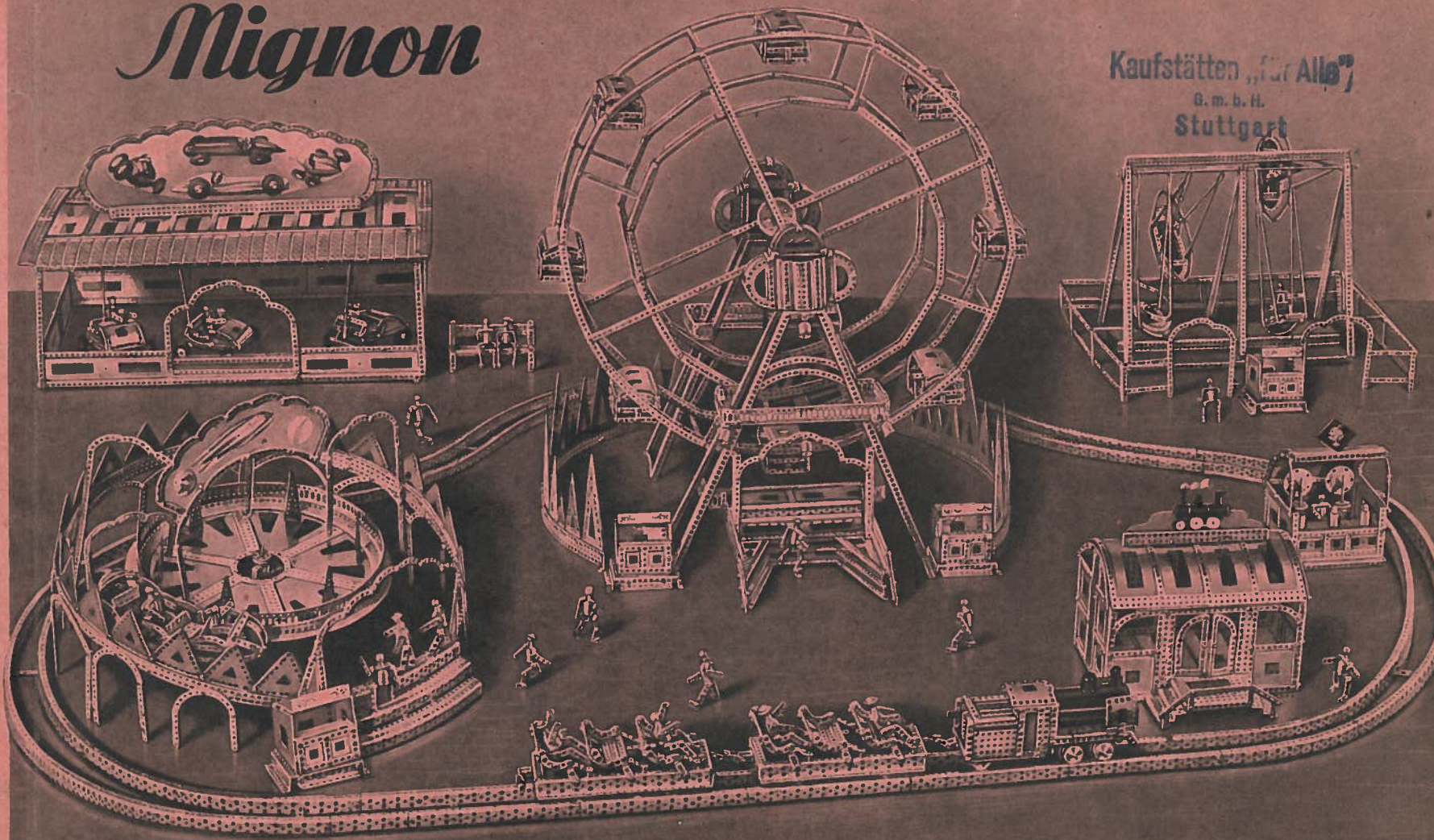


Mignon

Kaufstätten „für Alle“
G. m. b. H.
Stuttgart



Geb. **Staiger**

St. Georgen / Schwarzwald

Prohibida la reimpression de los textos y grabados de la
Guía de Construcciones, tanto íntegra como parcialmente.

Guía para las Cajas de Construcciones Metálicas

No. 1, 2 y 3

Querido amiguito:

Te saludamos como nuevo aficionado a nuestra hermosa Caja de Construcciones Metálicas, esperando que también a tí te dará mucha alegría y que le guardarás fidelidad. Nuestra Caja de Construcciones te permitirá componer tú mismo los juguetes más hermosos e interesantes; es más, según tus inclinaciones podrás hacer de constructor de máquinas y armar modelos de máquinas y vehículos que funcionarán perfectamente y, esto es lo más nuevo, llegarás hasta a construir todo un ferrocarril de intachable funcionamiento. O bien podrás sentirte ingeniero arquitecto, construyendo toda suerte de edificios que tu fantasía te inspire. Los bonitos colores de las diferentes piezas de construcción se prestan maravillosamente para ello. No podemos enumerar en este catálogo todo lo que

podrás construir con nuestra caja. En las páginas siguientes encontrarás ilustraciones de toda una serie de modelos con una lista minuciosa de las piezas que se necesitan para su construcción.

Pues bien, si empiezas a construir los primeros modelos, recuerda lo que ya te hemos dicho antes y comienza con los más sencillos, fijándote cuidadosamente en los ejemplos para que te acostumbres a emplear bien y en su debido lugar cada una de las piezas. Así adquirirás en poco tiempo tanta habilidad que te resultarán pronto y fácilmente los modelos más grandes y difíciles y podrás construir todo lo que se te ocurra.

Pero, ¡ojo! Lee con atención las indicaciones de la página 2 y fíjate muy bien en ellas, entonces no sufrirás ningún fracaso.

Y ahora, ¡mano a la obra!

¡Atención!

Nuestras Cajas de Construcciones están compuestas según el sistema de complementación y comprenden 3 cajas principales y 2 suplementarias; a saber:

la caja principal No. 1 y la suplementaria No. 1 S forman juntas la caja principal No. 2;

la caja principal No. 2 y la suplementaria No. 2 S forman juntas la caja principal No. 3.

Un complemento importante de las Cajas de Construcciones para impulsar modelos móviles es el motor de resorte No. 250 indicado en la guía, el cual puede pedirse separadamente a la fábrica.

El material de las piezas de construcción es de la mejor calidad y estabilidad y de larga duración. Las piezas están niqueladas o teñidas con arreglo a un procedimiento especial. Piezas de repuesto pueden pedirse según los números indicados en la lista del contenido.

Instrucciones para la construcción

- a) Las formas fundamentales y los modelos de instrucción de las páginas 3—8 tienen el objeto de demostrar cómo han de armarse los diferentes elementos básicos para que formen partes fijas o móviles a fin de adquirir las nociones indispensables para poder construir modelos intachables, que funcionan perfectamente.
- b) Al construir según modelo, hay que emplear las piezas indicadas en la lista correspondiente a fin de obtener modelos exactamente iguales al grabado.
- c) Téngase presente que contando los agujeros en las piezas de construcción, se facilita mucho el construir.
- d) Al montar las piezas, no se deben apretar las tuercas, hasta que se haya armado totalmente el modelo en cuestión para poder enderezar y rectificar al final en debida forma las piezas.
- e) En las piezas unidas en forma móvil hay que emplear **2 tuercas**, la primera de las cuales deberá atornillarse sólo hasta tanto las dos piezas puedan moverse fácilmente una contra la otra, mientras que la segunda tuerca se atornillará fijamente a la primera. En este caso se sujetará la primera tuerca con una llave de tuercas, apretando la segunda con la otra llave. Esta operación la hemos demostrado en el grabado de la página 3 (forma fundamental No. 1).
- f) En los modelos sucede a menudo que el disco perforado No. 76 debe unirse a un eje. Esto se consigue metiendo a ambos lados del disco una arandela elástica No. 146, presionando las piezas mediante 2 anillos de ajuste No. 81 y atornillando dichos anillos.
- g) Las piezas indicadas en los grabados con rayitas (- - -) quedan ocultas detrás de otras piezas que quedan delante y se han dibujado así para que se comprenda mejor la estructura del modelo.

No. 1 - 9 Formas fundamentales



1 No. 182
2 " 185

No. 1 Montar una contratuerca
Descripción exacta véase en
las „Instrucciones” grupo „e”



2 No. 4
2 " 180
2 " 185

No. 2 Junta de dos cintas planas
superpuestas



1 No. 7
2 " 30
4 " 180
4 " 185

No. 3 Junta de tope de dos vigas angulares



4 No. 24
4 " 41
8 " 180
8 " 185

No. 4 Cintas curvadas formando círculo



2 No. 4
1 " 72
5 " 180
5 " 185

No. 5 Junta rectangular de dos cintas planas



1 No. 76
2 " 81
1 " 87
2 " 146

No. 6 Arandela elástica No. 146 para fijar
piezas de las Cajas de Construcciones con
árboles

Descripción exacta véase en
las „Instrucciones” grupo „f”



No. 7 Unión de dos árboles

1 No. 82
2 " 86



No. 8 Unión de dos vástagos roscados

1 No. 83
2 " 107
2 " 185

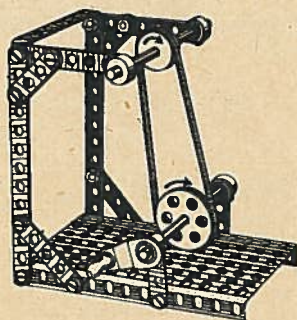


No. 9 Unión de un árbol y un vástago
roscado

1 No. 84
1 " 87
1 No. 106
1 " 185

Modelos de instrucción

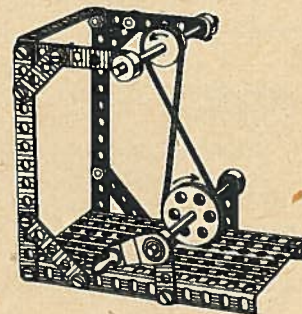
No. 10 - 14 Impulsión por correa



No. 10 Impulsión directa

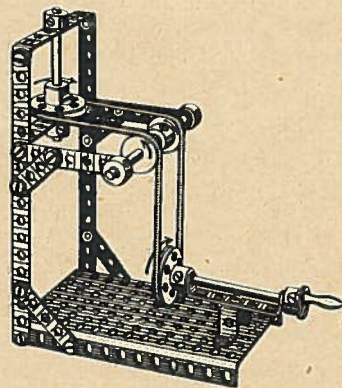
Piezas para los modelos No. 10 y 11

2 No. 3	1 No. 61	1 No. 99
2 " 5	1 " 73	1 " 148
2 " 6	1 " 74	11 " 180
4 " 7	3 " 81	3 " 181
1 " 55	2 " 87	14 " 185

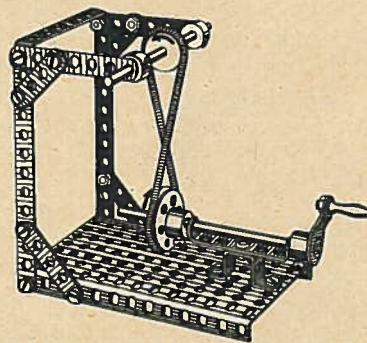


No. 11 Impulsión cruzada

2 No. 2	1 No. 75
2 " 5	4 " 81
2 " 6	2 " 86
2 " 7	1 " 87
1 " 50	1 " 99
2 " 55	1 " 148
1 " 56	14 " 180
1 " 61	3 " 181
2 " 73	17 " 185
2 " 74	

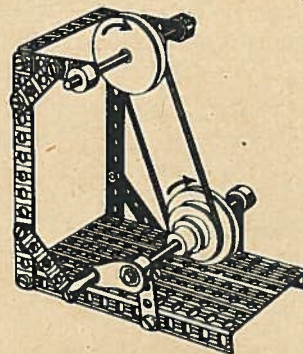


No. 13 Impulsión angular con poleas de inversión



No. 12 Impulsión semicruzada

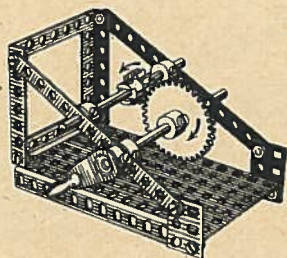
2 No. 3	1 No. 74
2 " 5	2 " 81
2 " 6	2 " 87
2 " 7	1 " 99
1 " 50	1 " 148
1 " 55	14 " 180
1 " 56	1 " 181
1 " 61	15 " 185
1 " 73	



No. 14 Impulsión por polea a escalones

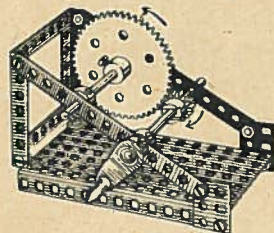
2 No. 3	2 No. 87
4 " 6	1 " 99
4 " 7	1 " 148
1 " 55	12 " 180
1 " 61	2 " 181
2 " 79	14 " 185
3 " 81	

No. 15 - 23 Impulsiones por ruedas dentadas



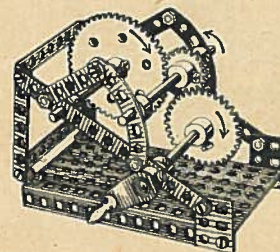
No. 15 Transmisión
(a marcha rápida)

2 No. 3	2 No. 87
2 " 21	1 " 99
2 " 43	1 " 118
1 " 61	1 " 120
1 " 68	10 " 180
3 " 81	10 " 185



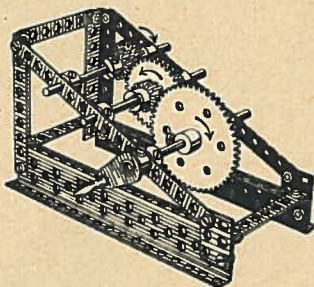
No. 16 Reducción (a marcha lenta)

2 No. 3	2 No. 87
2 " 21	1 " 99
2 " 43	1 " 118
1 " 61	1 " 121
1 " 68	10 " 180
3 " 81	10 " 185



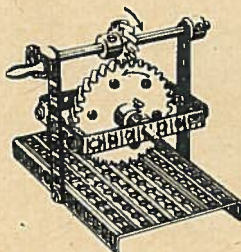
No. 17 Impulsion con rueda intermedia

2 No. 3	3 No. 87
2 " 6	1 " 99
2 " 21	1 " 119
2 " 24	1 " 120
2 " 43	1 " 121
1 " 61	16 " 180
1 " 68	16 " 185
6 " 81	



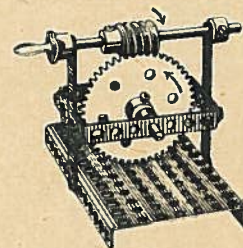
No. 18 Transmisión múltiple de ruedas
dentadas

2 No. 2	1 No. 99
3 " 5	2 " 118
2 " 21	1 " 119
2 " 30	1 " 120
2 " 33	1 " 121
6 " 81	14 " 180
3 " 87	14 " 185



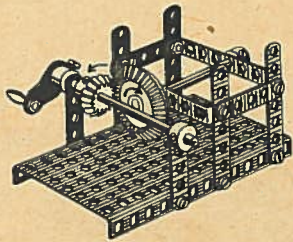
No. 19 Impulsión por ruedas helicoidales

2 No. 4	1 No. 87
2 " 6	1 " 99
2 " 55	1 " 128
1 " 61	1 " 130
3 " 81	8 " 180
1 " 86	8 " 185



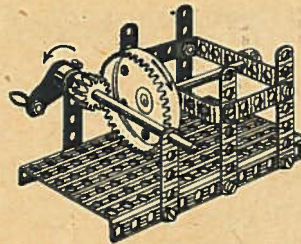
No. 20 Engranaje de tornillo sin fin

2 No. 4	1 No. 87
2 " 6	1 " 99
2 " 55	1 " 121
1 " 61	1 " 134
3 " 81	8 " 180
1 " 86	8 " 185



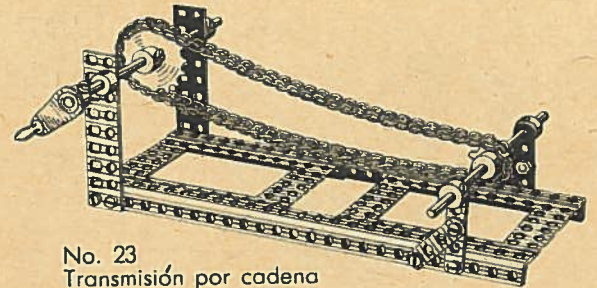
No. 21 Impulsión por ruedas cónicas

4 No. 5	1 No. 99
4 " 6	1 " 122
2 " 55	1 " 123
1 " 61	6 " 180
2 " 81	4 " 181
1 " 86	10 " 185
1 " 87	



No. 22 Impulsión por engranaje á corona

4 No. 5	1 No. 99
4 " 6	1 " 118
2 " 55	1 " 125
1 " 61	6 " 180
1 " 81	4 " 181
1 " 86	10 " 185
1 " 87	



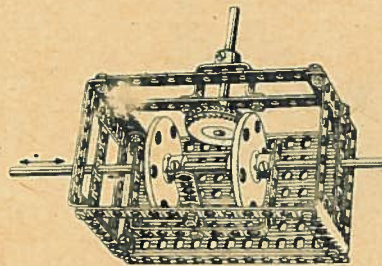
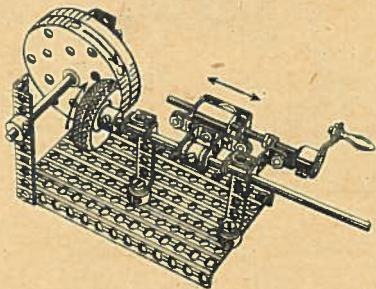
No. 23 Transmisión por cadena

2 No. 6	4 No. 81	1 No. 136
2 " 7	2 " 89	2 " 180
2 " 20	1 " 99	8 " 181
2 " 28	1 " 131	10 " 185
2 " 70	1 " 132	

No. 24 - 26 Transmisiones diversas

No. 24 Transmisión de fricción no escalonada

1 No. 6	1 No. 65	3 No. 145
2 " 30	1 " 74	1 " 156
3 " 44	5 " 81	8 " 180
1 " 45	1 " 84	1 " 181
1 " 49	1 " 87	2 " 182
1 " 51	1 " 90	12 " 185
2 " 56	1 " 99	
1 " 61	1 " 107	

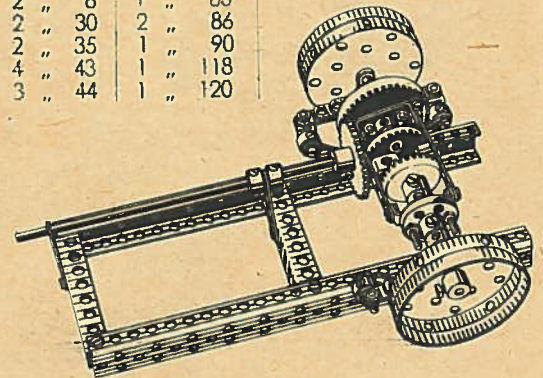


No. 25 Transmisión de inversión de marcha

3 No. 3	1 No. 61	4 No. 146
1 " 4	2 " 68	1 " 156
2 " 5	1 " 74	18 " 180
2 " 6	2 " 76	6 " 181
4 " 43	5 " 81	26 " 185
1 " 51	1 " 86	
1 " 55	1 " 90	

No. 26 Transmisión diferencial

2 No. 4	2 No. 57	2 No. 124	21 No. 180
4 " 5	2 " 65	1 " 125	2 " 181
5 " 6	1 " 73	2 " 145	8 " 182
4 " 7	9 " 81	1 " 146	33 " 185
2 " 8	1 " 85		
2 " 30	2 " 86		
2 " 35	1 " 90		
4 " 43	1 " 118		
3 " 44	1 " 120		



No. 27 - 30 Varios modelos de Instrucción



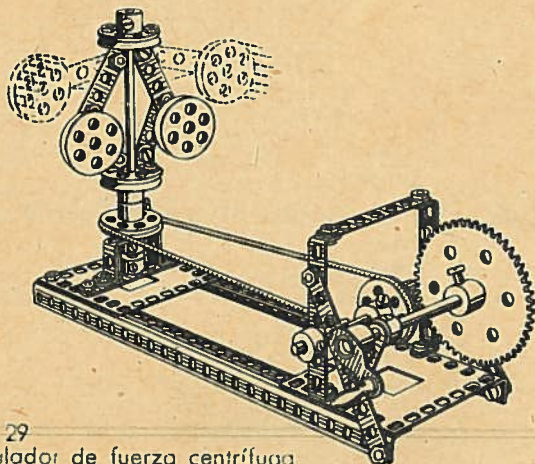
No. 27 Garrucha sencilla

4 No. 1	1 No. 141
2 " 8	1 " 152
1 " 45	4 " 180
1 " 55	3 " 181
1 " 61	3 " 182
2 " 75	14 " 185
1 " 81	



No. 28 Cardán

2 No. 7	2 No. 61	2 No. 107	6 No. 182
4 " 45	6 " 81	2 " 145	28 " 185
1 " 50	1 " 99	8 " 180	4 " 186
1 " 51	1 " 106	2 " 181	



No. 29
Regulador de fuerza centrífuga

2 No. 4	4 No. 43	2 No. 87	2 No. 145
2 " 5	1 " 51	1 " 88	1 " 148
2 " 6	2 " 55	1 " 99	2 " 165
4 " 7	6 " 73	1 " 118	18 " 180
2 " 26	6 " 81	1 " 121	14 " 181
2 " 28			36 " 185

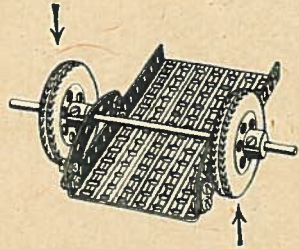


No. 30 Garrucha doble

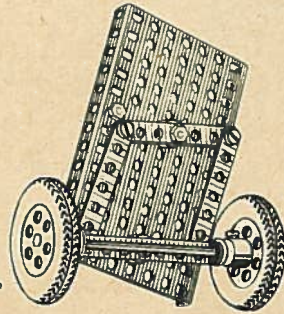
4 No. 1	1 No. 81
4 " 3	2 " 86
2 " 6	1 " 141
2 " 7	4 " 145
1 " 45	1 " 152
1 " 51	20 " 180
1 " 55	2 " 181
2 " 57	1 " 182
1 " 61	25 " 185
4 " 73	

No. 31 - 34 Vehículos

Rueda "fija"



Rueda "loca"

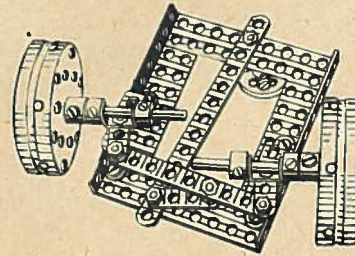


No. 31
Disposición de las ruedas posteriores

2 No. 24	1 No. 89
4 " 41	2 " 155
1 " 61	8 " 180
2 " 73	8 " 185
1 " 81	

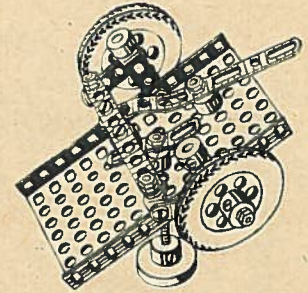
No. 32
Mecanismo de dirección I

3 No. 5
2 " 8
2 " 43
1 " 55
1 " 57
1 " 61
3 " 73
1 " 75
2 " 81
1 " 87
1 " 106
4 " 145
2 " 155
6 " 180
4 " 181
1 " 182
18 " 185



No. 33 Mecanismo de dirección II

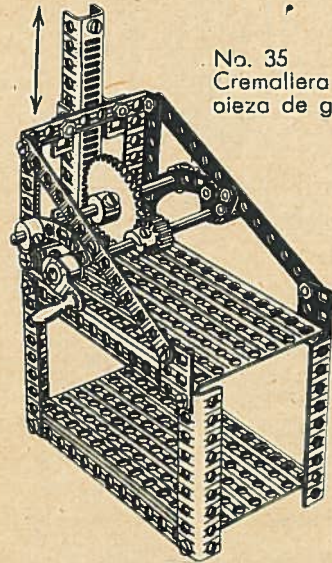
1 No. 3	1 No. 51	2 No. 86
1 " 4	1 " 57	2 " 106
1 " 7	2 " 66	1 " 107
2 " 8	1 " 70	9 " 180
2 " 41	1 " 73	3 " 181
2 " 43	4 " 81	1 " 182
2 " 44		31 " 185



No. 34 Mecanismo de dirección III

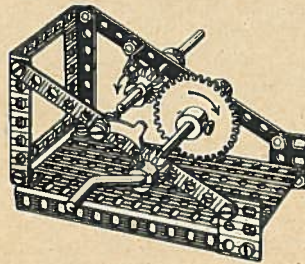
1 No. 4	1 No. 61	2 No. 145
2 " 7	3 " 73	2 " 155
1 " 12	7 " 81	6 " 180
1 " 13	1 " 83	3 " 181
2 " 43	2 " 86	2 " 182
1 " 51	2 " 105	25 " 185
4 " 57	1 " 107	

No. 35
Cremallera y
pieza de guía



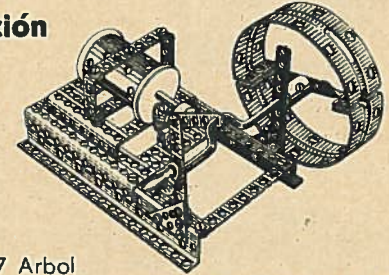
2 No. 3
2 " 21
2 " 24
4 " 30
4 " 41
2 " 43
4 " 52
2 " 61
2 " 68
3 " 81
2 " 87
1 " 99
1 " 118
1 " 120
1 " 135
2 " 145
27 " 180
3 " 181
30 " 185

