. Their contents are shown in Fig.5. For their size the sets have relatively few N&B, due no doubt, at least in part, to the use of Rods instead of Strips & A/Gs. As a comparison, before the advent of Flexible Plates a 1930 MECCANO No.3 had 94 N&B compared with 90 in the EUREKA No.3 but only about half as many non-N&B parts, 240 against 447.

Examples of Sets 1 & 3 in photos have been seen. Their boxes are covered in a grained black (possibly dark green) material, with the label as in Fig.1. The No.1 has a small white round disc on the label with '1' on it. The No.3 has the 2 layers shown in Figs.6 & 7. The No.1 has similar looking partitioning.

**The MANUAL** The pages aren't numbered. Fig.1 shows the cover, identical to the label. The first two inside pages are introductory and include the set structure. The next page has a list of the parts, with blank spaces for their prices. There follow 4 pages with models 1-6, 7-12, 13-18, 19-25. There is one photo of each, and each page is followed by another with the names of the models and a list of the the parts needed for them. The final 4 pages have the set contents (Fig.5 here), the illustrated parts (Figs.3 & 4), and finally a page with a list of the sets with the number of parts in each, and again, blank spaces for their prices.

All the models are quite small. There is no indication as to which set is needed for them but any of them could be made from a No.1.

There is a good selection of models. They include a few of domestic subjects, agricultural implements, & fairground rides; a Monoplane, no motor vehicles other than a Tractor; a Crane (Fig.8); a Railway Signal; an Anti-Tank Gun (Fig.9); an AA Gun; a Yacht; a Windmill (Fig.2); and three near 2-D figures including the Horseman in Fig.10.

As would be expected Rods are used for structures of any length. The only mechanical features are pulley drives.