No. 35 - 37 Aplicación de varios elementos de construcción



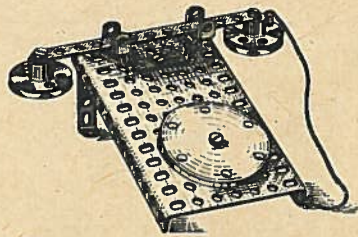
No. 36 Trinquete y soporte

2 No. 3	1 No. 61	1 No. 98	14 No. 180
2 " 21	1 " 68	2 " 118	1 " 182
2 " 43	2 " 81	1 " 120	15 " 185
1 " 51	1 " 87	1 " 138	2 " 186



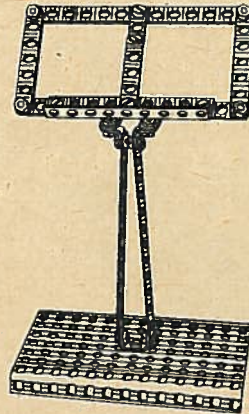
No. 37 Arbol
cigüeñal, arcos semicirculares y guía de arbol

3 No. 4	1 No. 54	2 No. 78	1 No. 100
2 " 5	2 " 57	1 " 81	4 " 145
1 " 6	2 " 63	1 " 84	24 " 180
2 " 33	1 " 68	1 " 86	3 " 181
1 " 41	1 " 70	2 " 94	4 " 182
2 " 43	2 " 72	1 " 99	33 " 185
2 " 49			



No. 1 Teléfono

1 No. 3	2 No. 73
2 " 43	1 " 75
2 " 44	1 " 76
2 " 56	7 " 180
1 " 57	3 " 182
1 " 61	11 " 185

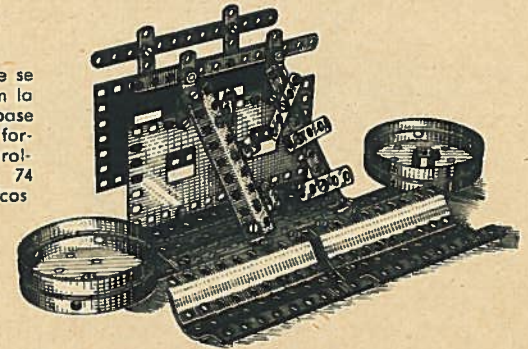


No. 2 Atril

4 No.3	1 No.30	1 No. 61
2 " 5	2 " 42	14 " 180
1 " 6	2 " 43	4 " 181
1 " 8	1 " 44	18 " 185

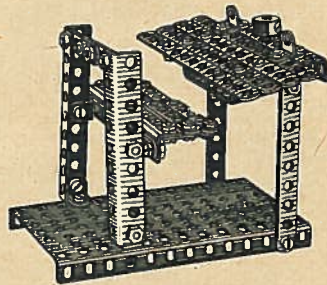
Modelos construídos con la Caja No. 1

Los pies que se atornillan en la placa de base No. 61, son formados por 4 roldanas No. 74 con neumáticos



No. 3 Porta-lápiz y pluma de escritorio

1 No. 1	4 No.42	2 No.145
2 " 3	2 " 57	4 " 156
8 " 6	1 " 61	2 " 166
2 " 7	2 " 64	22 " 180
1 " 8	1 " 65	12 " 181
3 " 30	1 " 66	6 " 182
2 " 41	4 " 74	40 " 185



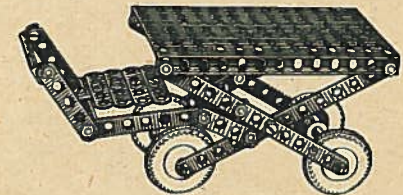
No. 4 Banco de escuela

4 No.3	4 No.30	1 No. 61
2 " 4	8 " 43	1 " 81
7 " 6	1 " 44	34 " 180
2 " 7	2 " 56	3 " 181
2 " 8	1 " 57	37 " 185



No. 5 Silla giratoria

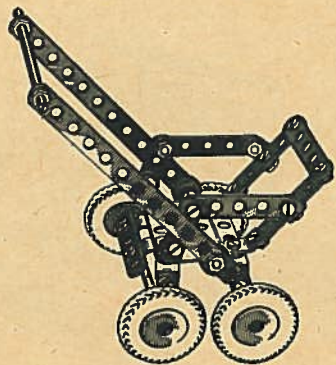
8 No. 6	1 No. 76	8 No.180
1 " 8	1 " 107	4 " 181
1 " 56	2 " 145	15 " 185



No. 6 Mesa de niños

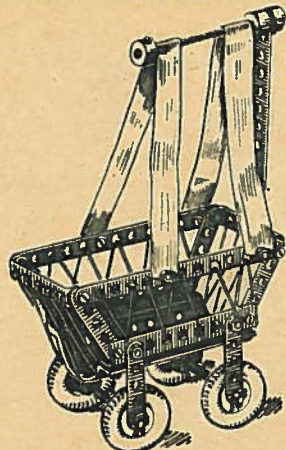
4 No.3	2 No.56	4 No.156
2 " 4	1 " 61	17 " 180
7 " 6	4 " 74	4 " 181
2 " 7	2 " 86	21 " 185

Modelos construídos con la Caja No. 1



No. 7 Cochecito para niños

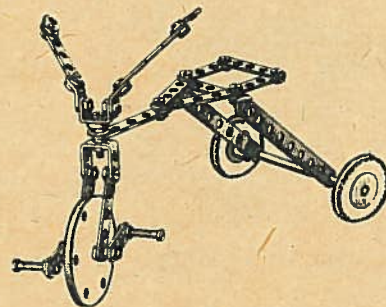
2 No.3	4 No.41	4 No. 74	4 No.156
8 " 6	4 " 42	2 " 86	22 " 180
2 " 7	8 " 43	1 " 107	6 " 181
2 " 8	1 " 56	4 " 145	32 " 185



El coche cuna se adorna con cinta de color y cordones

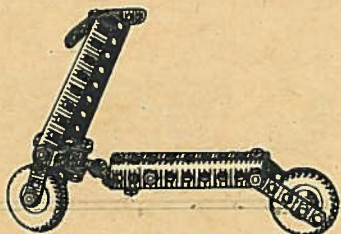
No. 8 Coche cuna

3 No. 3	2 No. 86
8 " 6	1 " 107
2 " 30	4 " 156
2 " 56	13 " 180
1 " 64	8 " 181
4 " 74	21 " 185
3 " 81	



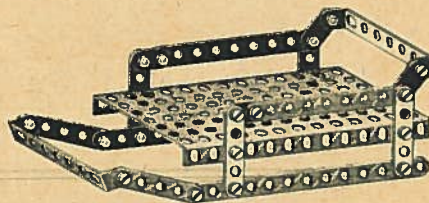
No. 9 Triciclo

2 No. 4	1 No. 44	2 No.145
8 " 6	1 " 45	2 " 156
2 " 7	1 " 56	12 " 180
2 " 8	2 " 74	3 " 181
2 " 41	1 " 76	3 " 182
2 " 42	1 " 87	28 " 185
	1 " 105	



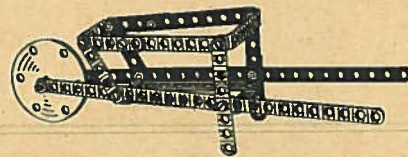
No. 10 Patinete

1 No. 4	1 No.43	1 No.105
2 " 6	2 " 44	2 " 156
2 " 7	1 " 57	9 " 180
4 " 30	2 " 74	6 " 181
2 " 41	1 " 85	1 " 182
2 " 42		20 " 185



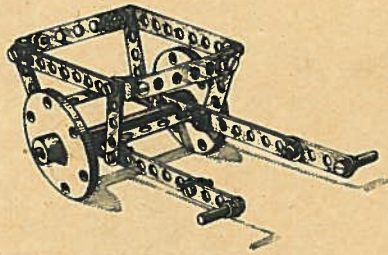
No. 11 Trineo

2 No. 3	1 No. 61
2 " 4	16 " 180
6 " 6	4 " 181
4 " 41	20 " 185
2 " 55	



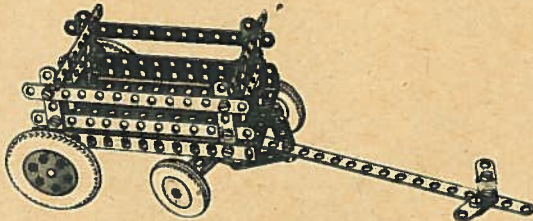
No. 12 Carretilla

2 No.1	1 No. 8	1 No.105
2 " 4	2 " 30	6 " 180
8 " 6	1 " 56	8 " 181
1 " 7	1 " 57	20 " 185
	1 " 76	



No. 13 Carreta

2 No.3	4 No.43	1 No. 87
2 " 4	2 " 56	8 " 180
6 " 6	2 " 76	8 " 181
2 " 7	4 " 81	2 " 182
2 " 8		18 " 185



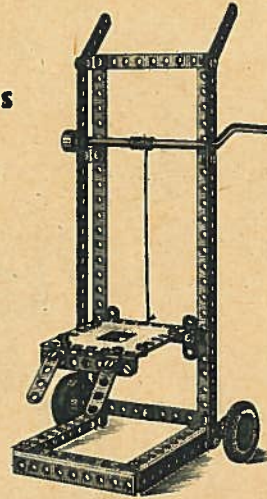
No. 16 Carreta de adrales

1 No. 1	2 No. 73
4 " 3	3 " 74
2 " 4	1 " 81
8 " 6	1 " 87
2 " 7	1 " 107
2 " 8	2 " 155
4 " 41	2 " 156
8 " 43	36 " 180
1 " 55	2 " 181
2 " 56	2 " 182
1 " 61	41 " 185

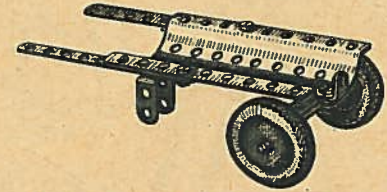
Vista de abajo

No. 14 Montasacos

4 No.	1
2 "	4
1 "	5
4 "	6
2 "	7
2 "	8
3 "	30
4 "	41
2 "	42
6 "	43
2 "	55
2 "	74
1 "	98
2 "	156
1 "	165
20 "	180
7 "	181
4 "	182
29 "	185

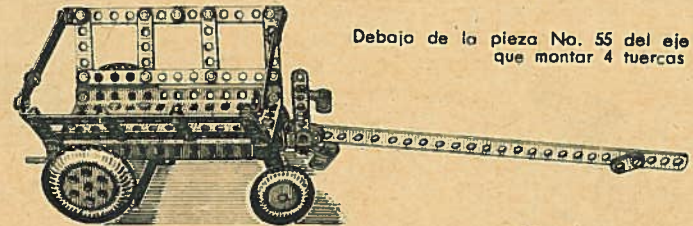


Modelos construídos con la Caja No. 1



No. 15 Carretilla de sacos

2 No. 4	2 No. 73
1 " 43	2 " 156
1 " 45	5 " 180
1 " 57	5 " 185
1 " 64	

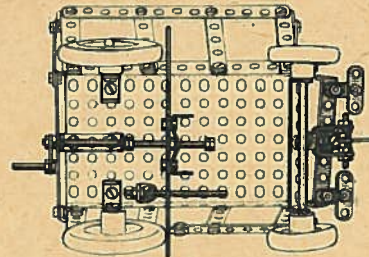


Debajo de la pieza No. 55 del eje delantero hay que montar 4 tuercas

4 No.	41
4 "	42
7 "	43
2 "	44
1 "	45
2 "	55
2 "	57
1 "	61
2 "	73
2 "	74
1 "	87
1 "	105
1 "	106
1 "	107
2 "	155
2 "	156
2 "	180
8 "	181
2 "	182
2 "	185

No. 17 Carreta de heno

1 No.	1
4 "	3
2 "	4
2 "	5
8 "	6
2 "	7
2 "	8



Vista de abajo

Modelos construidos con la Caja No. 1

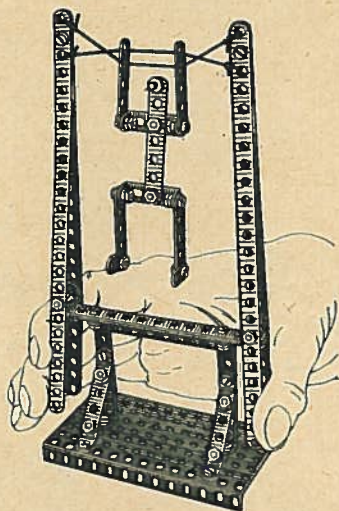


No. 18
Escalera doble

4 No.	1
2 "	4
7 "	6
1 "	43
2 "	56
19 "	180
5 "	181
29 "	185

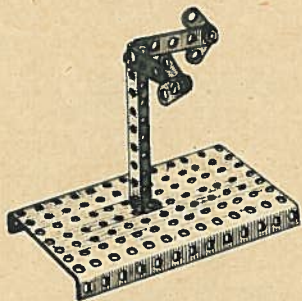
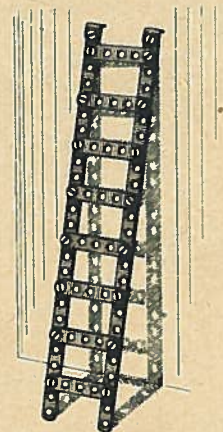
No. 19 Gimnasta

4 No.	1	2 No.	41	10 No.	180
2 "	3	4 "	42	15 "	181
1 "	5	2 "	44	2 "	182
4 "	6	2 "	55	35 "	185
2 "	7	2 "	57		
1 "	30	1 "	61		



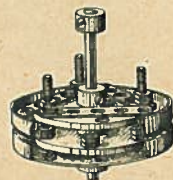
No. 20
Escalera

2 No.	1
8 "	6
2 "	43
18 "	180
18 "	185



No. 21 Poste indicador

2 No.	6	1 No.	61
1 "	30	4 "	180
4 "	41	2 "	181
1 "	43	6 "	185



No. 22 Trompo

3 No.	6	2 No.	76	1 No.	86	3 No.	182
1 "	66	3 "	81	6 "	181	18 "	185

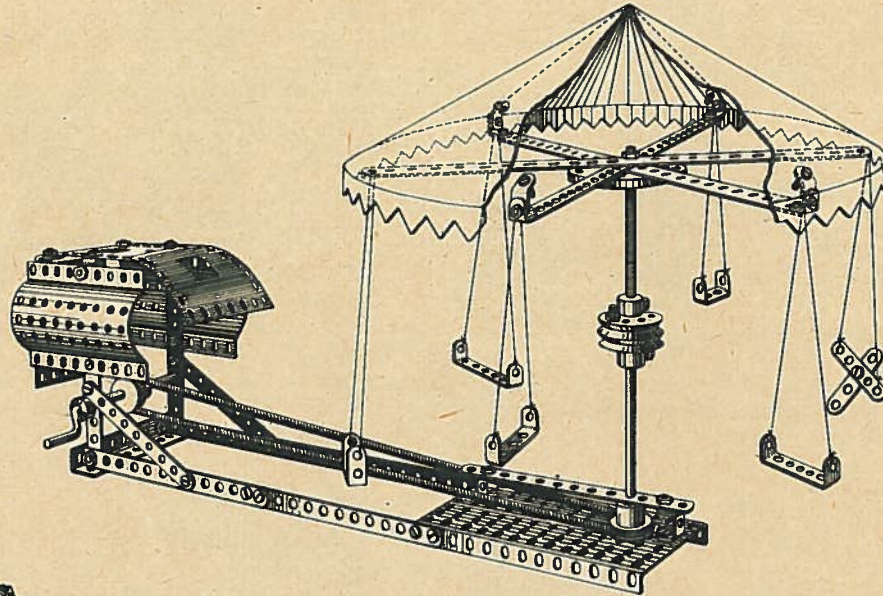
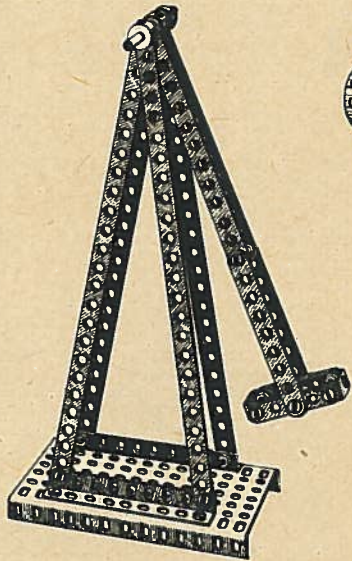
No. 23 Tijeras

2 No.	3
8 "	6
13 "	181
26 "	185



No. 24 Columpio

4 No. 1	1 No. 61
2 " 3	3 " 81
2 " 4	1 " 86
2 " 6	2 " 145
2 " 30	16 " 180
2 " 44	16 " 185



No. 25 Tío vivo a cadenas

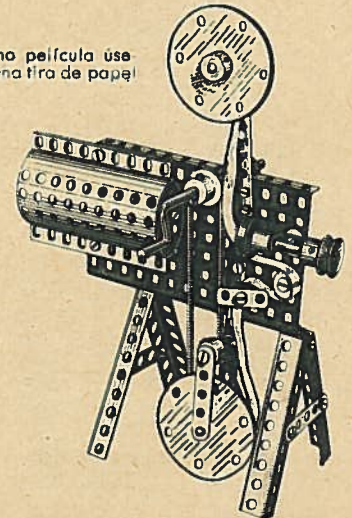
4 No. 1	4 No. 42	2 No. 64	1 No. 148
3 " 3	8 " 43	2 " 73	1 " 165
2 " 4	2 " 44	2 " 74	1 " 166
2 " 5	1 " 45	1 " 76	20 " 180
3 " 6	1 " 55	3 " 81	16 " 181
1 " 7	2 " 56	1 " 87	5 " 182
1 " 30	2 " 57	1 " 98	45 " 185
	1 " 61	1 " 107	

El techo se hace de cartón.
(Más o menos 150 milímetros de diámetro)

No. 26 Proyector de películas

2 No. 4	2 No. 76
3 " 6	4 " 81
1 " 8	1 " 85
4 " 30	1 " 98
2 " 43	2 " 105
2 " 44	2 " 145
1 " 45	1 " 148
1 " 61	14 " 180
2 " 64	5 " 181
2 " 73	3 " 182
4 " 74	27 " 185
1 " 75	

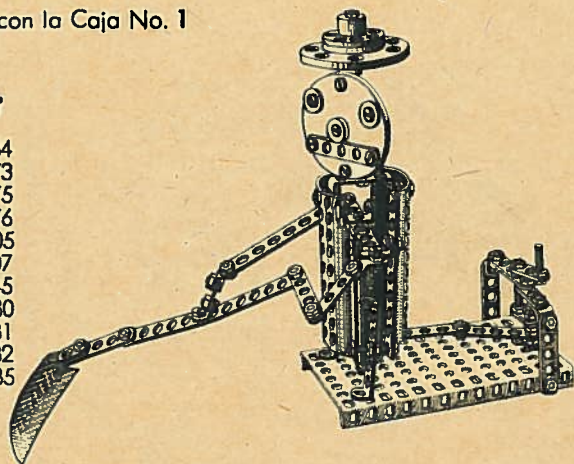
Como película úse
se una tira de papel



Modelos construídos con la Caja No. 1

No. 27 Segador

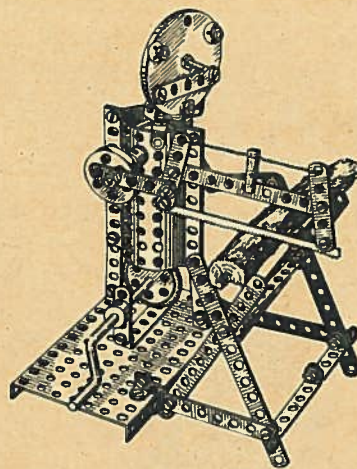
1	No. 3	2	No. 64
2	" 4	1	" 73
8	" 6	1	" 75
2	" 7	2	" 76
2	" 8	2	" 105
4	" 41	1	" 107
3	" 42	2	" 145
4	" 43	26	" 180
2	" 44	10	" 181
2	" 56	5	" 182
1	" 57	70	" 185
1	" 61		



La guadaña se hace de cartón u hoyalata fino

**No. 28
Aserrador de madera**

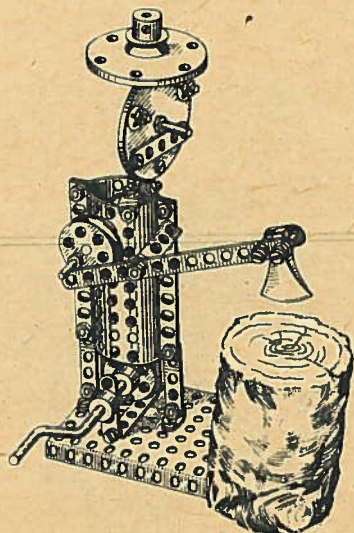
4	No. 3	1	No. 74
2	" 4	1	" 76
8	" 6	4	" 81
2	" 7	1	" 86
2	" 8	1	" 98
8	" 43	4	" 145
2	" 55	2	" 146
2	" 56	1	" 148
2	" 57	26	" 180
1	" 61	14	" 181
2	" 64	2	" 182
2	" 73	46	" 185



Para dar a la aserradora aspecto más natural, debe usarse una hoja de una sierra de marquetería

**No. 29
Partidor de leña**

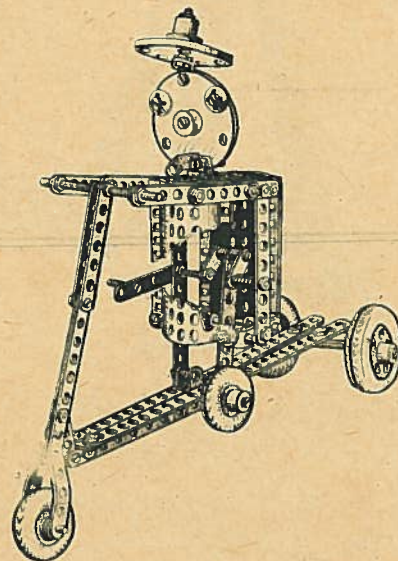
1	No. 3	2	No. 76
3	" 6	3	" 81
2	" 7	1	" 86
1	" 8	1	" 98
1	" 41	4	" 145
5	" 43	2	" 146
1	" 56	1	" 148
1	" 57	13	" 180
1	" 61	10	" 181
2	" 64	6	" 182
2	" 73	32	" 185
2	" 74		

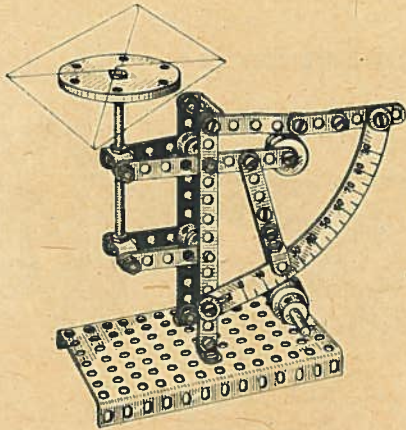


El tajadero de madera debe afirmarse con una tuerca No. 182 en la placa de base No. 61. El hacha se hace de madera, cartón fuerte o mejor aun de plomo.

**No. 30
Autopatinetete**

2	No. 1	2	No. 76
3	" 3	4	" 81
2	" 4	1	" 85
2	" 5	2	" 86
7	" 6	1	" 87
2	" 7	1	" 105
2	" 8	1	" 106
3	" 41	1	" 107
4	" 42	4	" 145
7	" 43	2	" 146
1	" 44	2	" 155
2	" 56	2	" 155
2	" 57	26	" 180
2	" 64	13	" 181
2	" 73	6	" 182
3	" 74	72	" 185
1	" 75		

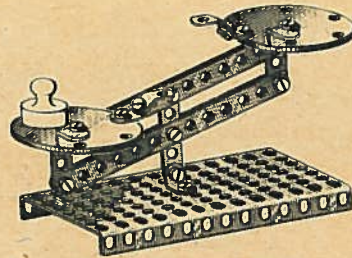




No. 31 Pesacartas

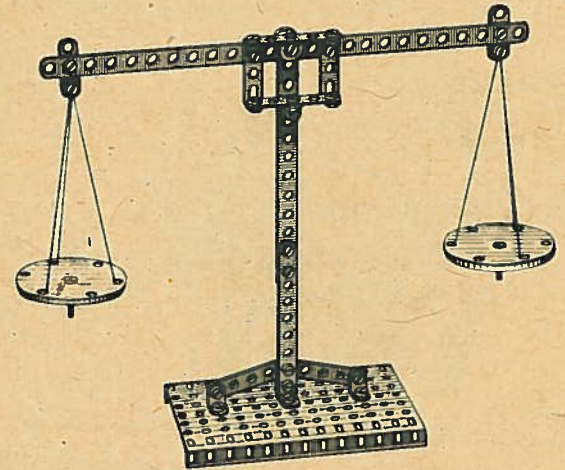
2 No. 3	4 No. 81
2 " 4	1 " 85
5 " 6	1 " 86
1 " 7	1 " 105
1 " 8	1 " 107
4 " 43	2 " 145
2 " 44	12 " 180
1 " 57	6 " 181
1 " 61	1 " 182
3 " 74	31 " 185
1 " 76	

La regla graduada se hace de cartón



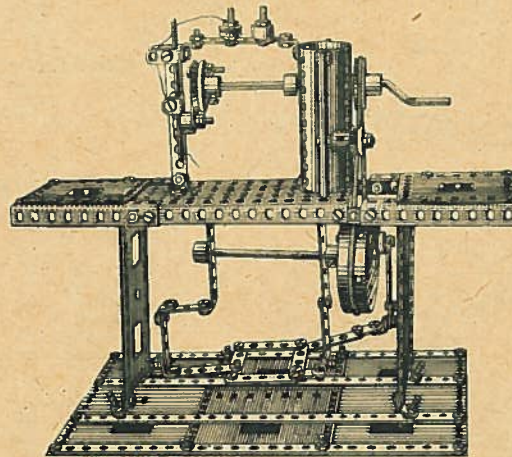
No. 32 Balanza

4 No. 3	4 No. 42	2 No. 76	6 No. 182
1 " 6	3 " 43	6 " 180	22 " 185
2 " 7	1 " 61	4 " 181	



No. 33 Báscula

1 No. 1	4 No. 43	2 No. 145
1 " 3	2 " 57	17 " 180
1 " 4	1 " 61	3 " 181
4 " 6	2 " 76	3 " 182
2 " 8	1 " 81	29 " 185

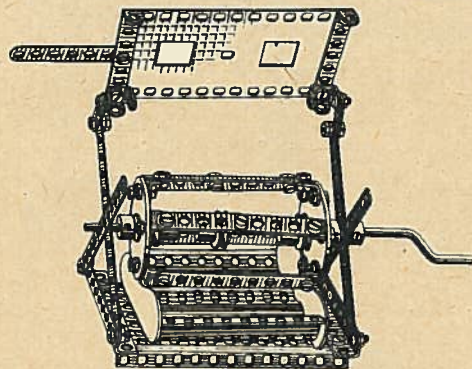


No. 34 Máquina de coser

4 No. 1	1 No. 8	1 No. 45	1 No. 65	1 No. 98	2 No. 168
4 " 3	4 " 30	2 " 55	2 " 73	1 " 105	2 " 169
2 " 4	4 " 41	2 " 56	4 " 74	4 " 145	51 " 180
2 " 5	4 " 42	1 " 57	1 " 75	1 " 148	17 " 181
8 " 6	8 " 43	1 " 61	4 " 81	2 " 165	13 " 182
2 " 7	1 " 44	2 " 64	1 " 87	2 " 166	90 " 185

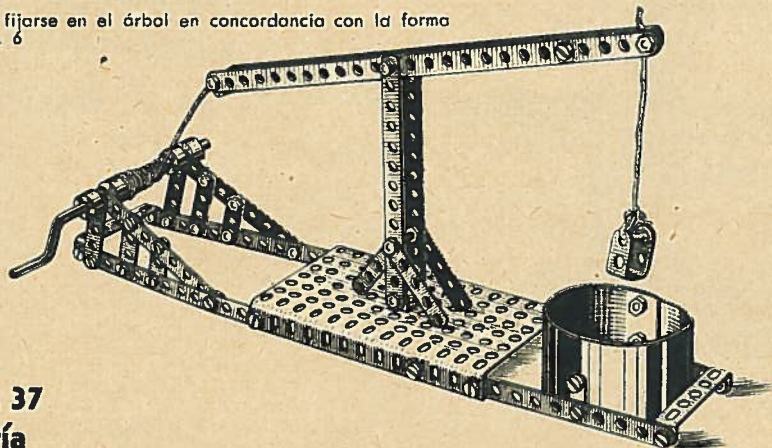
Modelos contruidos con la Caja No. 1

No. 35 Máquina lavapatatas



4 No. 3	2 No. 64	3 No. 1	2 No. 73
2 " 4	3 " 74	4 " 3	1 " 74
1 " 5	2 " 76	2 " 4	4 " 81
8 " 6	3 " 81	8 " 6	1 " 87
2 " 8	1 " 86	4 " 30	1 " 98
2 " 30	1 " 98	4 " 41	2 " 146
4 " 42	4 " 146	2 " 42	1 " 148
8 " 43	1 " 166	2 " 43	29 " 180
2 " 44	30 " 180	1 " 61	6 " 181
2 " 55	20 " 181	2 " 64	35 " 185
1 " 61	52 " 185		

El tambor debe fijarse en el árbol en concordancia con la forma fundamental No. 6

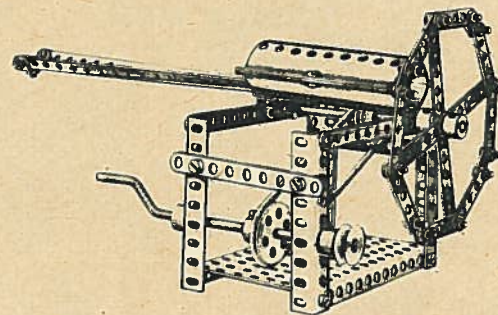


No. 37 Noría

4 No.1	8 No. 6	2 No.41	2 No.56	1 No. 98	7 No.181
4 " 3	2 " 7	2 " 44	1 " 61	2 " 105	1 " 182
2 " 4	2 " 8	1 " 45	4 " 81	25 " 180	43 " 185

El pozo se hace de cartón

No. 36 Cortadora de forraje

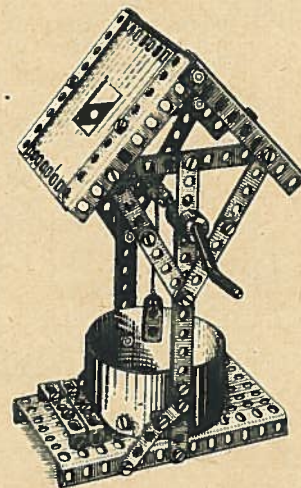


El volante debe fijarse en el árbol en concordancia con la forma fundamental No. 6

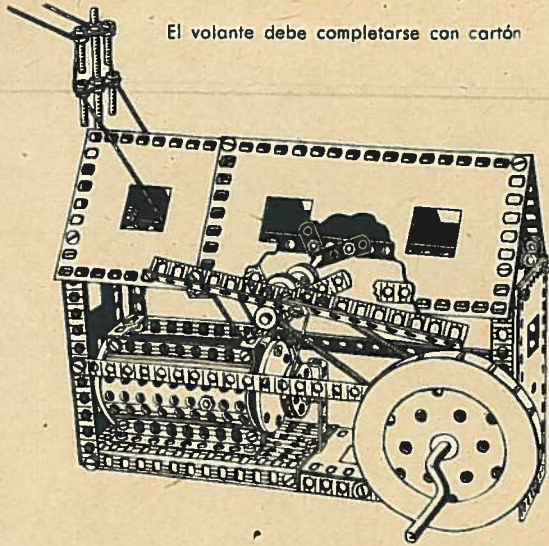
No. 38 Fuente

4 No. 3	1 No. 61
2 " 4	3 " 81
8 " 6	1 " 98
2 " 7	2 " 168
4 " 30	23 " 180
2 " 41	9 " 181
2 " 43	4 " 182
1 " 45	36 " 185
2 " 56	

El pozo se hace de cartón

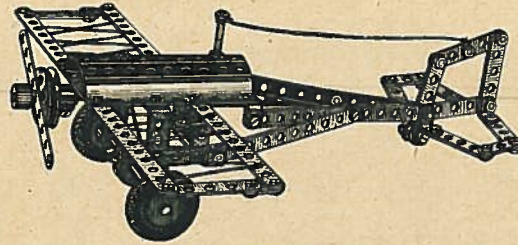


El volante debe completarse con cartón



No. 39 Central hidráulica

4	No. 1	1	No. 75
4	" 3	2	" 76
2	" 4	4	" 81
2	" 5	1	" 86
5	" 6	1	" 87
2	" 7	1	" 98
2	" 8	1	" 107
4	" 30	2	" 145
4	" 42	1	" 148
8	" 43	1	" 152
1	" 44	2	" 165
2	" 55	2	" 166
2	" 56	2	" 168
2	" 57	2	" 169
1	" 61	52	" 180
2	" 64	20	" 181
1	" 65	6	" 182
2	" 73	83	" 185
2	" 74		

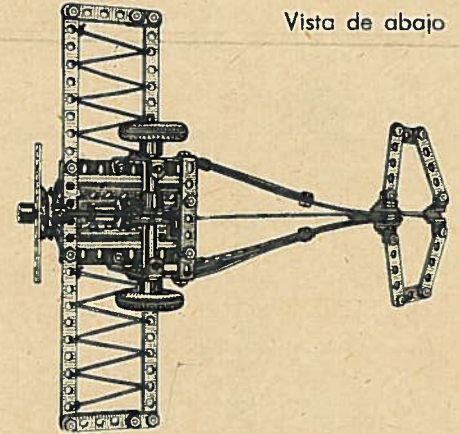


No. 40 Avión

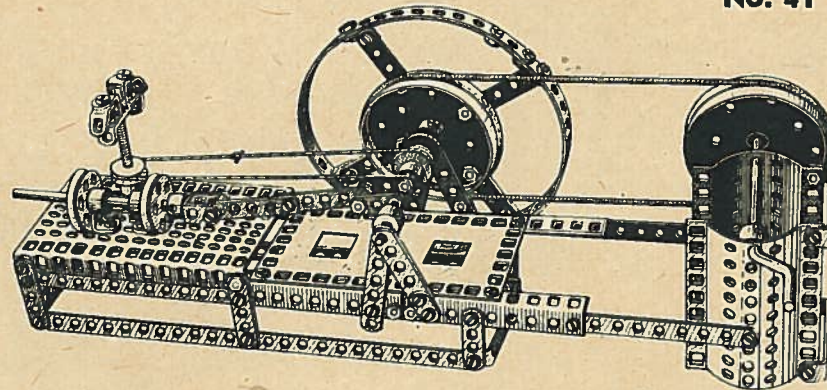
2	No. 1	2	No. 44	1	No. 105
4	" 3	1	" 55	1	" 107
1	" 4	2	" 56	3	" 145
1	" 5	1	" 64	2	" 156
8	" 6	1	" 73	37	" 180
1	" 7	4	" 74	1	" 181
2	" 8	1	" 75	3	" 182
4	" 41	2	" 81	46	" 185
8	" 43	1	" 87		

Modelos construídos con la Caja No. 1

Vista de abajo



No. 41 Máquina a vapor

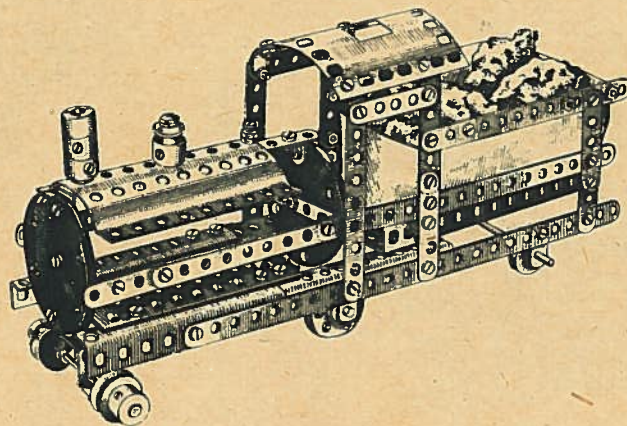


4	No. 1	1	No. 65
4	" 3	1	" 66
2	" 4	2	" 73
2	" 5	3	" 74
8	" 6	4	" 81
2	" 7	1	" 87
2	" 8	1	" 98
4	" 30	1	" 105
4	" 41	1	" 106
2	" 42	1	" 107
6	" 43	1	" 145
2	" 44	1	" 148
1	" 45	1	" 166
2	" 55	49	" 180
2	" 56	9	" 181
2	" 57	6	" 182
1	" 61	87	" 185
2	" 64		

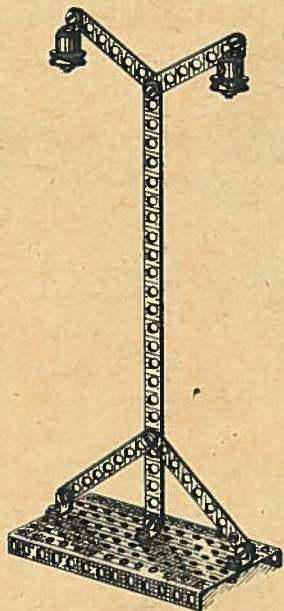
La cinta angular No. 57 sirve de segundo soporte del vástago roscado No. 107 (eje del regulador de la fuerza centrífuga)

No. 43 Locomotora

4 No. 1	4 No. 74
4 " 3	1 " 75
2 " 4	2 " 76
8 " 6	4 " 81
1 " 7	2 " 86
2 " 8	1 " 87
4 " 30	1 " 105
4 " 41	1 " 107
4 " 42	4 " 145
5 " 43	1 " 165
1 " 45	35 " 180
2 " 56	19 " 181
1 " 61	2 " 182
2 " 64	60 " 185
2 " 73	

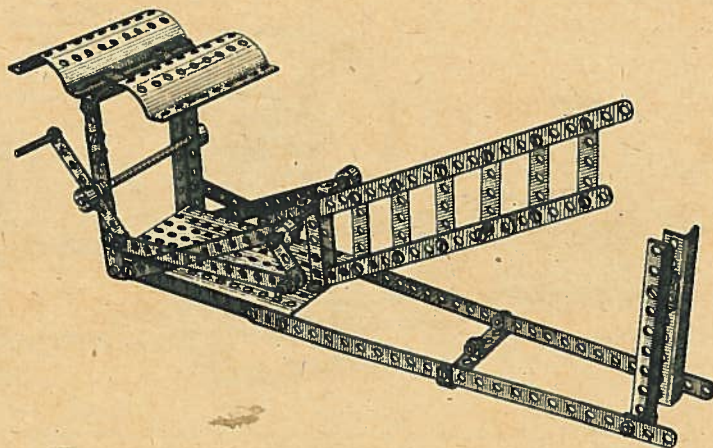


El revestimiento del tender se hace de cartón



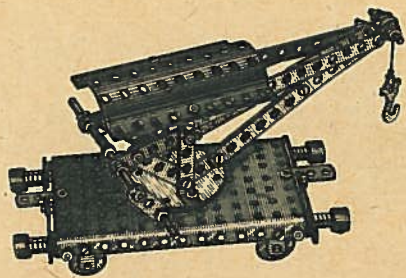
No. 42 Lámpara de estación de ferrocarril

1 No. 1	2 No. 74
2 " 4	6 " 180
2 " 5	4 " 181
5 " 43	2 " 182
1 " 61	12 " 185



No. 44 Barrera de ferrocarril

3 No. 1	1 No. 61
4 " 3	2 " 64
2 " 4	4 " 81
8 " 6	1 " 87
2 " 7	1 " 105
1 " 8	1 " 107
4 " 30	4 " 145
2 " 41	2 " 146
4 " 43	36 " 180
1 " 45	12 " 181
2 " 56	2 " 182
2 " 57	75 " 185

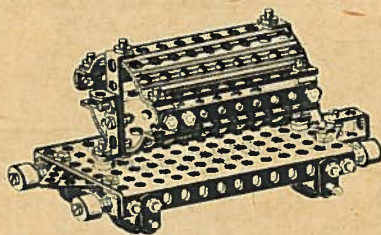


No. 45 Vagón de grúa

4 No. 3	1 No. 61	1 No. 107
2 " 4	1 " 64	1 " 141
8 " 6	4 " 74	3 " 145
2 " 7	1 " 75	1 " 152
1 " 8	1 " 76	24 " 180
4 " 41	4 " 81	4 " 181
4 " 43	2 " 86	7 " 182
2 " 56	1 " 105	62 " 185

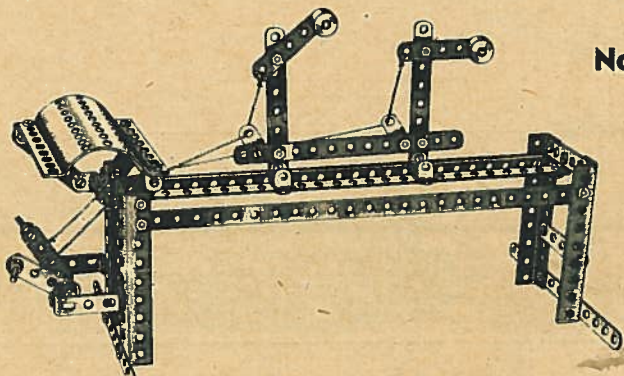
No. 46 Vagón tanque

2 No. 4	1 No. 45	1 No. 87
2 " 7	2 " 56	1 " 107
2 " 8	2 " 57	2 " 145
4 " 41	1 " 61	32 " 180
8 " 43	2 " 64	7 " 182
2 " 44	4 " 74	56 " 185
	4 " 81	



No. 48 Puente de señales

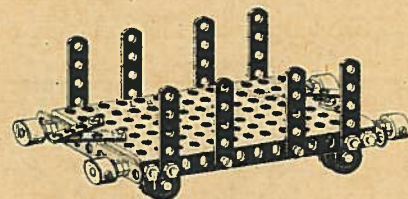
3 No. 1	2 No. 44
3 " 3	2 " 57
2 " 4	1 " 64
6 " 6	2 " 81
2 " 7	1 " 86
1 " 8	37 " 180
4 " 30	8 " 181
2 " 41	2 " 182
2 " 42	51 " 185
8 " 43	



Modelos construidos con la Caja No. 1

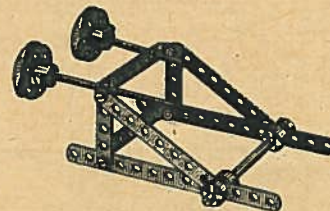
No. 47 Vagón de carga

2 No. 4	4 No. 74
8 " 6	4 " 81
2 " 7	2 " 86
2 " 8	12 " 180
4 " 41	4 " 181
4 " 43	4 " 182
1 " 61	32 " 185

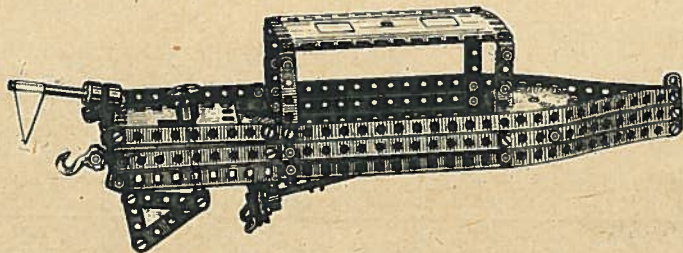


No. 49 Tope

2 No. 3	2 No. 73	1 No. 106
2 " 4	4 " 81	1 " 107
2 " 6	1 " 87	4 " 181
2 " 55		8 " 185

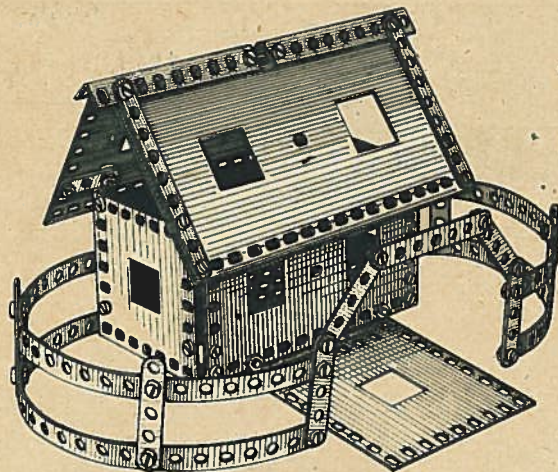


Modelos construidos con la Caja No. 1



No. 50 Barca a motor

4 No. 1	1 No. 61
4 " 3	1 " 73
2 " 4	1 " 74
2 " 5	2 " 76
8 " 6	2 " 81
2 " 7	1 " 86
2 " 8	1 " 106
4 " 30	1 " 107
4 " 41	1 " 141
4 " 42	1 " 165
8 " 43	1 " 166
2 " 44	41 " 180
1 " 45	20 " 181
2 " 55	3 " 182
1 " 56	73 " 185
1 " 57	

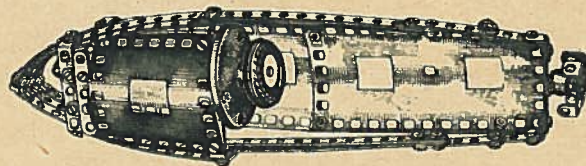


No. 51 Casa para weekend

4 No. 1	2 No. 44
2 " 4	1 " 61
1 " 5	2 " 165
8 " 6	2 " 166
2 " 7	2 " 168
2 " 8	2 " 169
2 " 30	49 " 180
4 " 42	13 " 181
8 " 43	62 " 185

No. 52 Bote de carreras

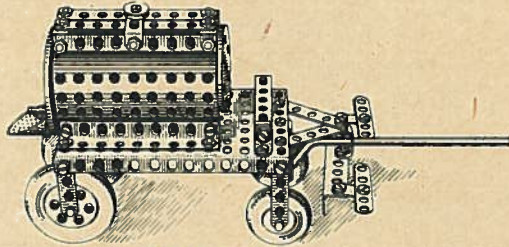
4 No. 1	4 No. 42	1 No. 85
2 " 3	6 " 43	1 " 156
2 " 4	1 " 55	1 " 165
2 " 5	1 " 56	2 " 166
6 " 6	2 " 57	40 " 180
1 " 7	1 " 74	12 " 181
2 " 8	1 " 76	2 " 182
2 " 41	2 " 81	56 " 185



Vista de abajo

No. 53 Carro de riego para calles

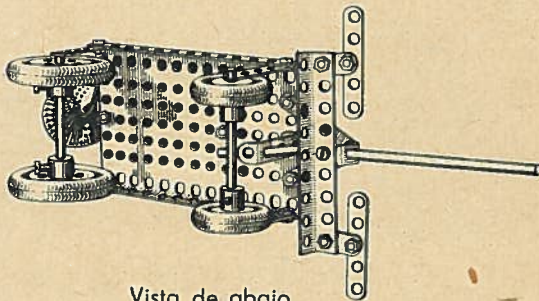
2 No. 4	2 No. 74
6 " 6	1 " 75
2 " 7	2 " 76
3 " 30	2 " 86
2 " 41	1 " 98
8 " 43	2 " 155
1 " 44	2 " 156
1 " 56	33 " 180
2 " 57	6 " 181
1 " 61	1 " 182
2 " 64	40 " 185
2 " 73	



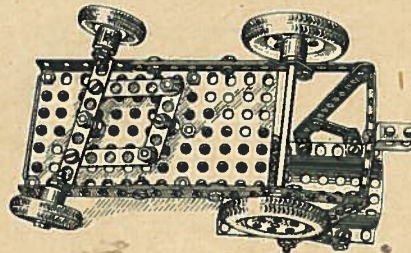
La criba es de cartón

No. 54 Tractor

4 No. 3	2 No. 55	2 No. 105
2 " 4	2 " 56	1 " 106
8 " 6	2 " 57	1 " 107
2 " 7	1 " 61	2 " 145
2 " 8	1 " 64	2 " 155
4 " 30	2 " 73	3 " 156
4 " 41	3 " 74	39 " 180
4 " 42	1 " 75	7 " 181
4 " 43	2 " 81	6 " 182
1 " 45	1 " 87	71 " 185



Vista de abajo

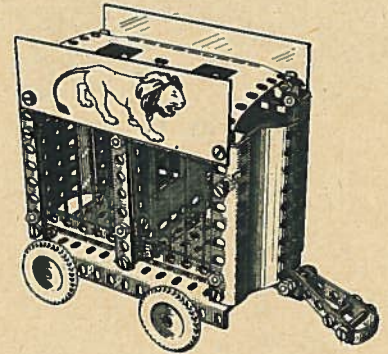


Tractor (Vista de abajo)

No. 55 Carro de circo

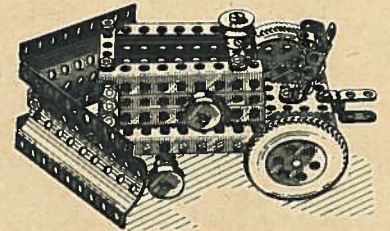
3 No. 3	8 No. 43	4 No. 74	2 No. 166
2 " 4	1 " 44	1 " 87	28 " 180
2 " 6	1 " 45	1 " 107	5 " 181
1 " 7	1 " 56	1 " 145	9 " 182
4 " 30	1 " 61	4 " 156	52 " 185
4 " 42	2 " 64	1 " 165	

Los letreros fijados con tuercas se hacen de cartón.
Las rejas pueden marcarse con alambre fino o con cordón.