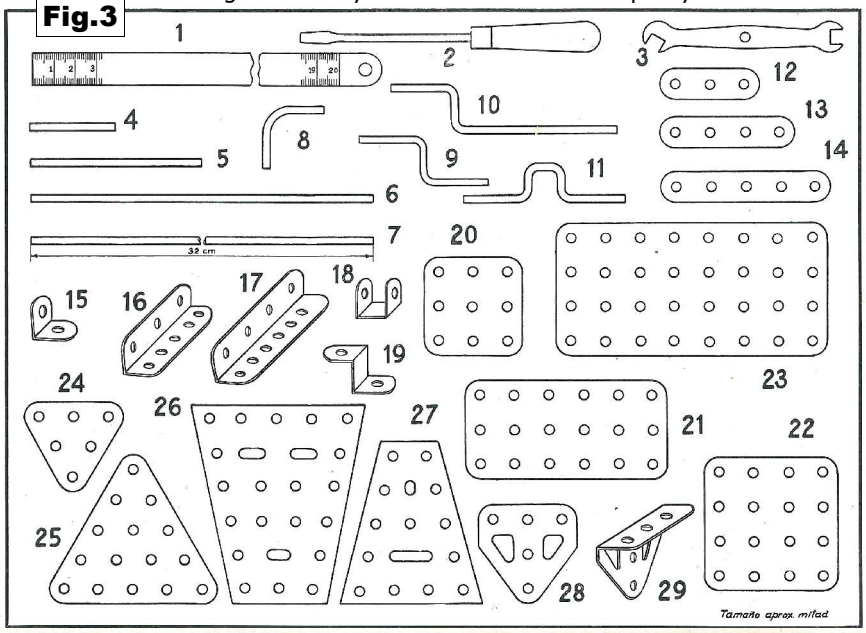

Fig.3

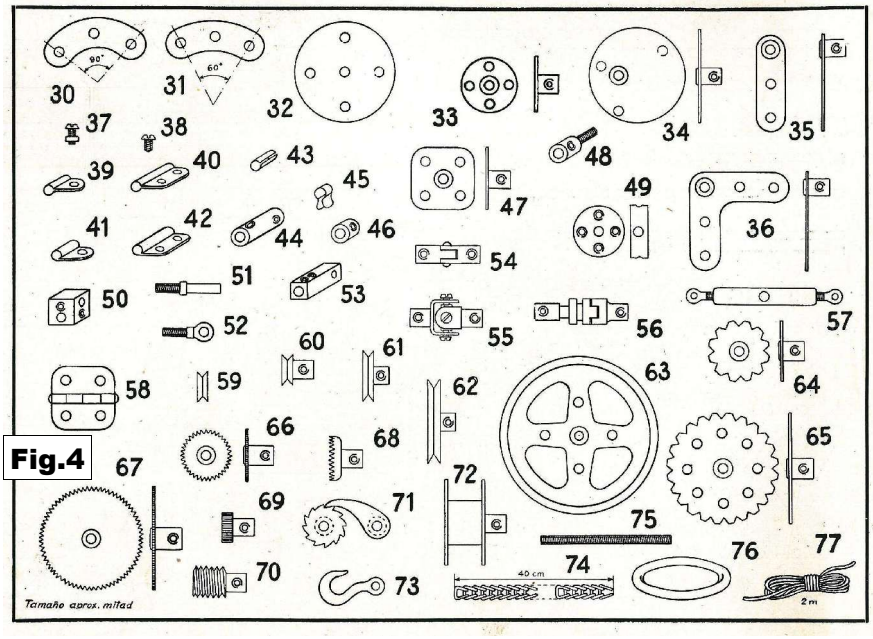

Fig.4

| N.º de ref. | ESPECIFICACIÓN | NÚM. DE PIEZAS POR CAJA | | | | |
|---|---|---|---|---|---|---|
| | | Núm. 1 | Supl. I | Núm. 2 | Supl. II | Núm. 3 |
| 1 | Doble decímetro. | 1 | — | 1 | — | 1 |
| 2 | Destornillador | 1 | — | 1 | — | 1 |
| 3 | Llave | 1 | — | 1 | — | 1 |
| 4 | Varilla 4 cm. long. | 8 | 7 | 15 | 5 | 20 |
| 5 | » 8 » » | 6 | 4 | 10 | 5 | 15 |
| 6 | » 16 » » | 4 | 2 | 6 | 4 | 10 |
| 7 | » 32 » » | — | — | — | 5 | 5 |
| 8 | » angular (codo) | 2 | 2 | 4 | 4 | 8 |
| 9 | » manivela corta | 1 | 1 | 2 | 1 | 3 |
| 10 | » » larga | — | 1 | 1 | 1 | 2 |
| 11 | » cigüeñal | — | 1 | 1 | — | 1 |
| 12 | Tira perforada 4'6 cm. long. | 6 | 2 | 8 | 2 | 10 |
| 13 | » » 6 » » | 4 | 2 | 6 | 2 | 8 |
| 14 | » » 8 » » | 2 | 2 | 4 | 2 | 6 |
| 15 | Soporte L | 4 | 4 | 8 | 4 | 12 |
| 16 | » L 4'6 cm. long. | 1 | 1 | 2 | 2 | 4 |
| 17 | » L 6'2 » » | 1 | 1 | 2 | 2 | 4 |
| 18 | » U | 2 | 2 | 4 | 2 | 6 |
| 19 | » Z | 2 | 2 | 4 | 2 | 6 |
| 20 | Placa 4'6 x 4'6 cm. | 2 | 2 | 4 | 4 | 8 |
| 21 | » 4'6 x 9'4 » | 1 | 1 | 2 | 2 | 4 |
| 22 | » 6'2 x 6'2 » | 1 | 3 | 4 | 2 | 6 |
| 23 | » 6'2 x 12'6 » | — | 1 | 1 | 1 | 2 |
| 24 | » triangular n.º 1. | 1 | 1 | 2 | 2 | 4 |
| 25 | » » » 2. | — | 1 | 1 | 1 | 2 |
| 26 | » trapezoidal » 1. | 2 | — | 2 | 2 | 4 |
| 27 | Placa trapezoidal n.º 2 | — | 1 | 1 | 1 | 2 |
| 28 | Soporte eje (plano) | 2 | 2 | 4 | 4 | 8 |
| 29 | » » (angular) | — | 4 | 4 | — | 4 |
| 30 | Cuadrante 6'2 cm. ∅ | 12 | 4 | 16 | 4 | 20 |
| 31 | Sextante 7'8 » ∅ | — | 6 | 6 | 6 | 12 |
| 32 | Placa circular. | 1 | 1 | 2 | — | 2 |
| 33 | » » con tornillo. | 1 | 1 | 2 | — | 2 |
| 34 | » excéntrica de 3 puntos. | — | 1 | 1 | 1 | 2 |
| 35 | Palanca manivela (recta) | 1 | 1 | 2 | — | 2 |
| 36 | » » (angular) | — | — | — | 1 | 1 |
| 37 | Perno | 30 | 30 | 60 | 30 | 90 |
| 38 | Tornillo | 15 | 5 | 20 | 10 | 30 |
| 39 | Brida céntrica sencilla. | 12 | 6 | 18 | 6 | 24 |
| 40 | » » doble | 2 | 2 | 4 | 6 | 10 |
| 41 | » plana sencila | 12 | 6 | 18 | 6 | 24 |
| 42 | » » doble | 2 | 2 | 4 | 6 | 10 |
| 43 | Manguito unión a presión | 4 | 4 | 8 | 4 | 12 |
| 44 | » » con tornillos. | 2 | 2 | 4 | 6 | 10 |
| 45 | Tope pinza (acero) | 4 | 2 | 6 | 4 | 10 |
| 46 | » con tornillo | 2 | 2 | 4 | 4 | 8 |
| 47 | Pie montante | 4 | 2 | 6 | 4 | 10 |
| 48 | Terminal varilla con rosca | — | 1 | 1 | 1 | 2 |
| 49 | Unión cruz (plato) | 1 | 1 | 2 | — | 2 |
| 50 | » » (dado) | 4 | 2 | 6 | 2 | 8 |
| 51 | Pivote (muñón) | 1 | 1 | 2 | 2 | 4 |
| 52 | Abrazadera. | — | 2 | 2 | 2 | 4 |
| 53 | Suspensión pendular | — | 2 | 2 | 2 | 4 |
| 54 | Unión rótula | — | 1 | 1 | 1 | 2 |
| 55 | » cardán | — | — | — | 2 | 2 |
| 56 | Embrague | — | — | — | 1 | 1 |
| 57 | Tensor | — | 1 | 1 | 1 | 2 |
| 58 | Visagra | — | 2 | 2 | 2 | 4 |
| 59 | Polea 15 mm. ∅ loca | 2 | 2 | 4 | 2 | 6 |
| 60 | » 15 » ∅ fija. | 2 | — | 2 | 2 | 4 |
| 61 | » 25 » ∅ » | — | 2 | 2 | 2 | 4 |
| 62 | Rueda 40 » ∅ | 4 | — | 4 | 2 | 6 |
| 63 | » 75 » ∅ | — | 2 | 2 | 2 | 4 |
| 64 | » 28 » ∅ para cadena | — | 2 | 2 | 2 | 4 |
| 65 | » 50 » ∅ » » | — | 1 | 1 | 1 | 2 |
| 66 | » 25 » ∅ dentada. | — | 1 | 1 | 1 | 2 |
| 67 | » 45 » ∅ » | — | 1 | 1 | 1 | 2 |
| 68 | » angular 20 mm. ∅ dentada. | — | 1 | 1 | — | 1 |
| 69 | Piñón dentado | — | 1 | 1 | 1 | 2 |
| 70 | » vis-sin-fin | — | 1 | 1 | — | 1 |
| 71 | Rueda trinquete completa | — | — | — | 1 | 1 |
| 72 | Tambor cabrestante | — | 1 | 1 | 1 | 2 |
| 73 | Gancho para cuerda | — | 1 | 1 | 1 | 2 |
| 74 | Cadena transmisora 40 cm. | — | 1 | 1 | 1 | 2 |
| 75 | Varilla rosc. 3'5 x 60 long. | — | 1 | 1 | 2 | 3 |
| 76 | Neumático para rueda n.º 62. | 4 | — | 4 | 2 | 6 |
| 77 | Trozo cordón de 2 metros | — | 1 | 1 | 1 | 2 |