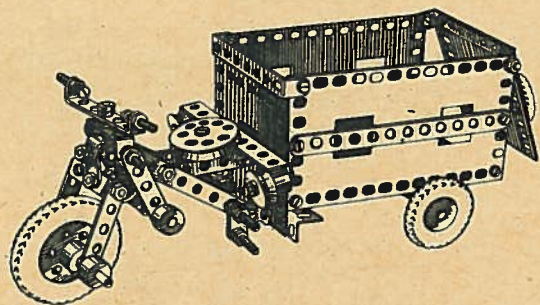


No. 56 Quitanieves

2 No. 4			
3 " 6			
2 " 8			
4 " 30			
1 " 42			
7 " 43			
1 " 45			
1 " 56			
2 " 57	2 No. 73	1 No. 87	20 No. 180
1 " 61	4 " 74	1 " 105	6 " 181
2 " 64	1 " 81	4 " 145	2 " 182
	1 " 86	2 " 155	32 " 185

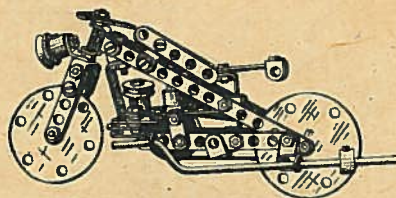


Modelos construidos con la Caja No. 1



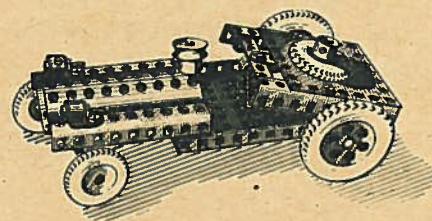
No. 57 Tricar

2 No. 3	1 No. 56	2 No. 145
2 " 4	2 " 57	4 " 146
1 " 5	1 " 61	1 " 155
6 " 6	2 " 73	4 " 156
1 " 7	4 " 74	2 " 165
2 " 8	4 " 81	2 " 166
2 " 30	1 " 86	21 " 180
4 " 41	1 " 87	16 " 181
6 " 43	2 " 105	10 " 182
2 " 44	1 " 106	81 " 185
2 " 55	1 " 107	



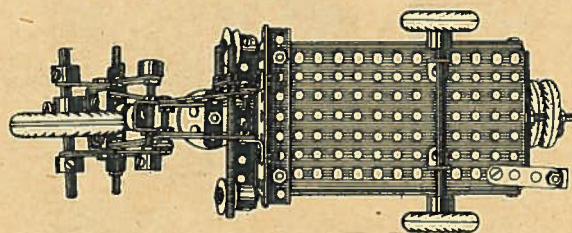
No. 58 Motocicleta

2 No. 3	2 No. 74
2 " 4	1 " 75
8 " 6	2 " 76
2 " 7	3 " 81
2 " 8	1 " 85
4 " 41	1 " 98
4 " 42	2 " 105
8 " 43	1 " 145
2 " 44	21 " 180
1 " 45	5 " 181
2 " 56	8 " 182
2 " 57	48 " 185
1 " 73	

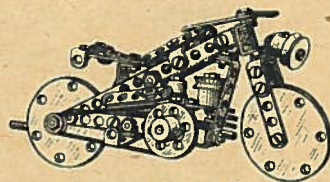


**No. 59
Automóvil de deporte**

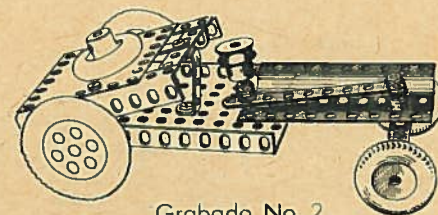
2 No. 4	1 No. 86
4 " 30	1 " 87
2 " 41	1 " 105
2 " 43	2 " 145
2 " 56	2 " 155
1 " 57	3 " 156
1 " 61	1 " 165
2 " 64	11 " 180
2 " 73	6 " 181
4 " 74	4 " 182
3 " 31	26 " 185



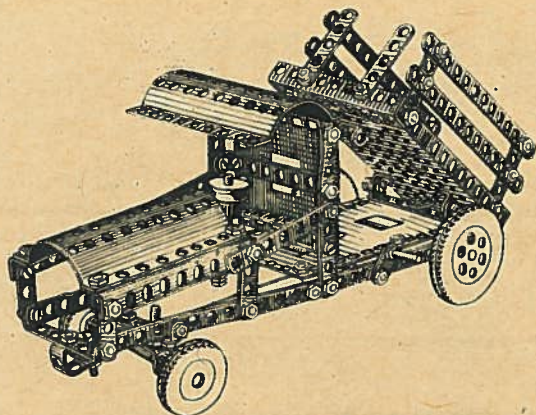
Vista de abajo



Grabado No. 2



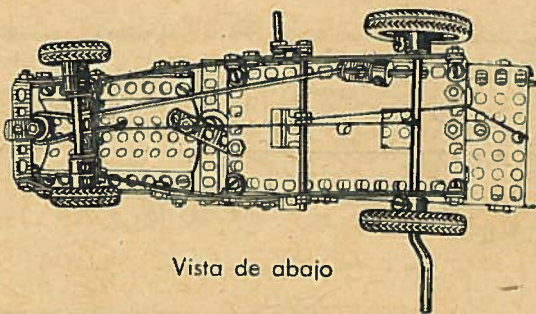
Grabado No. 2



No. 60 Automóvil

con impulsión por resorte espiral

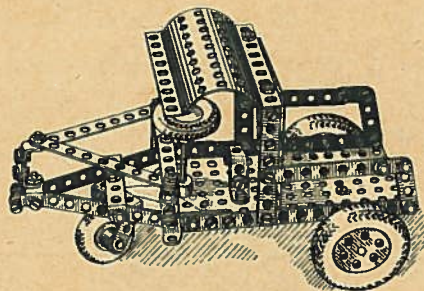
2 No. 1	2 No. 42	2 No. 73	1 No. 148
4 " 3	8 " 43	3 " 74	2 " 155
2 " 4	2 " 44	1 " 75	2 " 156
2 " 5	1 " 45	4 " 81	1 " 165
8 " 6	2 " 55	1 " 86	1 " 166
2 " 7	2 " 56	1 " 98	54 " 180
2 " 8	1 " 57	1 " 106	10 " 181
3 " 30	1 " 61	1 " 107	4 " 182
2 " 41	2 " 64	1 " 146	84 " 185



Vista de abajo

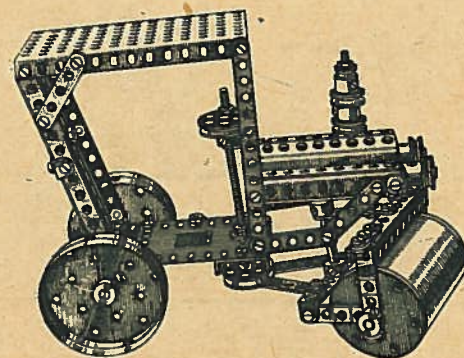
No. 61 Tricar

2 No. 3	2 No. 55	1 No. 87
2 " 4	1 " 56	4 " 145
2 " 5	2 " 57	2 " 146
7 " 6	1 " 61	2 " 155
2 " 7	1 " 64	2 " 156
2 " 8	2 " 73	1 " 165
3 " 41	2 " 74	34 " 180
8 " 43	4 " 81	11 " 181
2 " 44	1 " 85	3 " 182
1 " 45	1 " 86	50 " 185



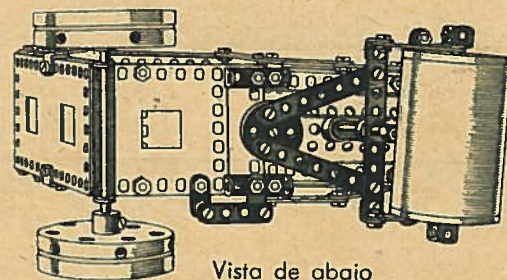
En cuanto a la pieza No. 6 en la maniobra debajo de la placa de base No. 61, obsérvese la forma fundamental No. 6

Modelos construidos con la Caja No. 1



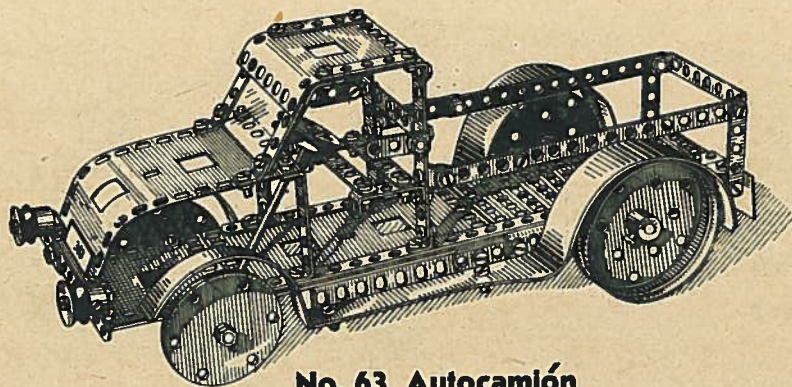
No. 62 Apsonadora

4 No. 3	2 No. 57	2 No. 87
1 " 4	1 " 61	1 " 106
2 " 5	2 " 64	1 " 107
8 " 6	1 " 65	1 " 145
2 " 7	1 " 66	2 " 165
2 " 8	2 " 73	1 " 166
3 " 30	4 " 74	38 " 180
4 " 41	1 " 75	10 " 181
8 " 43	2 " 76	11 " 182
2 " 55	4 " 81	80 " 185
2 " 56	1 " 86	



Vista de abajo
El rodillo se hace de cartón

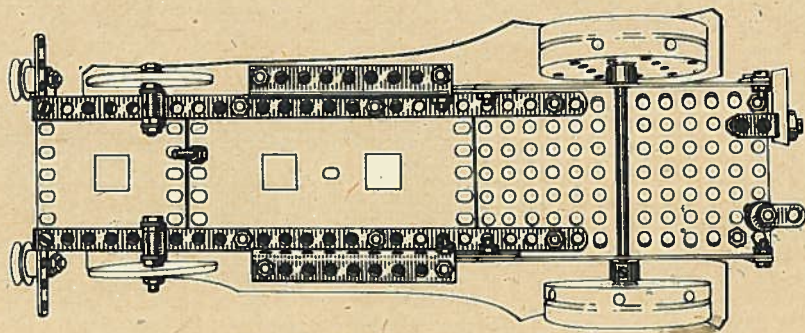
Modelos construidos con la Caja No. 1



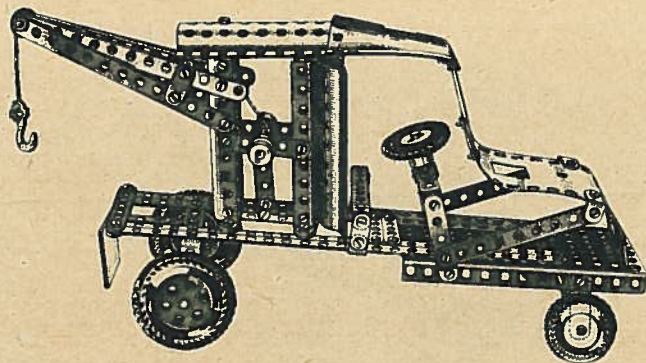
No. 63 Autocamión

4 No.1	2 No.30	2 No.56	1 No. 75	2 No.166
3 " 3	3 " 41	2 " 57	2 " 76	42 " 180
2 " 4	4 " 42	1 " 61	3 " 81	18 " 181
2 " 5	8 " 43	1 " 65	1 " 87	4 " 182
8 " 6	2 " 44	1 " 66	2 " 105	76 " 185
2 " 7	1 " 45	1 " 73	1 " 107	
2 " 8	2 " 55	2 " 74	2 " 165	

La guardabrisa se hace de celuloide; el guardalado, de cartón



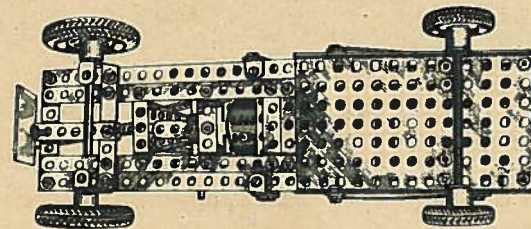
Vista de abajo



No. 64 Auto de remolque

4 No. 1	3 No.43	1 No. 75	2 No.155
4 " 3	1 " 45	4 " 81	3 " 156
2 " 4	2 " 55	1 " 85	1 " 165
2 " 5	1 " 56	1 " 86	1 " 166
8 " 6	2 " 57	1 " 87	49 " 180
2 " 7	1 " 61	1 " 107	19 " 181
2 " 8	2 " 64	1 " 141	2 " 182
4 " 30	2 " 73	2 " 146	71 " 185
4 " 41	3 " 74	1 " 152	

La guardabrisa se hace de celuloide; la placa del número de matrícula, de cartón. Con respecto a la fijación de la manivela (pieza No. 7), véase la forma fundamental No. 6.

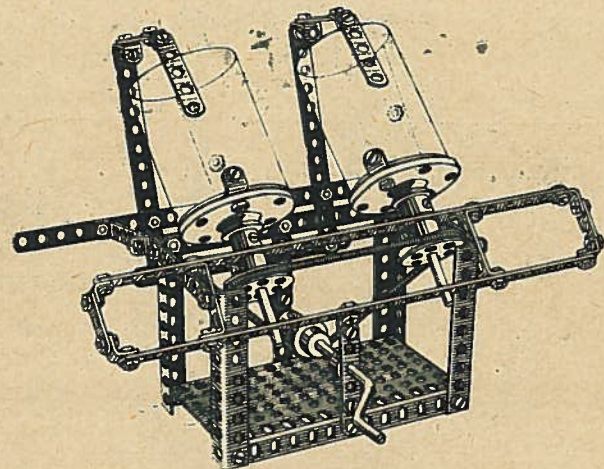
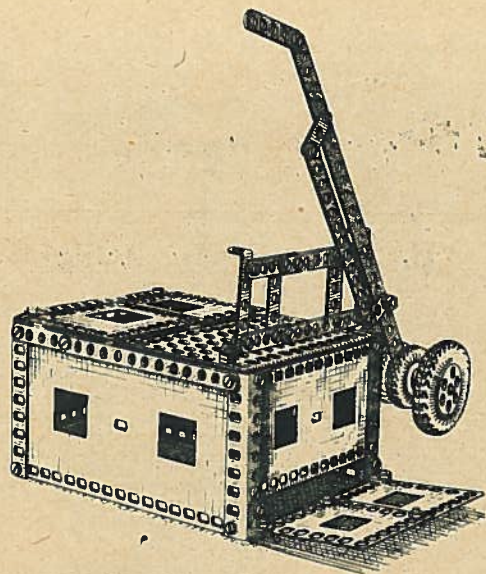


Vista de abajo

No. 67

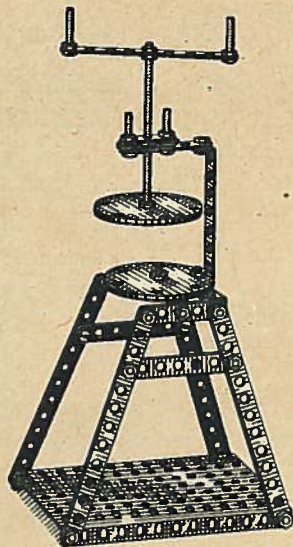
Prensa a fornillo

4 No. 3	2 No. 76
1 " 4	1 " 107
2 " 5	2 " 145
3 " 6	13 " 180
2 " 8	4 " 181
1 " 55	4 " 182
2 " 56	26 " 185
1 " 61	



No. 65 Tijera de guillotina

1 No. 1	1 No. 86
4 " 3	2 " 146
2 " 4	2 " 155
7 " 6	2 " 156
2 " 8	2 " 165
4 " 30	2 " 166
1 " 41	2 " 168
5 " 43	2 " 169
2 " 56	38 " 180
1 " 61	8 " 181
2 " 73	3 " 182
2 " 74	54 " 185
1 " 81	

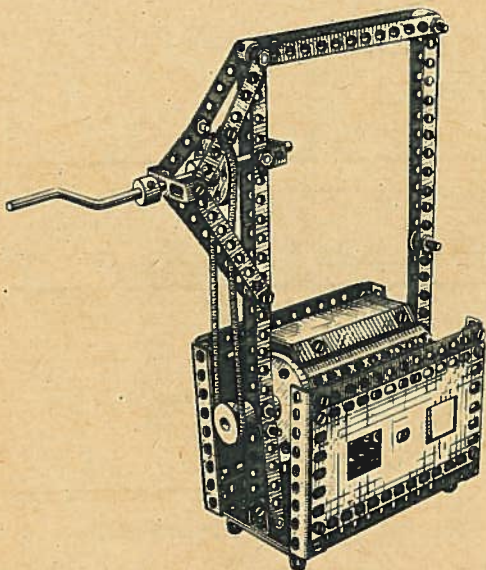


No. 66 Tambor niquelador

3 No. 1	1 No. 61
4 " 3	2 " 73
2 " 4	3 " 74
7 " 6	2 " 76
2 " 8	4 " 81
4 " 30	2 " 86
1 " 41	1 " 98
3 " 42	4 " 146
8 " 43	1 " 148
2 " 44	49 " 180
2 " 56	8 " 181
2 " 57	57 " 185

Los dos tambores se hacen de celuloide. Su fijación se efectúa según la forma fundamental No. 6

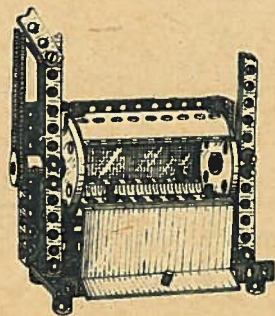
Modelos construidos con la Caja No. 1



El tambor se reviste de carton

No. 68 Tambor galvanizador

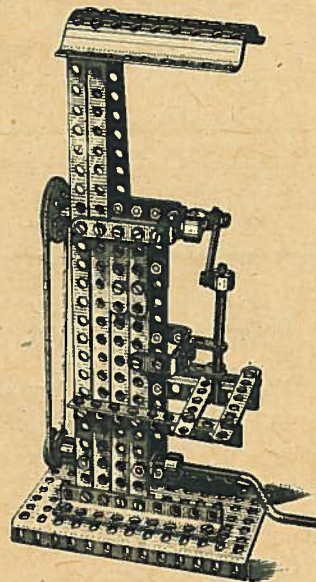
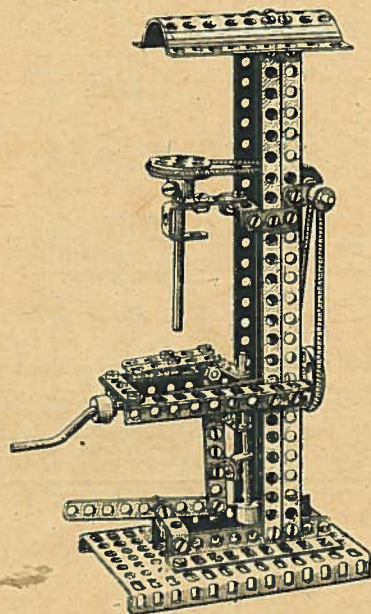
4	No.	1
4	"	3
2	"	4
2	"	6
2	"	7
4	"	30
4	"	43
2	"	44
2	"	45
2	"	56
1	"	57
1	"	61
2	"	64
1	"	73
1	"	74
1	"	75
2	"	76
4	"	81
2	"	86
1	"	98
2	"	105
4	"	145
1	"	148
2	"	166
34	"	180
8	"	181
9	"	182
55	"	185



Vista parcial

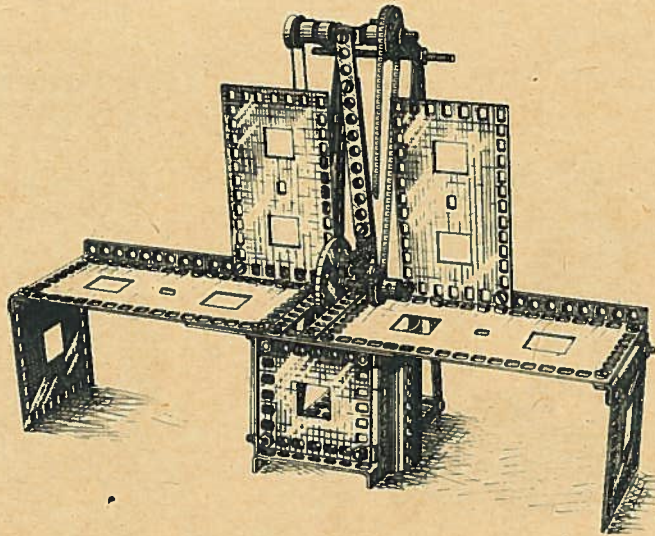
No. 70 Perforadora vertical

4	No.	1	1	No.	61
1	"	4	1	"	64
5	"	6	2	"	73
2	"	7	3	"	74
2	"	8	4	"	81
4	"	30	2	"	86
4	"	41	1	"	87
4	"	42	1	"	98
7	"	43	1	"	148
1	"	44	45	"	180
1	"	45	3	"	181
1	"	57	50	"	185



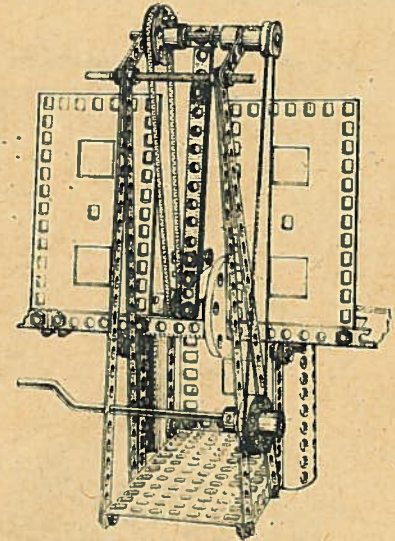
No. 69 Prensa de excéntrica

4	No.	1	5	No.	43	1	No.	98
4	"	3	1	"	45	4	"	145
2	"	4	2	"	57	2	"	146
6	"	6	1	"	61	1	"	148
1	"	7	1	"	64	43	"	180
1	"	8	1	"	73	9	"	181
4	"	30	1	"	74	52	"	185
2	"	41	3	"	81			
4	"	42	2	"	86			

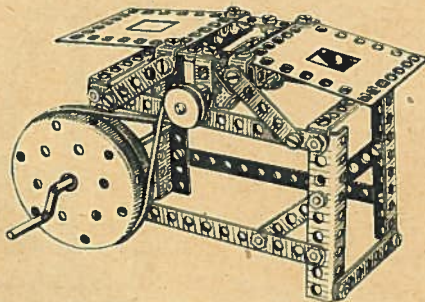


No. 71
Sierra circular
de péndulo

4 No. 1	2 No. 81
3 " 3	1 " 86
2 " 4	1 " 98
3 " 6	1 " 106
4 " 30	1 " 107
2 " 41	3 " 145
7 " 43	1 " 148
1 " 44	1 " 165
1 " 45	2 " 166
2 " 55	2 " 168
1 " 61	2 " 169
2 " 64	48 " 180
2 " 73	5 " 181
2 " 74	1 " 182
1 " 76	60 " 185



Vista posterior



No. 72 Acepilladora

4 No. 3	1 No. 65
2 " 5	1 " 74
8 " 6	2 " 81
2 " 8	1 " 98
4 " 30	2 " 105
4 " 42	1 " 148
4 " 43	2 " 165
2 " 44	32 " 180
2 " 55	7 " 181
2 " 56	3 " 182
2 " 57	58 " 185

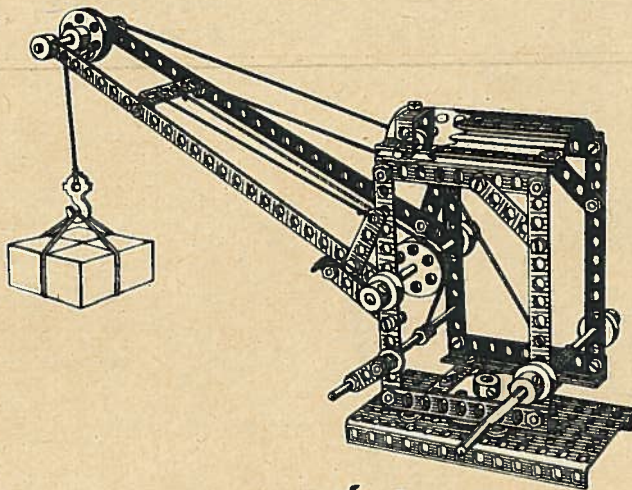
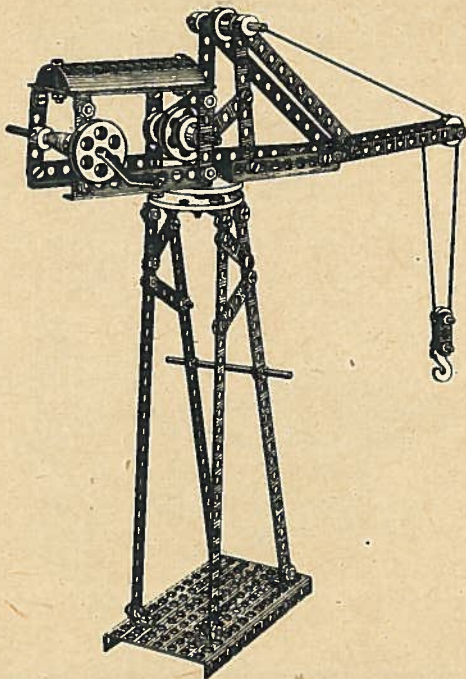


Vista parcial
(Portacuchilla)

Modelos construidos con la Caja No. 1

No. 73 Grúa giratoria de torre

4 No. 1	1 No. 61	1 No. 105
4 " 3	1 " 64	1 " 107
2 " 4	2 " 73	1 " 141
8 " 6	4 " 74	4 " 145
2 " 7	1 " 75	1 " 152
2 " 8	2 " 76	38 " 180
4 " 30	4 " 81	7 " 181
8 " 43	2 " 86	5 " 182
2 " 56	1 " 98	62 " 185

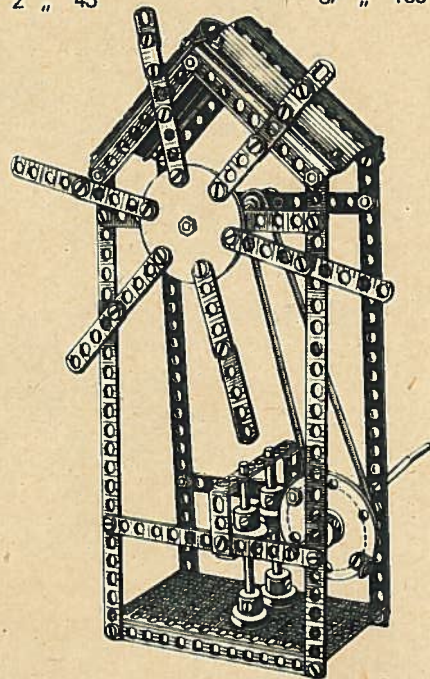


No. 74 Grúa de carga

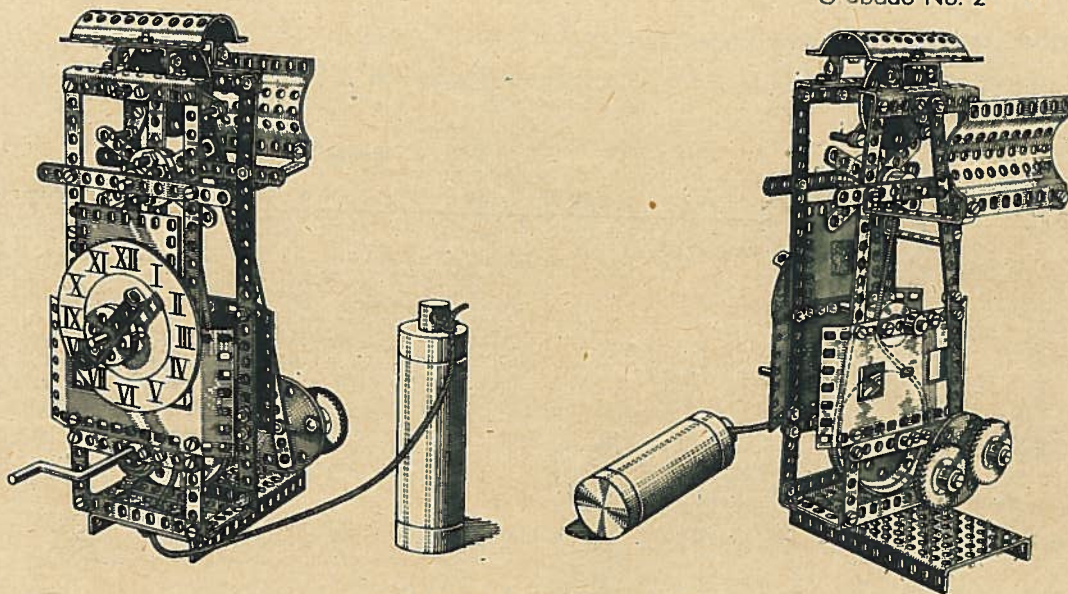
2 No. 1	2 No. 76
4 " 3	4 " 81
2 " 4	1 " 85
3 " 6	1 " 86
2 " 7	1 " 87
1 " 8	1 " 98
4 " 30	1 " 105
1 " 43	1 " 107
1 " 45	1 " 141
1 " 56	1 " 145
1 " 61	1 " 152
1 " 64	25 " 180
2 " 73	6 " 181
4 " 74	1 " 182
1 " 75	41 " 185

No. 75 Molino de viento con herrería

4 No. 1	2 No. 57	2 No. 86
4 " 3	1 " 61	1 " 98
2 " 4	2 " 64	1 " 107
8 " 6	1 " 73	4 " 145
2 " 7	4 " 74	2 " 146
2 " 8	1 " 75	1 " 148
4 " 30	2 " 76	42 " 180
4 " 41	4 " 81	8 " 181
2 " 43		57 " 185



Grabado No. 2



No. 76 Reloj de pared

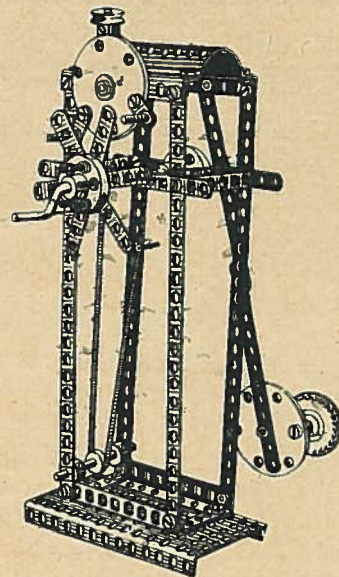
4 No.1	4 No.30	2 No.64	1 No. 86	2 No.156
4 " 3	2 " 41	1 " 65	1 " 87	1 " 165
2 " 4	4 " 43	2 " 73	1 " 98	2 " 166
2 " 5	2 " 55	4 " 74	1 " 107	51 " 180
6 " 6	2 " 56	1 " 75	1 " 141	14 " 181
2 " 7	2 " 57	2 " 76	1 " 148	10 " 182
2 " 8	1 " 61	4 " 81	1 " 152	80 " 185

Como pesa puede emplearse una piedra o un pedazo de metal de más o menos 250 grs. de peso

El horario se hace de cartón (más o menos 60 milímetros de diámetro)

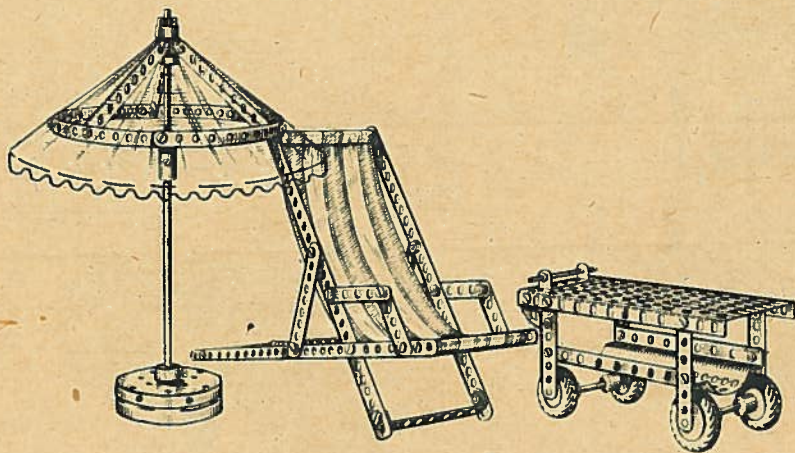
No. 77
Mecanismo de reloj

4 No. 1	1 No.61	1 No. 98
4 " 3	1 " 64	1 " 107
2 " 4	2 " 73	4 " 145
2 " 6	3 " 74	1 " 148
2 " 7	1 " 75	2 " 156
2 " 8	2 " 76	20 " 180
4 " 30	4 " 81	11 " 181
2 " 41	1 " 86	12 " 182
2 " 56		47 " 185



Modelos construídos con la Caja No. 2

Los siguientes modelos pueden construirse con la Caja de Construcciones No. 2, ó con la Caja Principal No. 1 y la Suplementaria No. 1 S

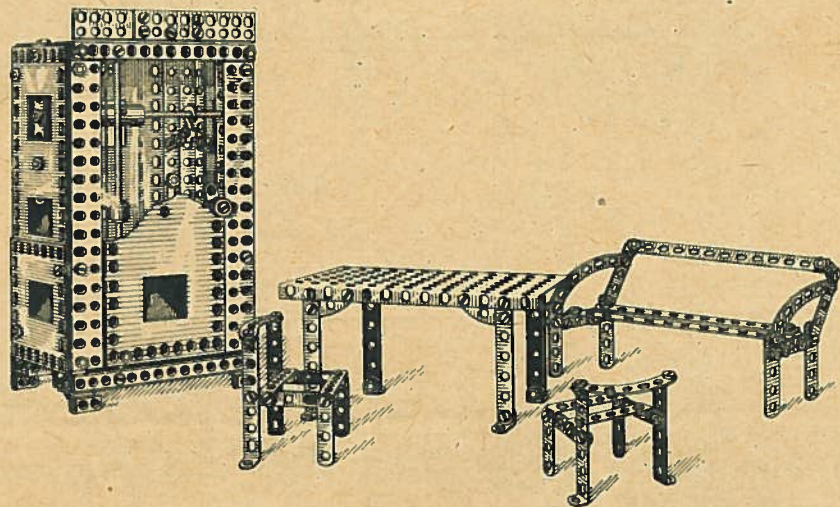


No. 2 Juego de muebles

3 No. 3	2 No.13	6 No.41	2 No. 57	1 No.141
4 " 4	2 " 19	2 " 42	2 " 61	2 " 165
4 " 5	2 " 20	15 " 43	3 " 81	2 " 166
10 " 6	4 " 24	1 " 44	1 " 82	2 " 169
4 " 7	4 " 26	4 " 52	1 " 83	92 " 180
3 " 8	2 " 29	4 " 55	1 " 105	15 " 181
2 " 12	2 " 36	4 " 56	2 " 107	1 " 182
			1 " 108	112 " 185

No. 1 Juego de muebles para veranda

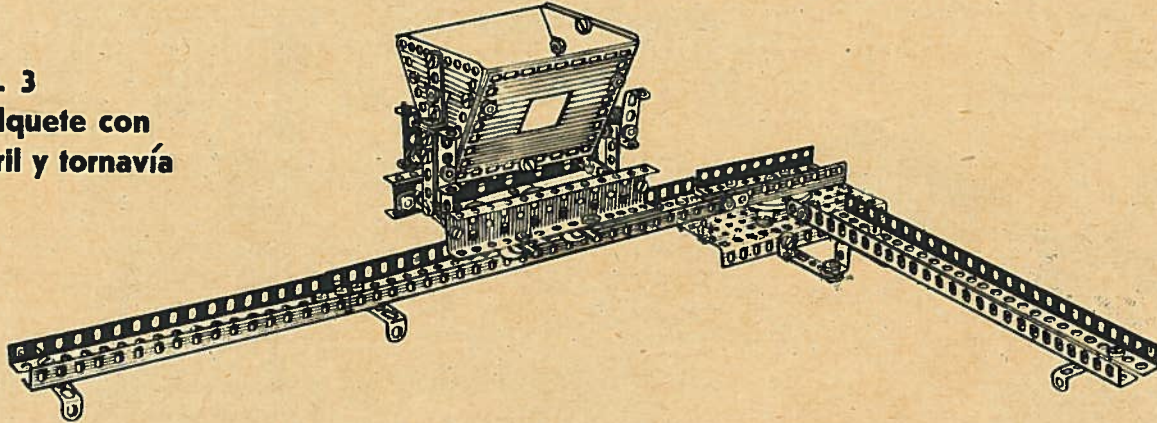
4 No. 1	3 No.43	4 No. 74	1 No.137
4 " 3	1 " 54	1 " 81	4 " 156
4 " 4	4 " 55	1 " 82	34 " 180
4 " 5	1 " 57	2 " 86	12 " 181
4 " 6	1 " 61	1 " 87	58 " 185
2 " 26	1 " 64	1 " 89	
2 " 30	1 " 66	1 " 106	



El revestimiento del quitasol y de la butaca se hace de tela o papel

El interior del volquete puede revestirse con cartón

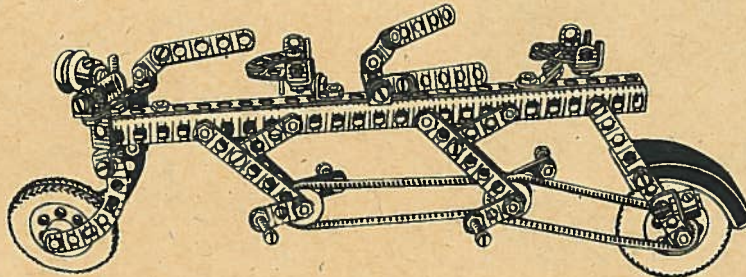
No. 3
Volquete con
carril y tornavía



4 No. 6	3 No. 55
2 " 7	2 " 56
3 " 8	4 " 57
2 " 13	1 " 61
2 " 26	4 " 74
4 " 28	1 " 76
2 " 29	2 " 107
2 " 30	2 " 168
2 " 36	2 " 173
4 " 41	65 " 180
4 " 42	10 " 181
16 " 43	3 " 182
1 " 51	89 " 185

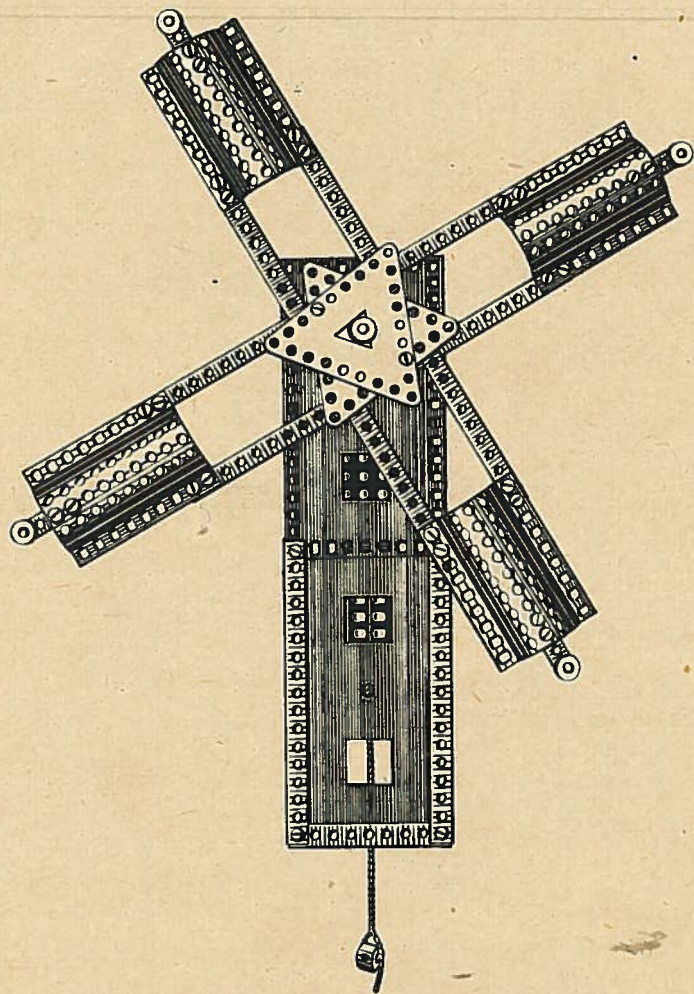
No. 4 Tándem

2 No. 4	4 No. 57
4 " 5	2 " 73
4 " 6	3 " 74
4 " 7	1 " 75
4 " 8	2 " 81
4 " 24	1 " 85
4 " 26	3 " 105
2 " 28	1 " 106
6 " 42	2 " 155
7 " 43	20 " 180
1 " 44	17 " 181
1 " 51	8 " 182
2 " 56	72 " 185



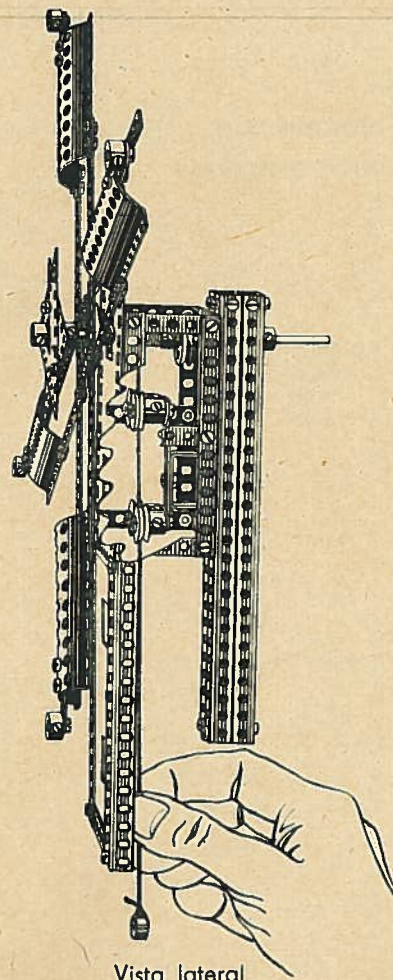
El guardalodo es de cartón delgado

Modelo construido con la Caja No. 2

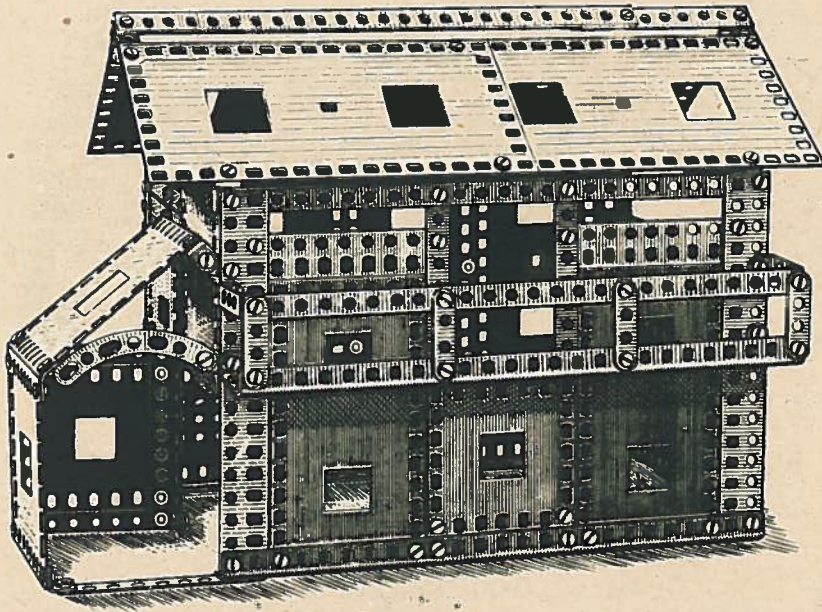


No. 5 Rueda de viento

4	No.	1
2	"	5
6	"	6
4	"	7
3	"	8
4	"	28
2	"	29
1	"	30
6	"	41
1	"	51
1	"	52
2	"	61
4	"	64
2	"	73
4	"	74
8	"	81
1	"	89
2	"	146
1	"	152
2	"	169
2	"	173
60	"	180
14	"	181
4	"	182
74	"	185



Vista lateral



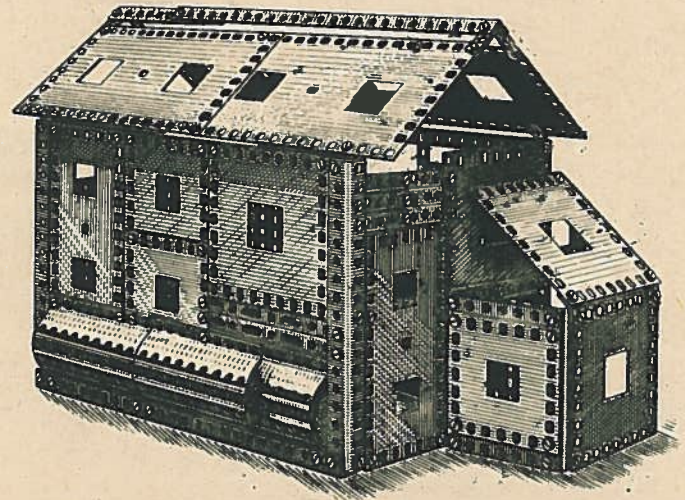
Casa de habitación (Vista frontal)

4 No. 41	4 No.166
6 " 42	4 " 168
9 " 43	4 " 169
4 " 57	104 " 180
2 " 61	30 " 181
3 " 64	134 " 185
4 " 165	

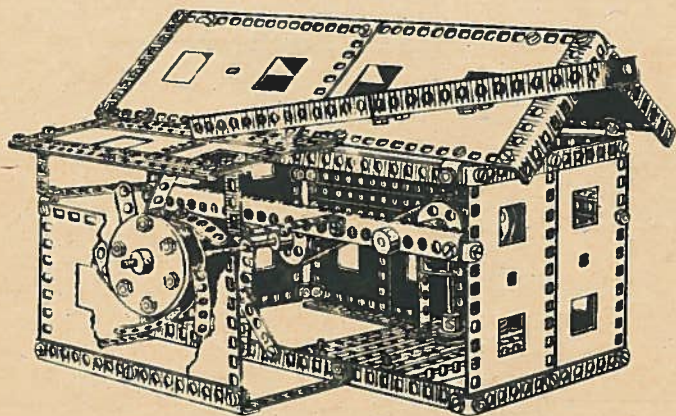
No. 6 Casa de habitación

4 No.1	2 No.12
4 " 3	2 " 19
4 " 4	2 " 20
4 " 5	1 " 24
8 " 6	4 " 28
4 " 7	2 " 29
4 " 8	3 " 30

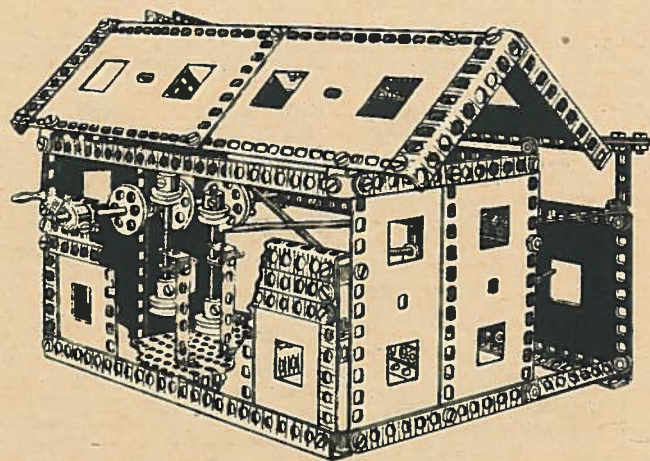
Casa de habitación (Vista posterior)



No. 7 Molino

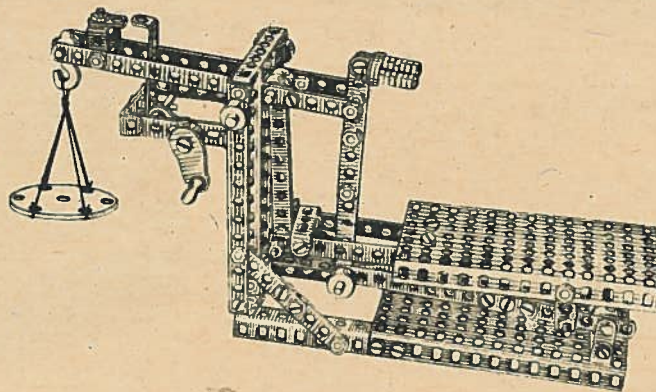


*Grabado No. 1



Grabado No. 2

4 No. 1	2 No. 45	4 No. 166
4 " 3	4 " 55	4 " 168
4 " 4	2 " 56	4 " 169
2 " 5	2 " 57	61 " 180
7 " 6	1 " 61	46 " 181
1 " 8	4 " 73	4 " 182
2 " 19	4 " 74	115 " 185
4 " 28	2 " 76	
1 " 29	2 " 81	
4 " 30	2 " 86	
2 " 36	1 " 89	
4 " 41	1 " 99	
6 " 42	1 " 108	
16 " 43	1 " 148	
4 " 44	4 " 165	



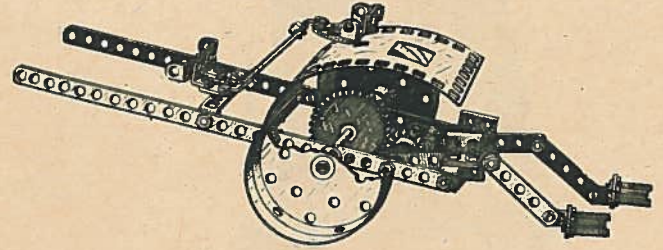
No. 8 Báscula decimal

3 No. 3	8 No. 43	1 No. 87
3 " 4	1 " 45	1 " 99
4 " 5	4 " 55	2 " 105
6 " 6	4 " 56	1 " 106
2 " 7	1 " 57	1 " 107
4 " 8	2 " 61	1 " 141
3 " 26	1 " 76	41 " 180
2 " 30	8 " 81	13 " 181
2 " 36	1 " 85	6 " 182
3 " 41	1 " 86	88 " 185



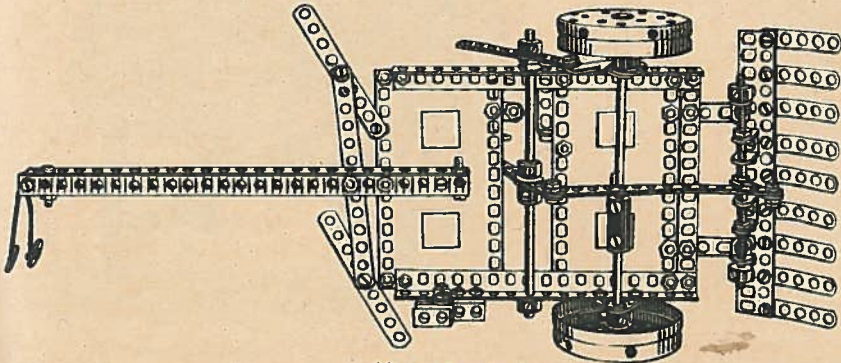
No. 9 Rastrillo de heno

4 No. 3	2 No.29	1 No. 75	1 No.138
4 " 4	2 " 41	7 " 81	2 " 145
9 " 6	1 " 42	1 " 82	2 " 146
1 " 7	2 " 43	1 " 86	2 " 166
1 " 8	2 " 45	1 " 87	41 " 180
2 " 13	1 " 51	1 " 89	6 " 181
1 " 19	2 " 52	1 " 105	5 " 182
4 " 26	4 " 57	1 " 108	66 " 185
2 " 28	2 " 65	1 " 118	

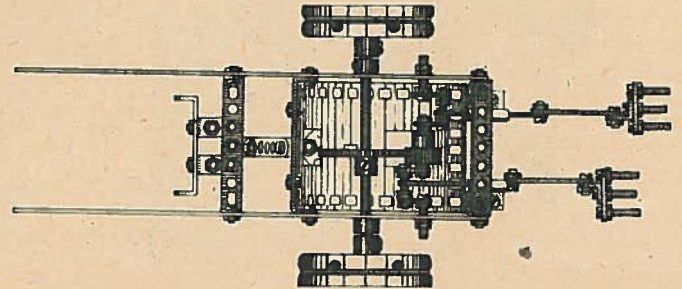


No. 10 Henajero

2 No. 1	4 No. 52	1 No.118
2 " 5	3 " 55	1 " 120
3 " 6	1 " 56	1 " 166
3 " 8	1 " 57	15 " 180
2 " 26	2 " 66	15 " 181
6 " 41	2 " 81	10 " 182
2 " 42	1 " 87	56 " 185
8 " 43	1 " 105	