Fig.5


Fig.6

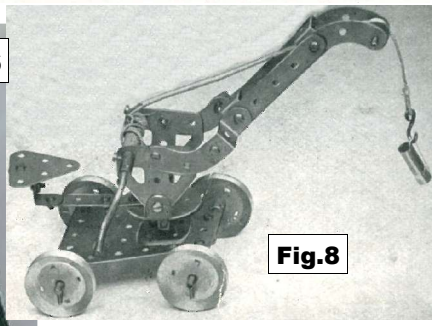
Fig.8

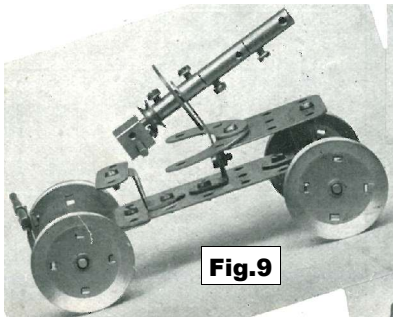
Fig.9


Fig.7

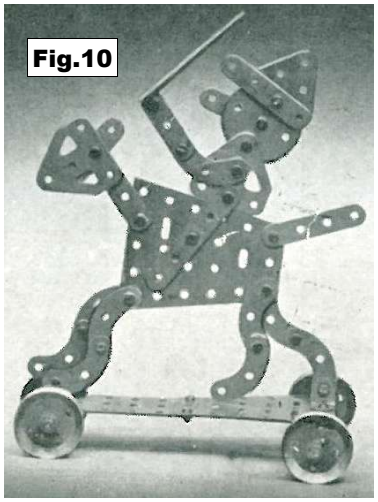
Fig.10