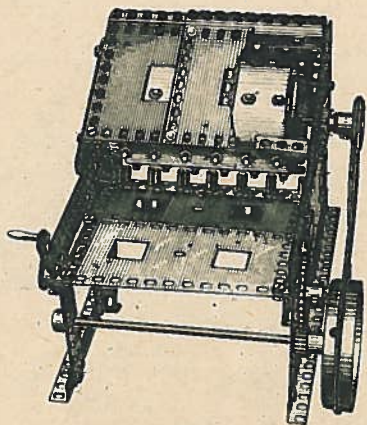


Vista de abajo



Vista de abajo

Modelos construídos con la Caja No. 2

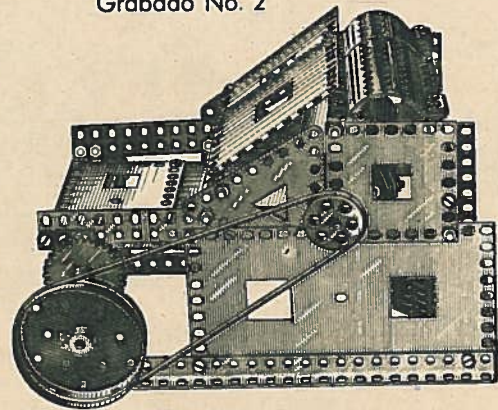


No. 11 Trilladora

4 No. 3	1 No. 73	1 No.148
2 " 12	1 " 75	1 " 150
2 " 19	2 " 76	2 " 165
2 " 20	2 " 81	2 " 166
2 " 28	1 " 83	2 " 168
16 " 43	2 " 89	2 " 169
2 " 52	1 " 99	2 " 173
2 " 55	2 " 107	54 " 180
4 " 57	1 " 118	40 " 181
2 " 61	1 " 120	20 " 182
4 " 64	2 " 145	146 " 185
1 " 65	2 " 146	

El tambor se reviste de cartón

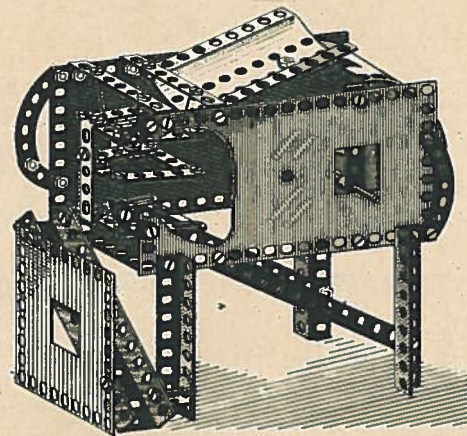
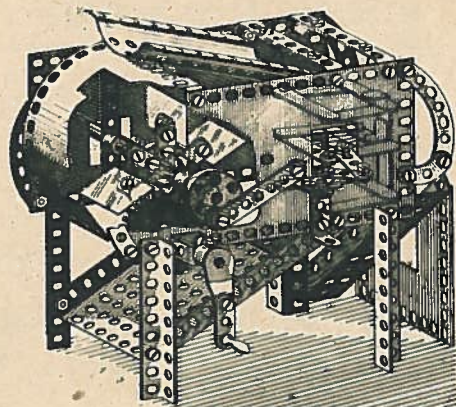
Grabado No. 2



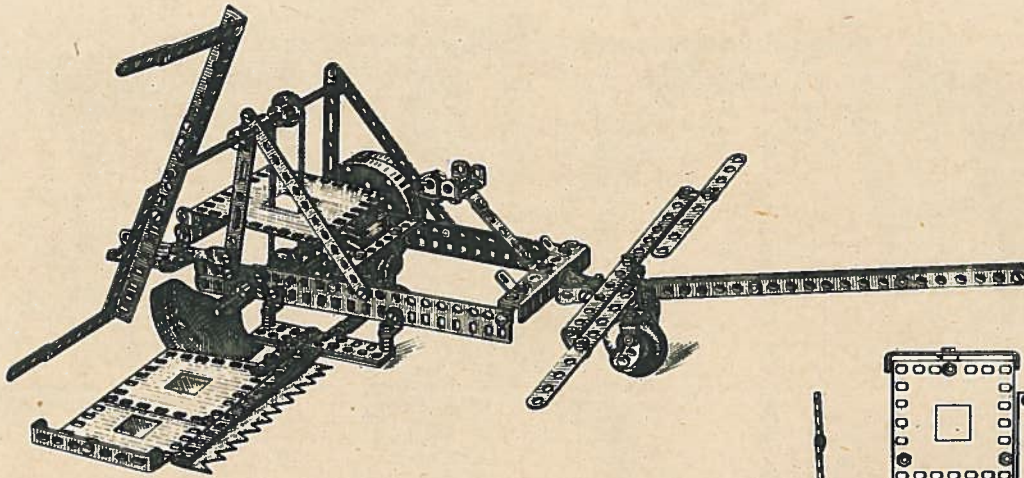
No. 12 Triadora

2 No. 4	1 No.44	1 No.118
1 " 5	1 " 45	1 " 120
9 " 6	3 " 55	2 " 145
4 " 7	1 " 56	1 " 165
3 " 8	1 " 57	1 " 166
2 " 13	1 " 61	1 " 168
4 " 24	1 " 64	2 " 169
2 " 26	2 " 73	50 " 180
4 " 30	1 " 81	19 " 181
1 " 36	1 " 85	5 " 182
1 " 24	1 " 87	81 " 185
9 " 43	1 " 99	

Las paletas se hacen de cartón



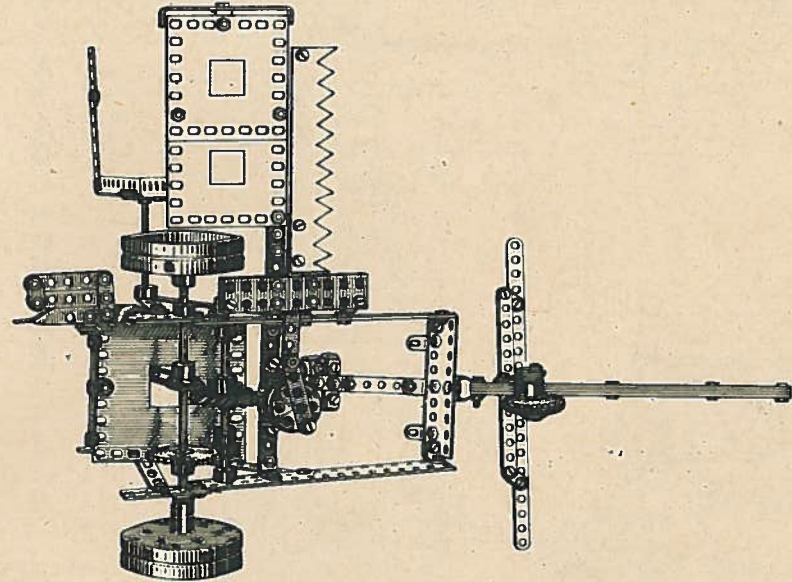
Grabado No. 2



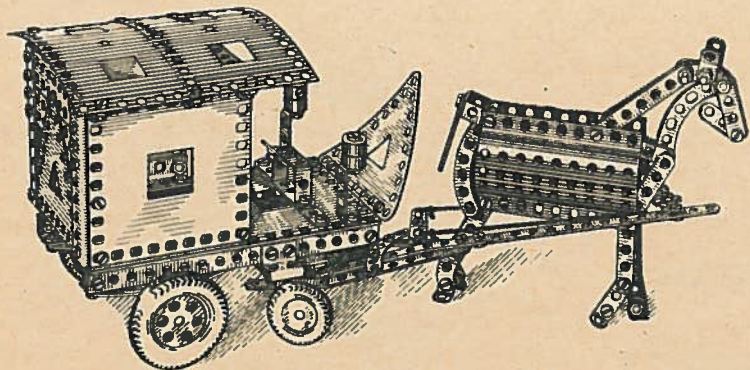
La cuchilla se hace de cartón o de chapa de hierro

No. 13 Segadora

4 No. 1	1 No. 44	2 No.107
4 " 3	2 " 45	1 " 118
4 " 4	1 " 51	1 " 120
3 " 5	1 " 54	1 " 128
9 " 6	3 " 55	1 " 129
2 " 7	1 " 57	4 " 145
4 " 8	2 " 66	2 " 146
2 " 12	1 " 73	1 " 148
2 " 19	3 " 74	1 " 156
2 " 20	6 " 81	2 " 165
3 " 26	1 " 83	1 " 168
3 " 30	1 " 85	59 " 180
6 " 41	1 " 87	27 " 181
6 " 42	1 " 89	6 " 182
13 " 43	1 " 105	124 " 185

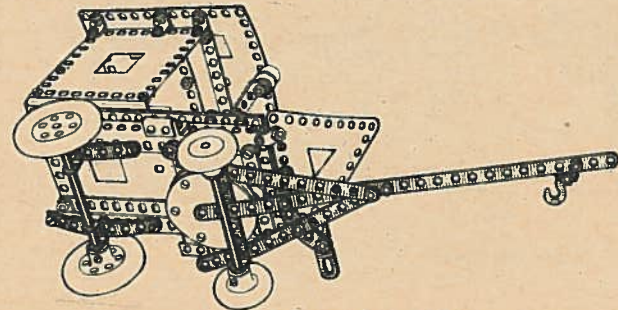


Vista de abajo



No. 14 Coche con caballo

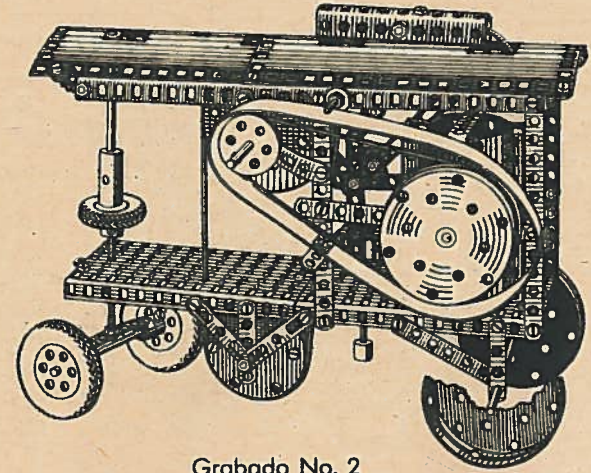
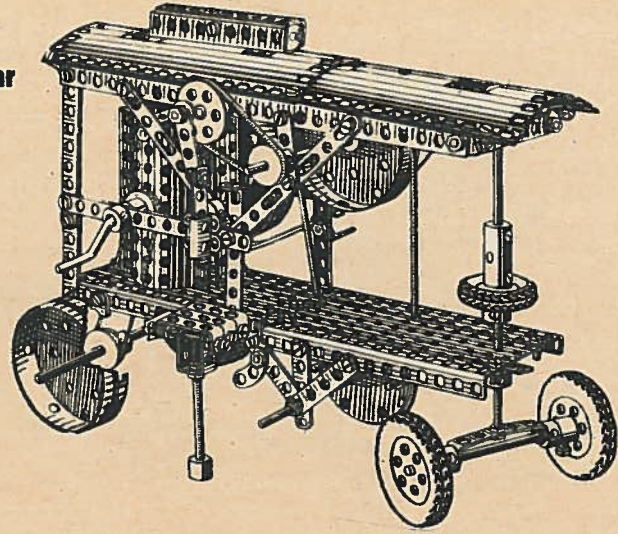
1 No. 1	2 No. 20	1 No. 45	10 No. 81	2 No. 173
2 " 3	4 " 24	1 " 51	2 " 87	63 " 180
4 " 4	4 " 26	2 " 52	1 " 141	27 " 181
4 " 5	2 " 29	1 " 55	3 " 145	11 " 182
10 " 6	4 " 30	2 " 57	2 " 155	109 " 185
2 " 7	1 " 41	2 " 64	2 " 156	
4 " 8	5 " 42	2 " 73	2 " 166	
2 " 13	16 " 43	2 " 74	2 " 168	
2 " 19	2 " 44	2 " 76	1 " 169	



Vista del coche de abajo

**No. 15
Máquina para aserrar y partir leña**

3 No. 3	4 No. 74
2 " 4	1 " 75
2 " 5	2 " 76
9 " 6	8 " 81
4 " 7	1 " 82
1 " 8	1 " 83
2 " 12	1 " 86
2 " 13	1 " 87
2 " 20	2 " 89
1 " 24	1 " 98
1 " 26	1 " 105
2 " 28	1 " 106
2 " 30	1 " 107
5 " 41	2 " 108
12 " 43	1 " 137
1 " 44	2 " 145
2 " 45	1 " 148
1 " 52	1 " 150
3 " 55	2 " 155
2 " 56	1 " 156
4 " 57	2 " 169
2 " 61	36 " 180
2 " 64	35 " 181
2 " 65	7 " 182
2 " 66	99 " 185
4 " 73	

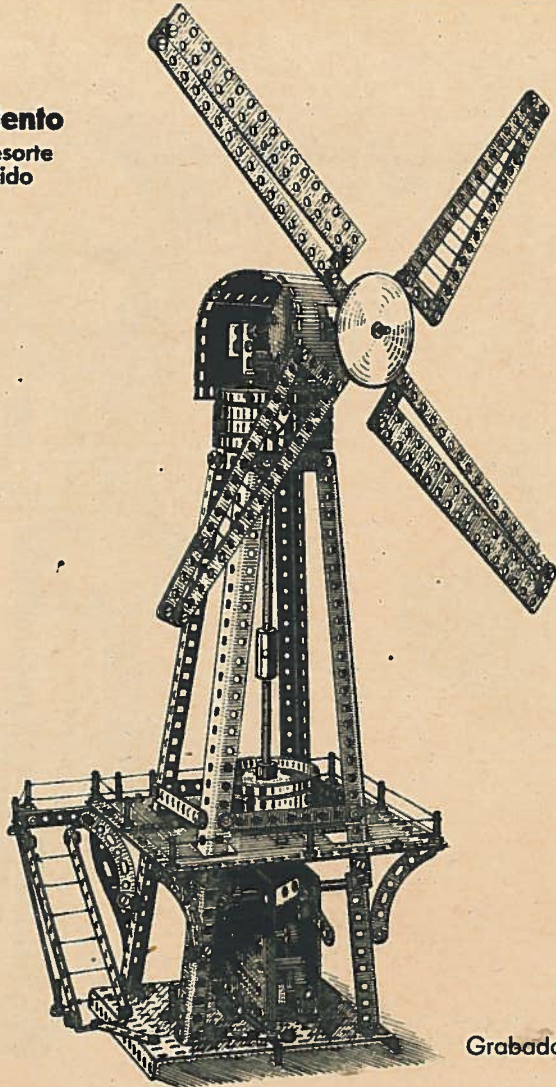


Grabado No. 2

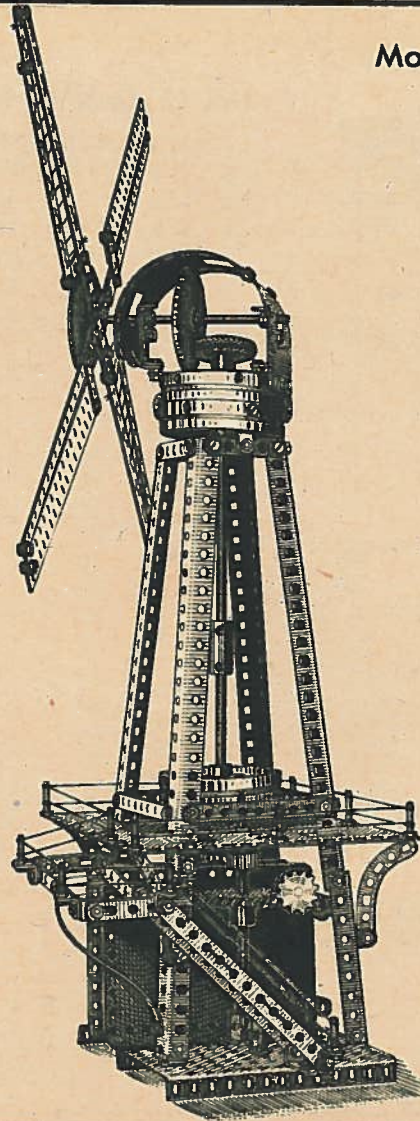
La hoja protectora se hace de cartón

No. 16
Molino de viento
con motor de resorte
No. 250 embutido

- 4 No. 1
- 4 " 3
- 4 " 4
- 1 " 5
- 8 " 6
- 4 " 7
- 2 " 8
- 1 " 12
- 1 " 13
- 2 " 19
- 4 " 24
- 2 " 26
- 4 " 28
- 4 " 30
- 6 " 41
- 5 " 42
- 16 " 43
- 1 " 51
- 1 " 55
- 1 " 56
- 4 " 57
- 2 " 61
- 2 " 65
- 1 " 66
- 1 " 74
- 2 " 76
- 3 " 81
- 1 " 82
- 2 " 87



Grabado No. 1

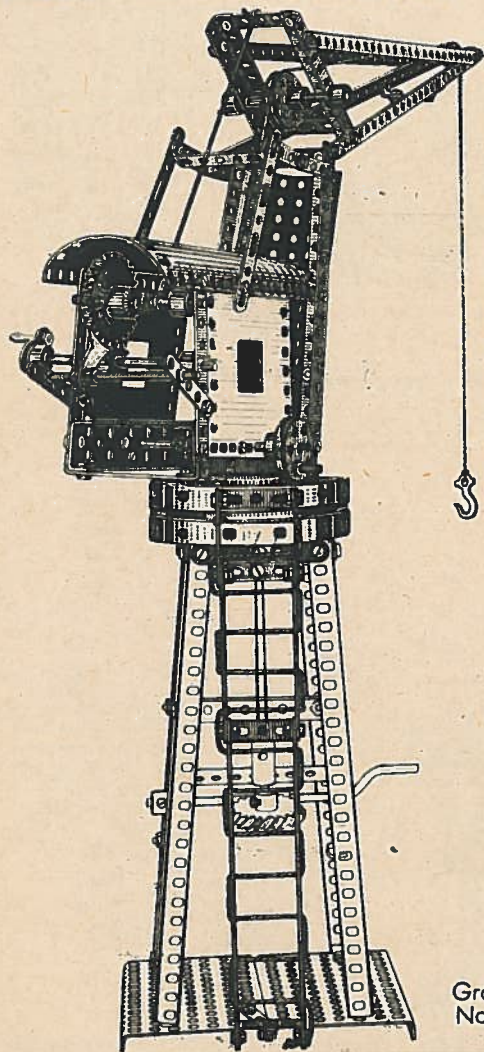


Grabado No. 2

- 1 No. 89
- 1 " 108
- 1 " 118
- 1 " 120
- 1 " 128
- 1 " 129
- 1 " 137
- 2 " 145
- 1 " 156
- 1 " 165
- 1 " 166
- 2 " 169
- 67 " 180
- 39 " 181
- 12 " 182
- 131 " 185
- 1 " 250

Hay que fijarse en una marcha sin fricción de los árboles y en el engrane exacto de las ruedas rectas y helicoidales. Para evitar que los engranes sufran cambio durante el servicio, debe atomillarse el motor lo más firmemente posible en la placa de base

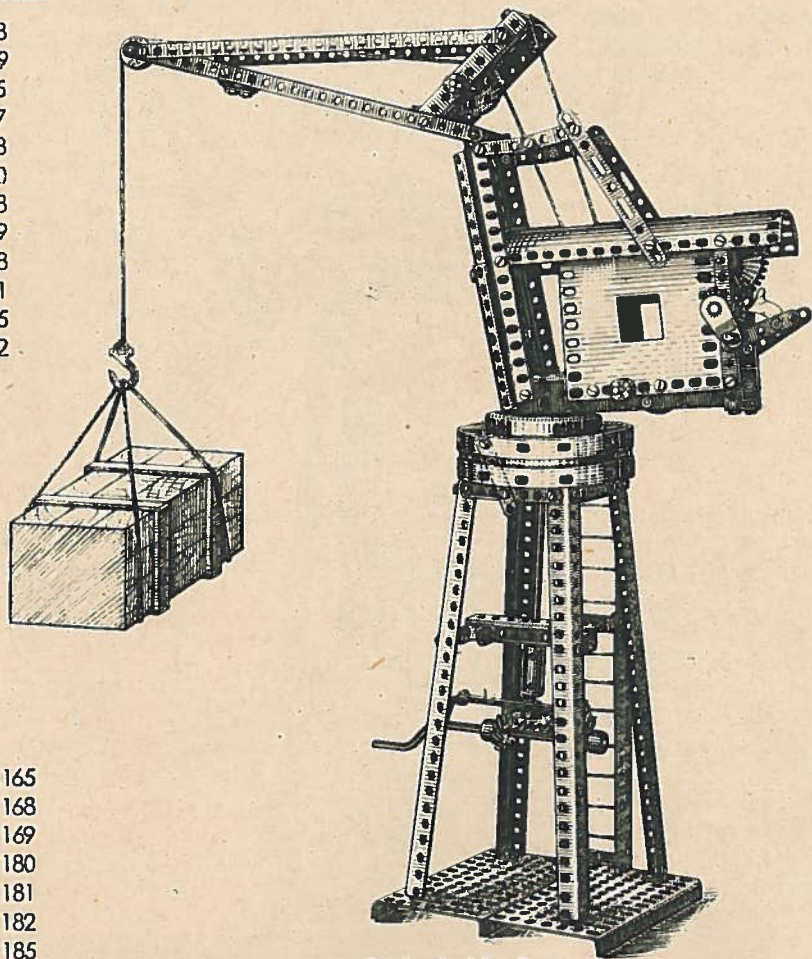
Modelo construido con la Caja No. 2



Grabado
No. 2

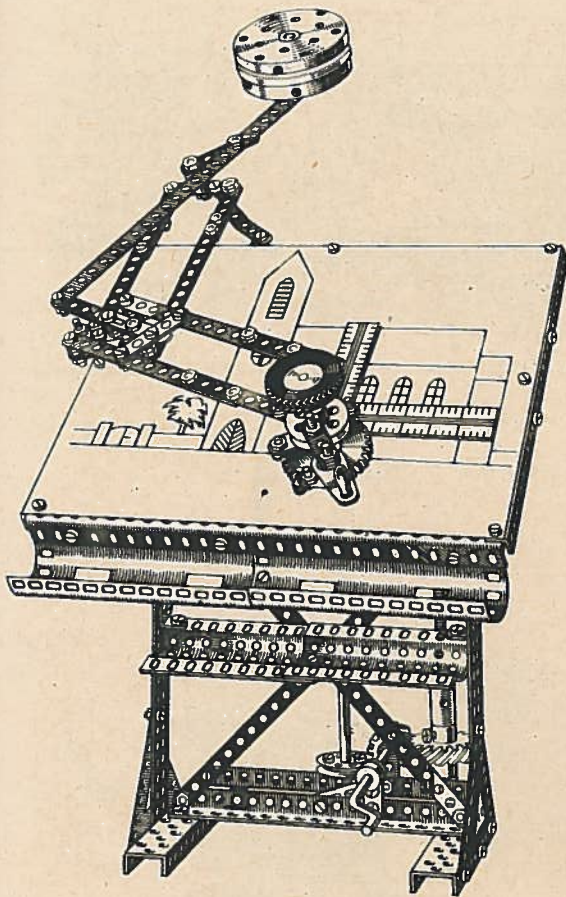
No. 17 Grúa giratoria

4 No. 1	1 No. 98
3 " 4	1 " 99
4 " 5	1 " 105
8 " 6	1 " 107
4 " 7	1 " 118
2 " 8	1 " 120
2 " 12	1 " 128
1 " 13	1 " 129
2 " 19	1 " 138
2 " 20	1 " 141
4 " 28	2 " 145
2 " 29	1 " 152
3 " 30	
2 " 36	
2 " 41	
6 " 43	
2 " 45	
2 " 55	
3 " 56	
4 " 57	
2 " 61	
2 " 63	
2 " 64	
1 " 65	
1 " 66	
2 " 73	
1 " 74	1 No.165
9 " 81	2 " 168
1 " 82	1 " 169
1 " 85	73 " 180
2 " 86	28 " 181
2 " 87	3 " 182
1 " 89	111 " 185

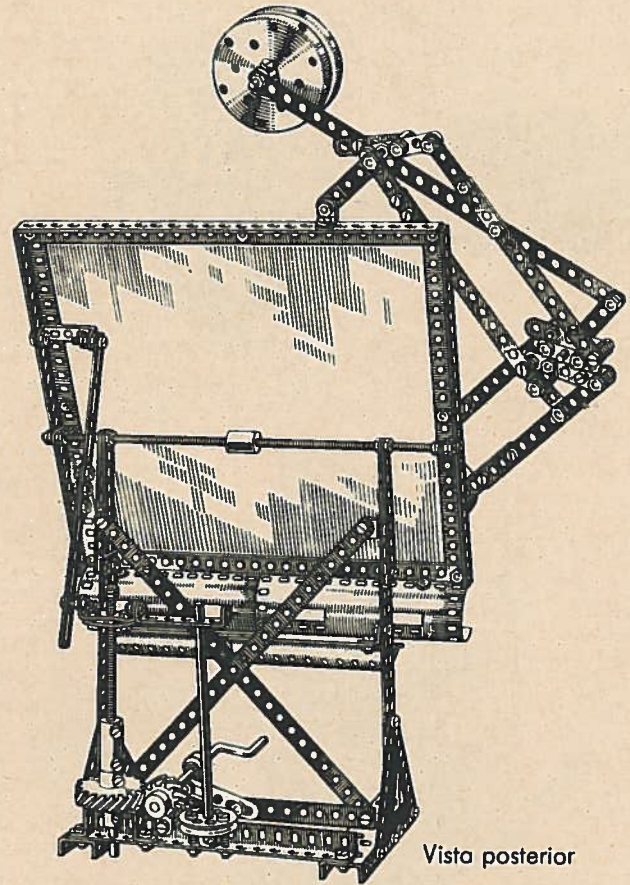


Grabado No. 1

No. 18 Pantógrafo

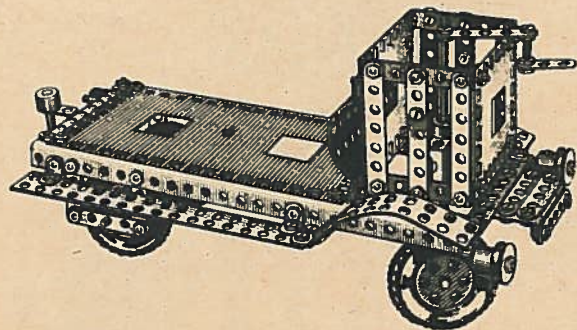


3 No. 1	5 No. 81
4 " 3	1 " 82
4 " 4	1 " 83
4 " 5	1 " 86
10 " 6	1 " 89
1 " 7	1 " 98
4 " 8	1 " 99
2 " 12	1 " 105
2 " 13	1 " 106
2 " 19	1 " 107
2 " 26	2 " 108
4 " 28	1 " 120
2 " 29	1 " 128
2 " 36	1 " 129
4 " 41	2 " 145
6 " 43	1 " 146
1 " 51	1 " 156
1 " 56	2 " 166
2 " 57	2 " 173
2 " 64	60 " 180
1 " 65	15 " 181
1 " 66	15 " 182
2 " 73	150 " 185
1 " 74	



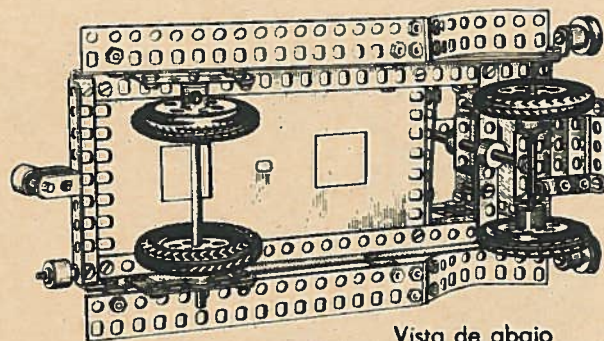
Vista posterior

Como tablero de dibujo empléese cartón grueso. Las escalas se hacen de madera. Póngase en la pesa de compensación, compuesto de las piezas No. 65 y 66, un pedacito de hierro de 30 grs.

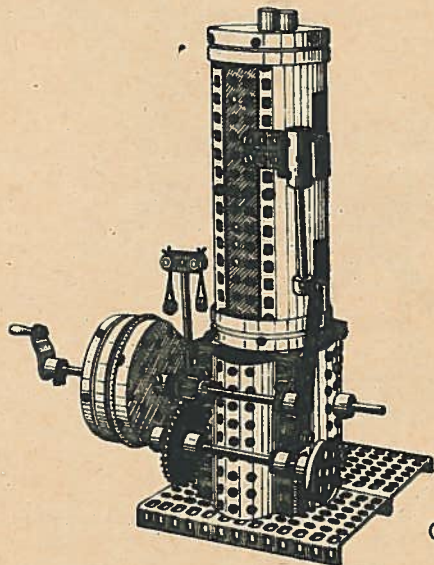


No. 19 Carro eléctrico

2	No. 4	1	No. 64
4	" 5	4	" 73
8	" 6	2	" 74
4	" 7	4	" 81
3	" 8	1	" 85
2	" 19	1	" 86
2	" 20	1	" 87
2	" 28	1	" 108
1	" 30	4	" 145
4	" 42	2	" 165
6	" 43	1	" 169
1	" 45	65	" 180
1	" 51	5	" 181
4	" 56	6	" 182
3	" 57	84	" 185



Vista de abajo

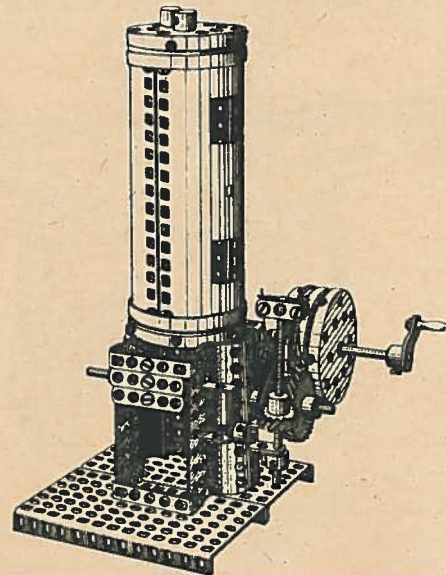


Grabado No. 1

No. 20 Máquina a vapor

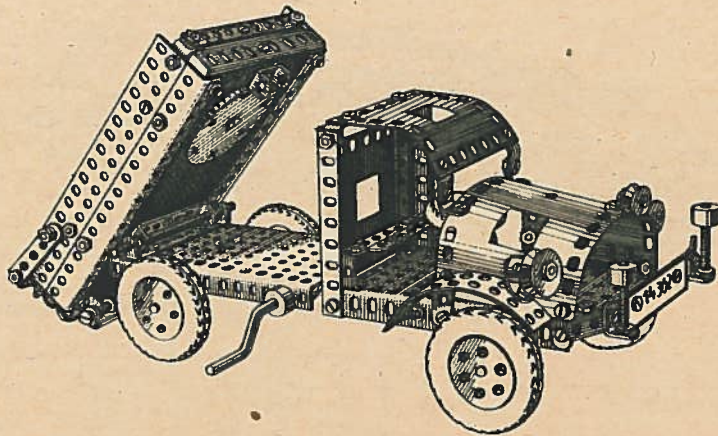
1	No. 4	2	No. 56	1	No. 118
7	" 6	2	" 61	1	" 120
2	" 7	3	" 64	1	" 128
3	" 8	2	" 65	1	" 129
2	" 19	2	" 66	2	" 145
2	" 20	2	" 73	2	" 146
2	" 30	7	" 81	1	" 148
6	" 41	1	" 82	2	" 169
5	" 43	1	" 83	34	" 180
1	" 45	1	" 86	29	" 181
1	" 51	2	" 87	4	" 182
2	" 52	2	" 89	71	" 185
2	" 55	1	" 99		

Grabado No. 2

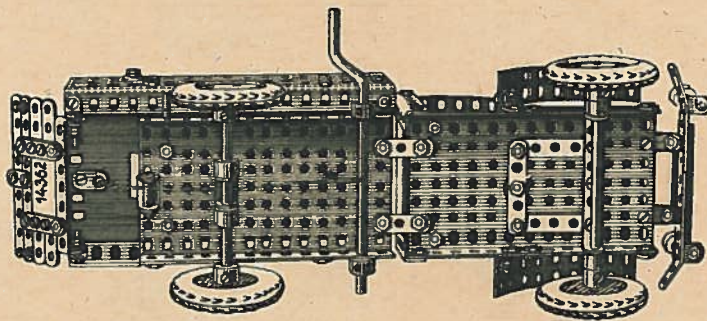


No. 21 Autocamión

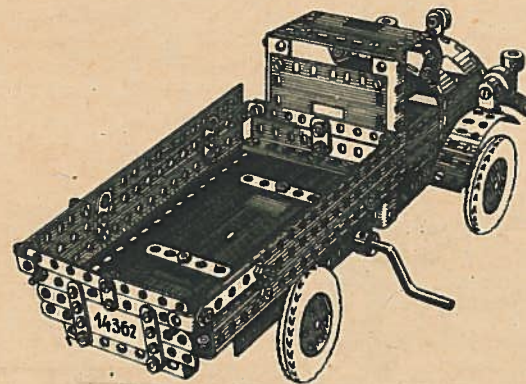
1 No. 3	15 No.43	1 No. 98
4 " 4	4 " 44	2 " 105
2 " 5	1 " 45	1 " 106
10 " 6	1 " 51	1 " 107
2 " 7	4 " 55	4 " 155
4 " 8	1 " 56	1 " 156
2 " 19	2 " 61	2 " 165
2 " 20	2 " 73	1 " 166
4 " 26	3 " 74	1 " 169
2 " 29	1 " 75	79 " 180
3 " 30	1 " 76	19 " 181
6 " 41	10 " 81	6 " 182
5 " 42	2 " 87	124 " 185



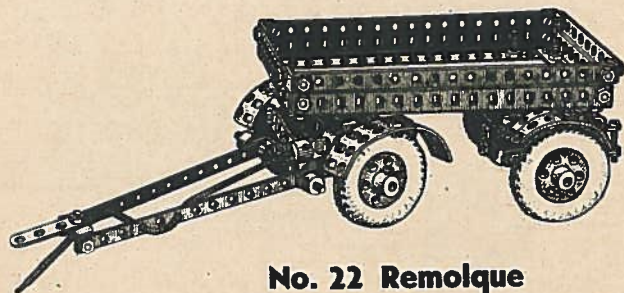
Grabado No. 1



Grabado No. 2

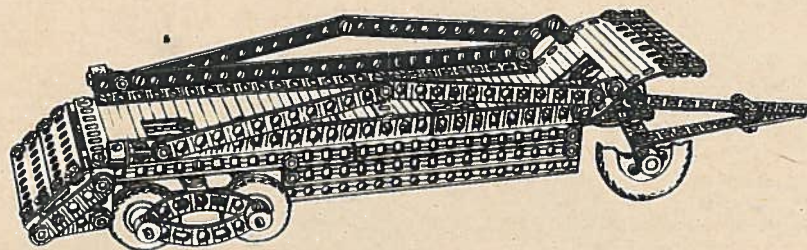


Grabado No. 3



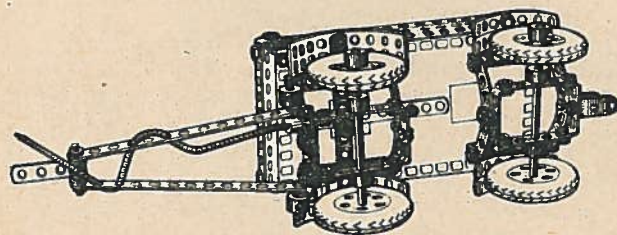
No. 22 Remolque

2 No. 3	2 No.30	2 No. 87
4 " 4	6 " 41	1 " 137
4 " 5	6 " 43	1 " 148
4 " 6	1 " 44	4 " 155
1 " 7	1 " 45	1 " 169
4 " 8	4 " 56	41 " 180
2 " 19	4 " 57	14 " 181
2 " 20	4 " 73	8 " 182
4 " 24	1 " 75	69 " 185
2 " 29	8 " 81	

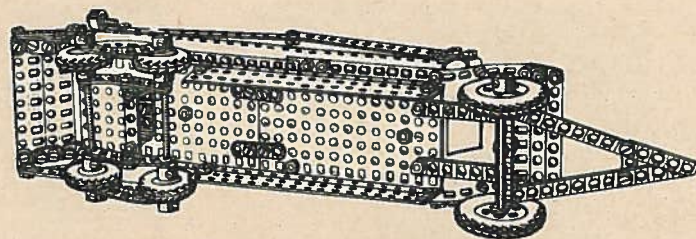


No. 23 Autocamión bajo para pesos grandes

4 No. 3	2 No.30	1 No. 87
4 " 4	6 " 41	2 " 108
4 " 5	2 " 42	4 " 145
5 " 6	8 " 43	4 " 146
4 " 7	1 " 51	2 " 155
4 " 8	1 " 55	4 " 156
2 " 19	1 " 56	2 " 169
2 " 20	2 " 61	61 " 180
4 " 24	2 " 73	12 " 181
3 " 26	4 " 74	3 " 182
2 " 29	7 " 81	78 " 185



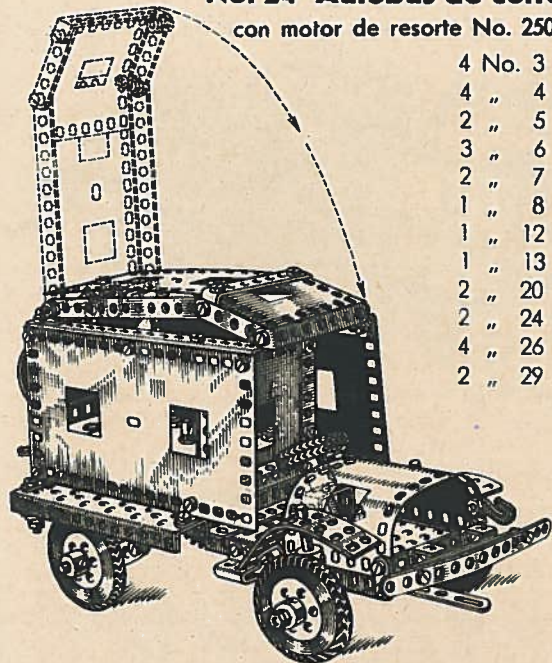
Vista de abajo



Vista de abajo

No. 24 Autobús de correo

con motor de resorte No. 250



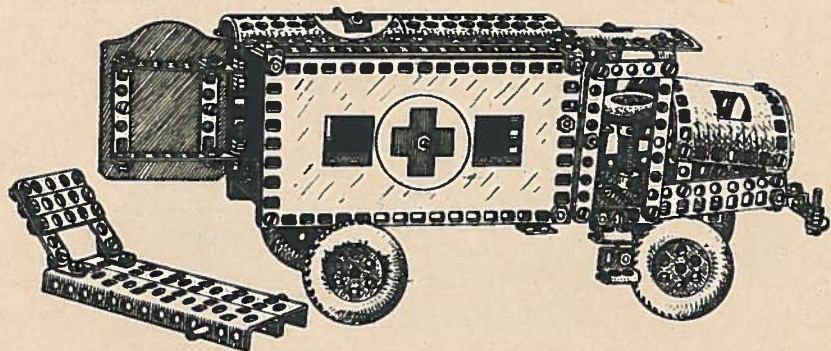
4 No. 3	3 No. 30
4 " 4	2 " 36
2 " 5	2 " 41
3 " 6	16 " 43
2 " 7	4 " 44
1 " 8	1 " 45
1 " 12	1 " 51
1 " 13	2 " 52
2 " 20	3 " 55
2 " 24	4 " 57
4 " 26	1 " 61
2 " 29	1 " 64

4 " 73	1 " 74
1 " 75	9 " 81
1 " 83	2 " 86
2 " 89	1 " 89
3 " 105	2 " 107
2 " 107	1 " 128
1 " 129	1 " 141
1 " 141	4 " 155
1 " 156	1 " 165
1 " 165	2 " 166
2 " 166	1 " 168
1 " 168	2 " 169
2 " 169	60 " 180
60 " 180	19 " 181
19 " 181	5 " 182
5 " 182	115 " 185
115 " 185	1 " 250



Vista de abajo

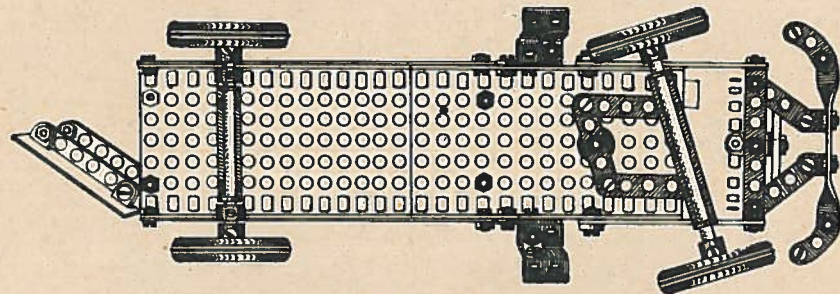
Modelos construidos con la Caja No. 2



No. 25 Automóvil de ambulancia

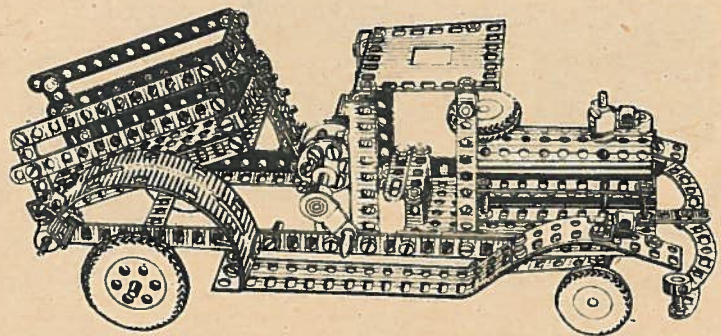
4 No. 4	2 No.29	3 No.56	2 No. 87	2 No.169
3 " 5	2 " 36	2 " 61	2 " 105	71 " 180
10 " 6	4 " 41	4 " 73	1 " 106	28 " 181
2 " 7	4 " 42	2 " 64	1 " 107	6 " 182
2 " 8	14 " 43	1 " 74	4 " 155	133 " 185
2 " 19	4 " 52	1 " 76	1 " 156	
2 " 20	1 " 54	4 " 81	2 " 165	
2 " 26	3 " 55	1 " 86	1 " 166	

La puerta hay que revestirla con cartón



Vista de abajo

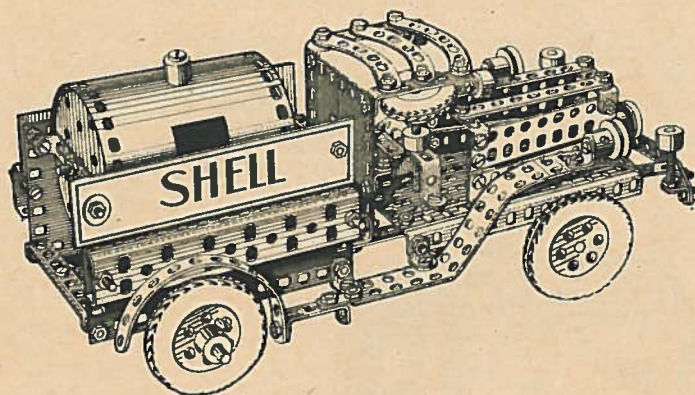
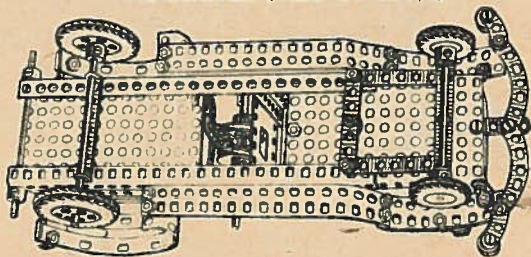
Modelos construidos con la Caja No. 2



No. 26 Autocamión

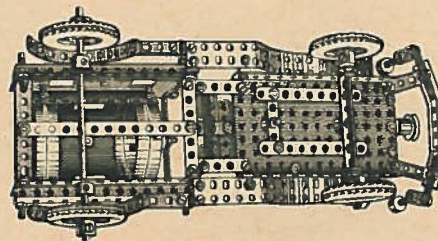
4 No. 3	14 No.43	1 No. 75	1 No.137
2 " 4	1 " 51	9 " 81	2 " 155
4 " 5	3 " 55	1 " 83	3 " 156
6 " 6	2 " 61	2 " 87	2 " 165
3 " 7	2 " 63	1 " 89	31 " 180
1 " 8	2 " 64	1 " 99	40 " 181
1 " 13	4 " 73	2 " 107	21 " 182
2 " 19	3 " 74	1 " 108	107 " 185
2 " 20			
2 " 24			
2 " 26			
2 " 28			
2 " 30			
1 " 41			

Autocamión (Vista de abajo)



No. 27 Auto-tanque

4 No.3	2 No.19	6 No.41	4 No.57	4 No. 74
4 " 4	2 " 20	15 " 43	1 " 61	10 " 81
1 " 5	3 " 24	1 " 51	1 " 65	1 " 83
4 " 6	2 " 30	4 " 55	1 " 66	1 " 87
2 " 8	2 " 36	4 " 56	4 " 73	1 " 89
				2 " 105
				1 " 107
				2 " 145
				4 " 146
				4 " 155
				1 " 156
				1 " 165
				2 " 166
				1 " 169
				55 " 180
				27 " 181
				13 " 182
				107 " 185

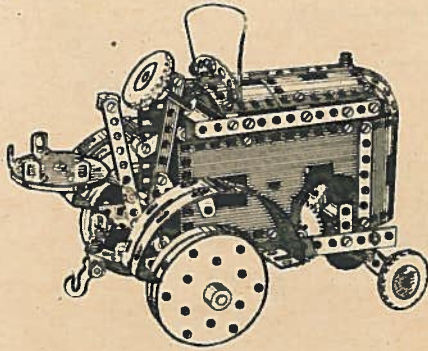


Auto-tanque (Vista de abajo)

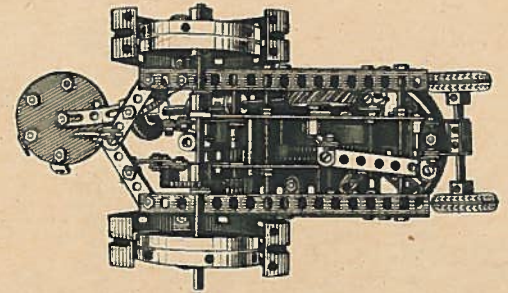
El letrero con la inscripción "SHELL" se hace de cartón

No. 28 Tractor

con motor de resorte No. 250

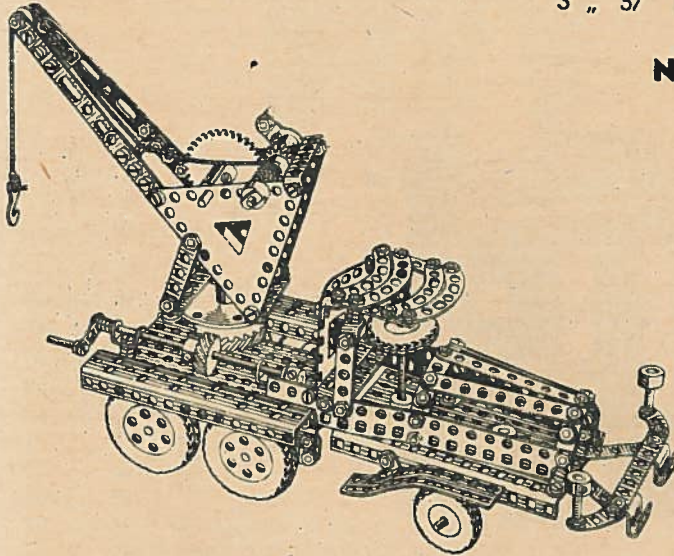


2 No. 3	2 No. 63	1 No.120
4 " 4	2 " 65	1 " 128
4 " 5	3 " 74	1 " 129
2 " 6	1 " 75	1 " 137
3 " 8	1 " 76	1 " 141
2 " 12	7 " 81	2 " 145
1 " 24	1 " 82	3 " 156
4 " 26	1 " 83	2 " 165
2 " 29	2 " 86	3 " 166
6 " 41	2 " 89	49 " 180
6 " 42	1 " 99	29 " 181
15 " 43	1 " 106	1 " 182
2 " 44	2 " 107	107 " 185
3 " 57	1 " 118	1 " 250



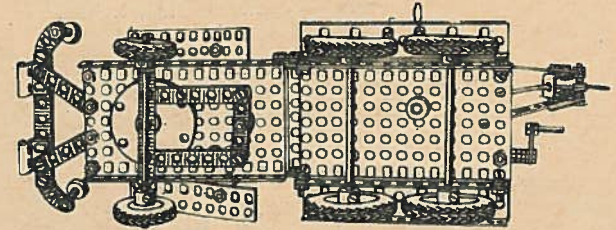
Tractor (Vista de abajo)

No. 29 Autogrúa



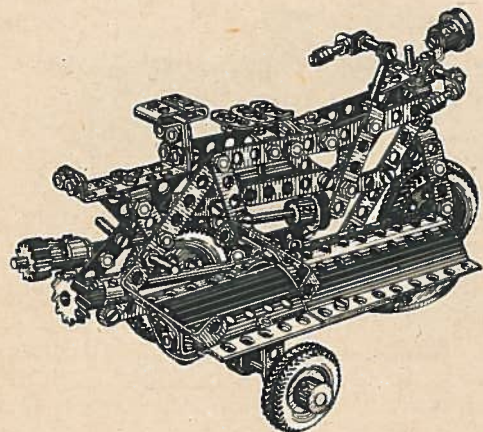
4 No. 3
4 " 4
3 " 5
8 " 6
2 " 7
1 " 8
2 " 12
2 " 13
2 " 19
2 " 20
4 " 24
2 " 26
2 " 36
4 " 41
4 " 42
14 " 43
2 " 44
1 " 45

2 No.52
3 " 55
3 " 56
1 " 57
2 " 61
4 " 73
2 " 74
1 " 75
2 " 76



Autogrúa (Vista de abajo)

9 No. 81	2 No.108	1 No.152
1 " 82	1 " 118	4 " 155
1 " 83	1 " 120	2 " 156
1 " 86	1 " 128	1 " 165
2 " 87	1 " 129	2 " 173
1 " 99	1 " 137	56 " 180
3 " 105	1 " 141	34 " 181
1 " 106	2 " 145	8 " 182
2 " 107	4 " 146	128 " 185



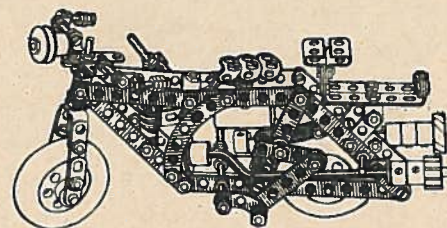
No. 30 Motocicleta con coche de remolque

2	No. 3
4	" 4
4	" 5
7	" 6
3	" 7
4	" 8
2	" 24
4	" 26
6	" 41
6	" 42
13	" 43
3	" 44

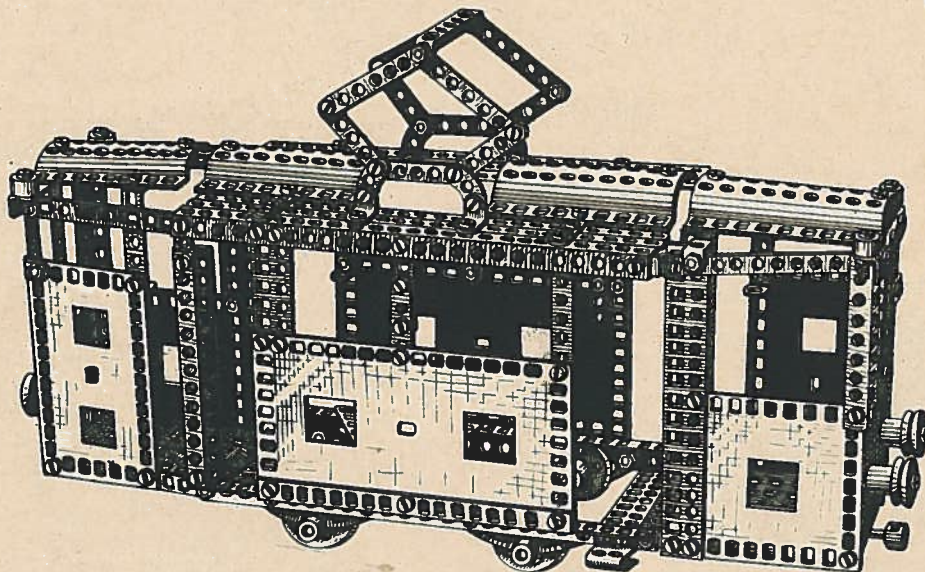
2	No. 45
2	" 52
4	" 56
2	" 57
2	" 64
2	" 73
3	" 74
1	" 75
1	" 76
7	" 81
1	" 82
1	" 85

1	No. 86
1	" 87
1	" 98
1	" 105
1	" 106
1	" 107
1	" 118
1	" 128
1	" 137
4	" 145
3	" 146
2	" 155

1	No. 156	14	No. 182
48	" 180	124	" 185
14	" 181		



Motocicleta por separado



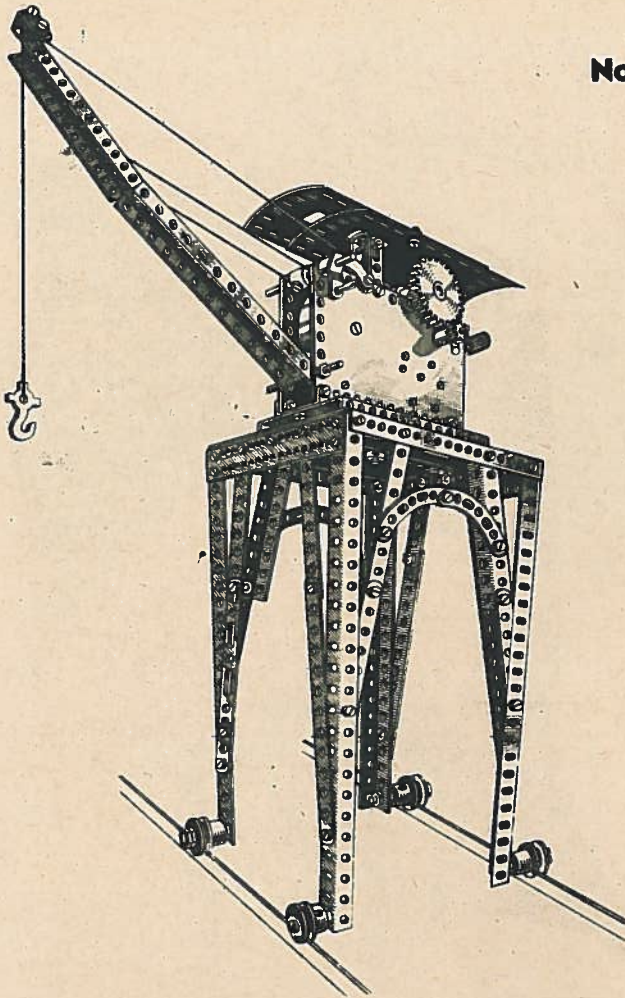
No. 31 Tranvia

4	No. 1	2	No. 20
4	" 3	4	" 24
4	" 4	4	" 26
4	" 5	4	" 28
10	" 6	2	" 29
4	" 7	4	" 30
4	" 8	2	" 36
2	" 12	4	" 42
2	" 13	16	" 43
2	" 19	2	" 44

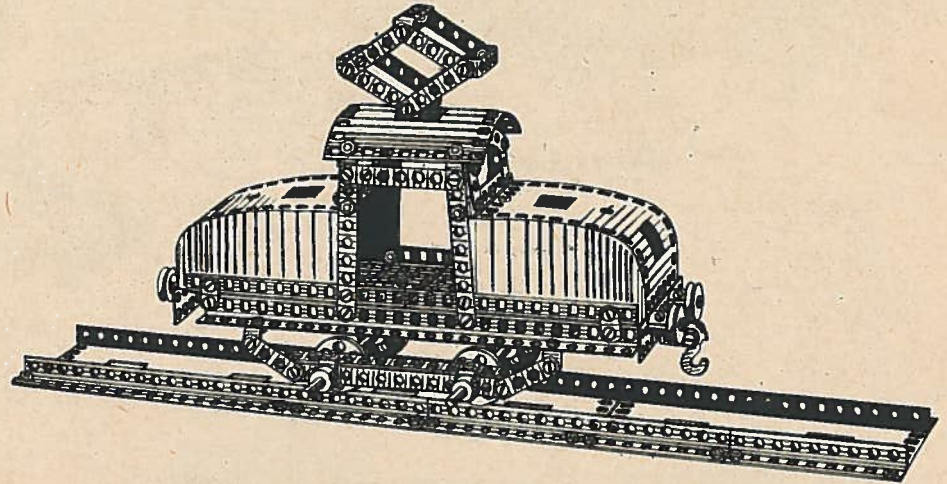
2	No. 52	2	No. 108
3	" 55	2	" 165
4	" 56	2	" 166
2	" 61	2	" 168
4	" 64	2	" 169
4	" 73	2	" 173
4	" 74	96	" 180
10	" 81	40	" 181
2	" 87	26	" 182
1	" 107	172	" 185

No. 32 Grúa de portón de ferrocarril

con motor de resorte No. 250



4 No. 3	2 No.19	3 No.41	4 No. 74	1 No.118	2 No.166
4 " 4	4 " 24	2 " 44	4 " 81	1 " 120	2 " 169
4 " 5	4 " 28	2 " 45	1 " 85	1 " 138	42 " 180
2 " 8	2 " 29	2 " 57	2 " 86	1 " 141	27 " 181
2 " 12	4 " 30	1 " 61	1 " 99	2 " 145	6 " 182
2 " 13	2 " 36	1 " 65	2 " 105	1 " 146	88 " 185
			1 " 106	1 " 152	1 " 250

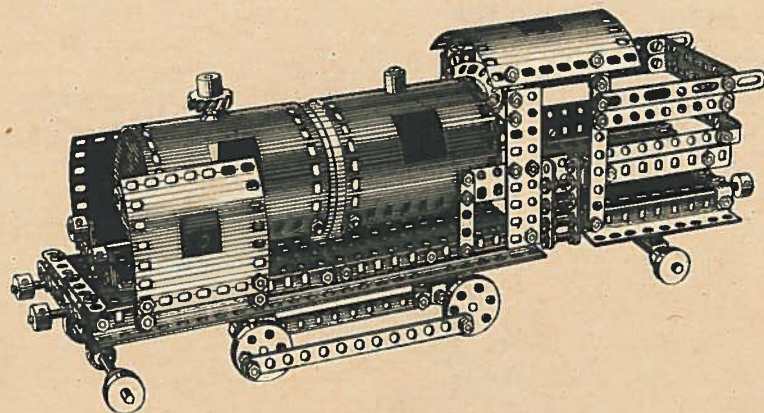


No. 33 Locomotora eléctrica

4 No.3	2 No.20	4 No.42	4 No. 73	1 No.168
4 " 4	2 " 24	14 " 43	4 " 74	3 " 169
2 " 5	4 " 28	1 " 45	4 " 81	88 " 180
10 " 6	2 " 29	2 " 55	2 " 89	8 " 181
4 " 7	2 " 30	4 " 57	1 " 141	5 " 182
4 " 8	6 " 41	2 " 61	2 " 166	102 " 185

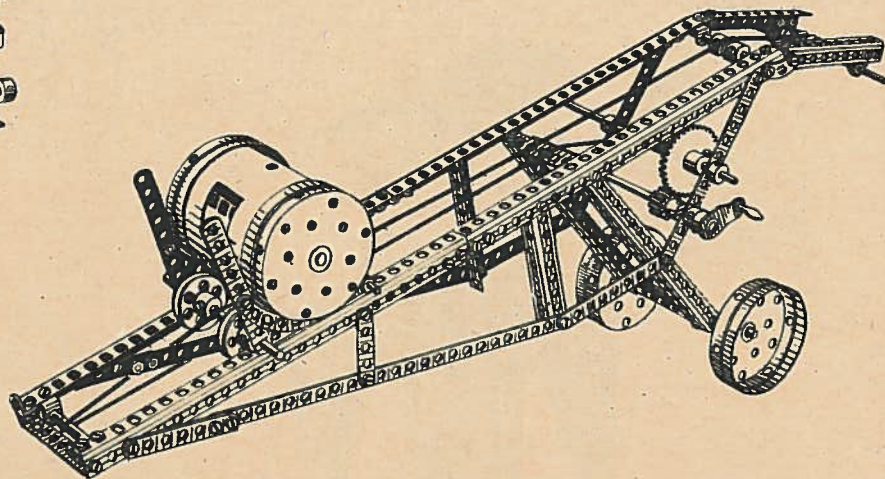
La placa de base No. 61 está atornillada a la pieza 65.
Así se puede girar la grúa por el árbol (pieza 85).

Modelos construidos con la Caja No. 2



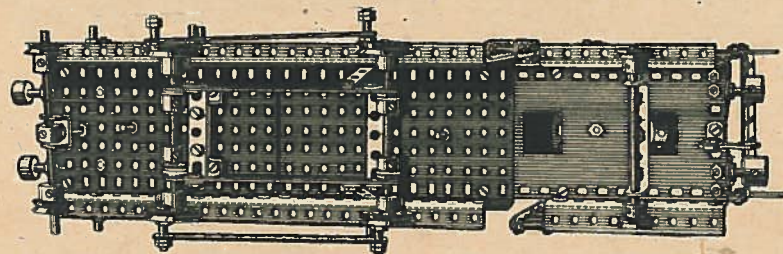
No. 34 Locomotora

4 No. 3	2 No.28	2 No.61	1 No. 83	4 No.145
4 " 4	4 " 30	1 " 64	2 " 87	4 " 146
10 " 6	4 " 41	2 " 65	1 " 89	2 " 165
4 " 7	4 " 42	2 " 66	1 " 105	1 " 166
2 " 8	15 " 43	4 " 73	1 " 106	1 " 168
2 " 12	1 " 45	4 " 74	2 " 107	2 " 169
2 " 19	1 " 51	1 " 75	1 " 128	63 " 180
2 " 20	3 " 55	10 " 81	1 " 137	44 " 181
1 " 24	3 " 56	1 " 82	1 " 141	27 " 182
				180 " 185

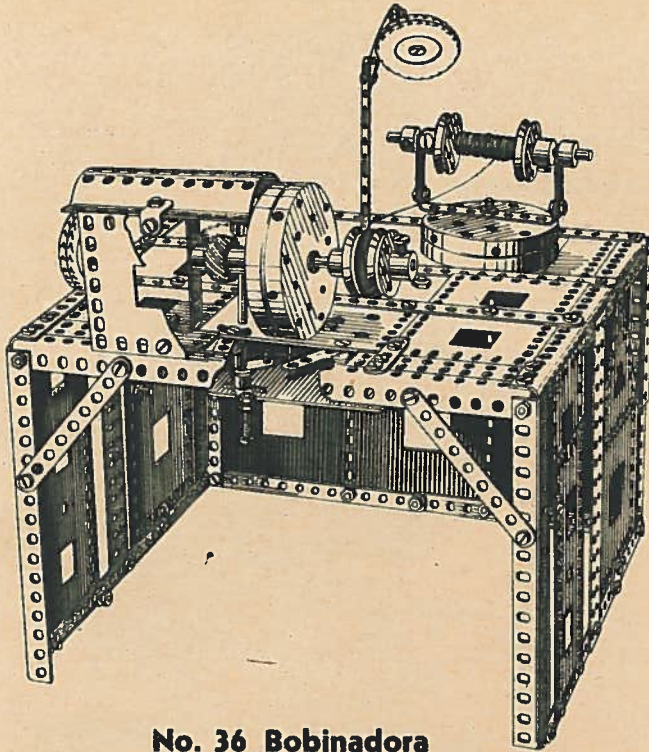


No. 35 Montabarriles

2 No. 1	4 No.41	2 No. 87
2 " 3	2 " 42	2 " 89
4 " 4	6 " 43	1 " 99
4 " 5	3 " 55	2 " 107
4 " 6	2 " 65	1 " 118
2 " 7	2 " 66	1 " 120
2 " 24	2 " 73	1 " 152
4 " 26	2 " 74	2 " 169
4 " 28	1 " 75	55 " 180
2 " 29	9 " 81	3 " 181
4 " 30	2 " 86	71 " 185



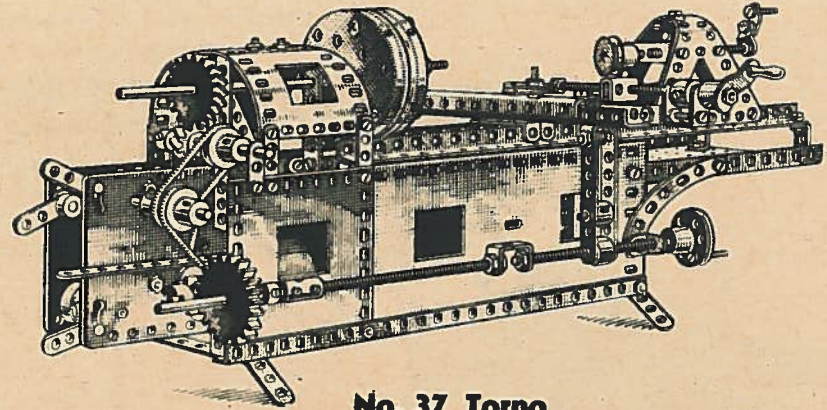
Locomotora (Vista de abajo)



No. 36 Bobinadora

con motor de resorte No. 250

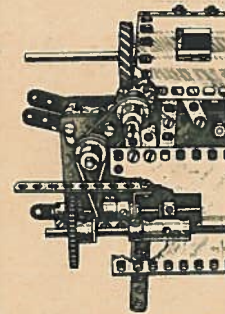
4 No. 1	4 No.28	2 No. 74	4 No.168
2 " 3	2 " 29	3 " 81	4 " 169
2 " 4	4 " 30	1 " 87	2 " 173
2 " 6	2 " 41	1 " 89	52 " 180
2 " 7	4 " 43	1 " 128	24 " 181
1 " 12	3 " 55	1 " 129	13 " 182
2 " 19	1 " 64	2 " 156	92 " 185
2 " 20	2 " 65	3 " 165	1 " 250
1 " 24	4 " 73	4 " 166	



No. 37 Torno

con motor de resorte No. 250

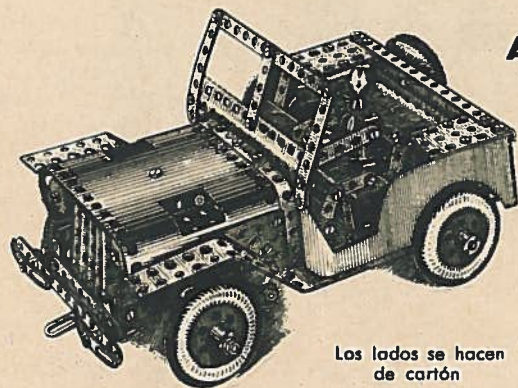
2 No.3	4 No. 8	1 No.36	1 No. 89
1 " 4	2 " 24	6 " 41	1 " 99
2 " 5	1 " 26	2 " 42	2 " 105
5 " 6	4 " 28	8 " 43	1 " 106
3 " 7	3 " 30	4 " 44	2 " 107
		2 " 45	2 " 108
		1 " 52	1 " 118
		2 " 55	1 " 120
		1 " 56	1 " 128
		4 " 57	1 " 129
		2 " 61	4 " 145
		1 " 65	4 " 146
		1 " 66	2 " 165
		2 " 73	2 " 168
		4 " 74	2 " 169
		1 " 75	2 " 173
		6 " 81	43 " 180
		1 " 82	27 " 181
		1 " 83	10 " 182
		2 " 86	108 " 185
		1 " 87	1 " 250



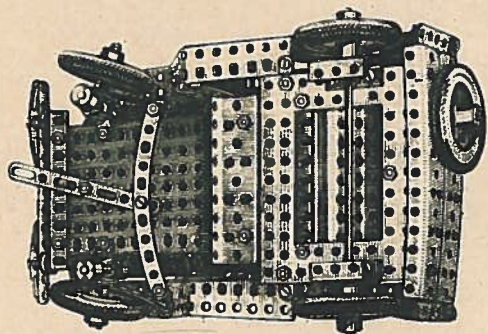
Torno (Vista parcial)

Modelos construidos con la Caja No. 3

Los siguientes modelos pueden construirse con la Caja de Construcciones Principal No. 3, ó la Principal No. 2 y la Suplementaria No. 2 S



Los lados se hacen de cartón



Vista de abajo

No. 1 Automóvil "Jeep"

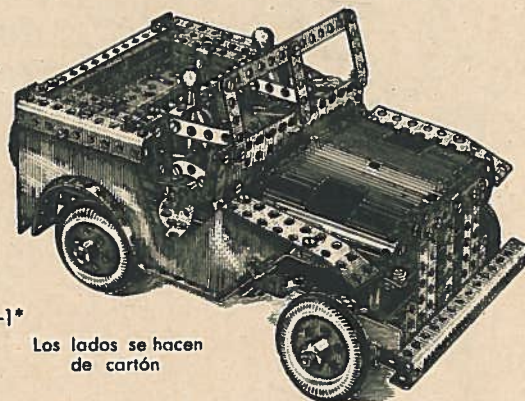
2	No.	31
2	"	34
2	"	37
2	"	38
2	"	40
1	"	41
14	"	43
4	"	44
1	"	55
2	"	57
1	"	61
1	"	64
1	"	70
2	"	72
5	"	73
3	"	74
2	"	75
6	"	81
2	"	85
2	"	89
15	"	105
2	"	106
2	"	107
1	"	112
4	"	113
1	"	145
2	"	155
2	"	169
2	"	180
1	"	227
7	"	265
1	"	301
132	"	185

No. 2 Automóvil "Jeep"

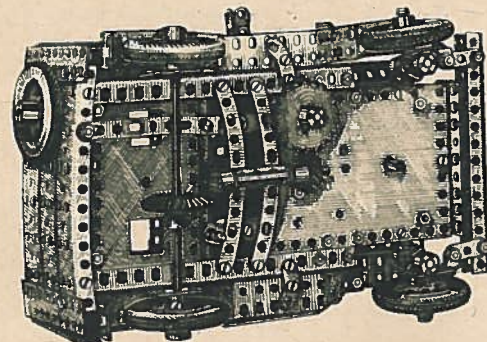
con motor de resorte
No. 250

1	No.	3	5	No.	73
10	"	5	3	"	74
3	"	6	6	"	81
10	"	7	2	"	85
12	"	8	2	"	86
1	"	12	1	"	89
1	"	15	1	"	96
2	"	16	2	"	99-1*
2	"	18	2	"	105
4	"	20	2	"	106
4	"	21	2	"	112
2	"	22	2	"	113
1	"	24	1	"	122
7	"	26	1	"	123
2	"	29	1	"	128
3	"	30	1	"	129
2	"	34	1	"	135
1	"	36	2	"	145
3	"	40	5	"	155
11	"	41	1	"	166
4	"	42	1	"	169
16	"	43	112	"	180
4	"	44	24	"	181
1	"	47	3	"	182
2	"	48	161	"	185
5	"	57	1	"	250

* Significa sólo el mango de la manivela

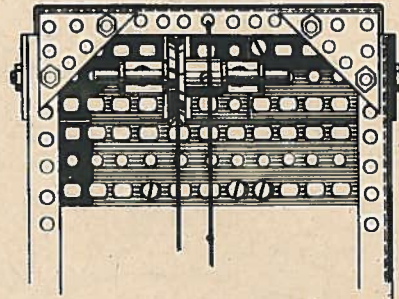


Los lados se hacen de cartón



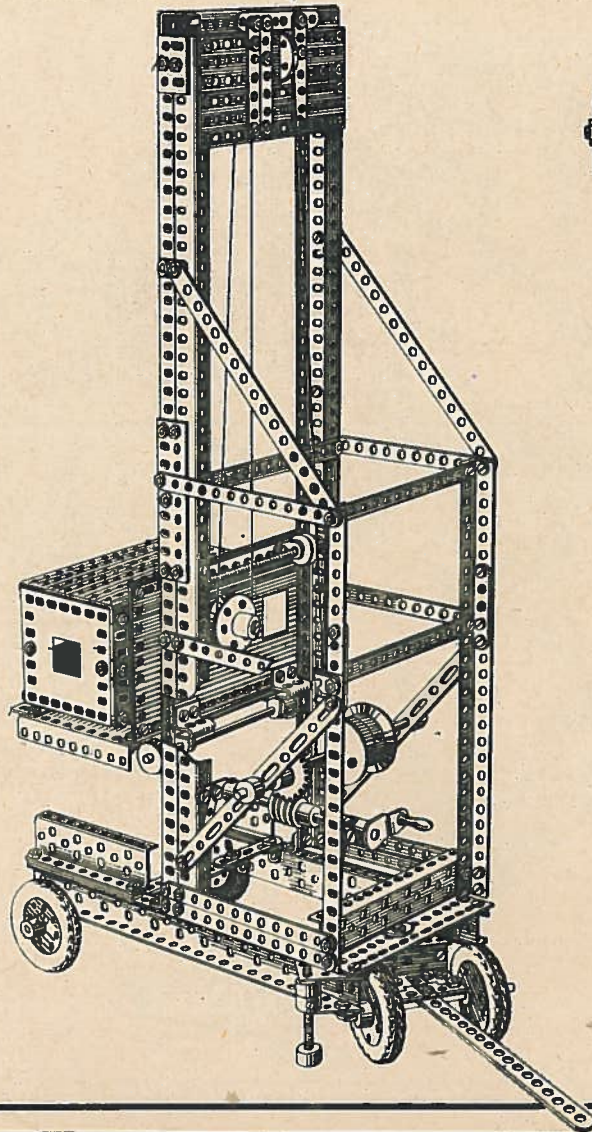
Vista de abajo

Modelo construido con la Caja No. 3



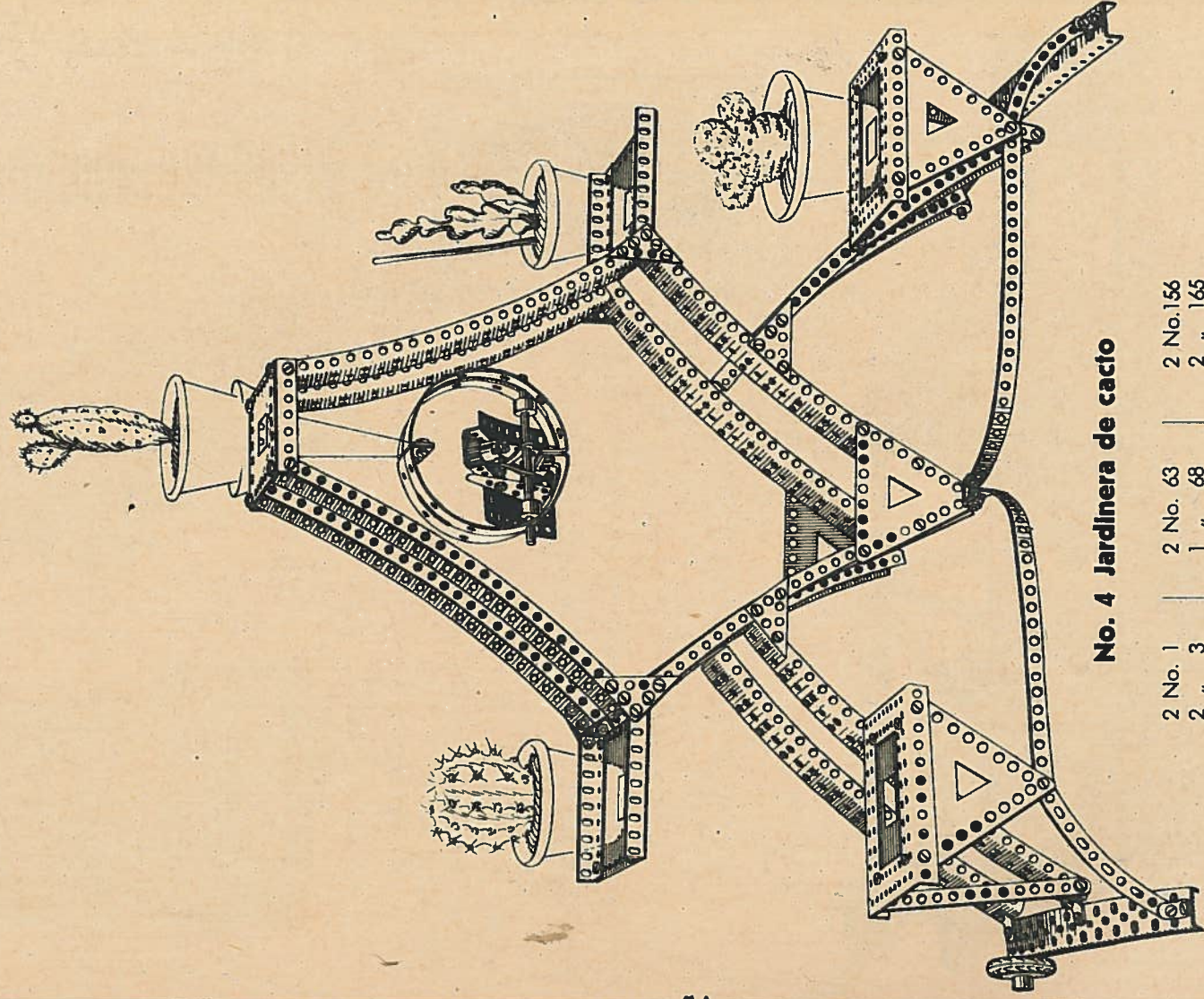
Vista parcial

El contenido del cajón transportado se compone de 4 piezas No. 77 y 2 piezas No. 78



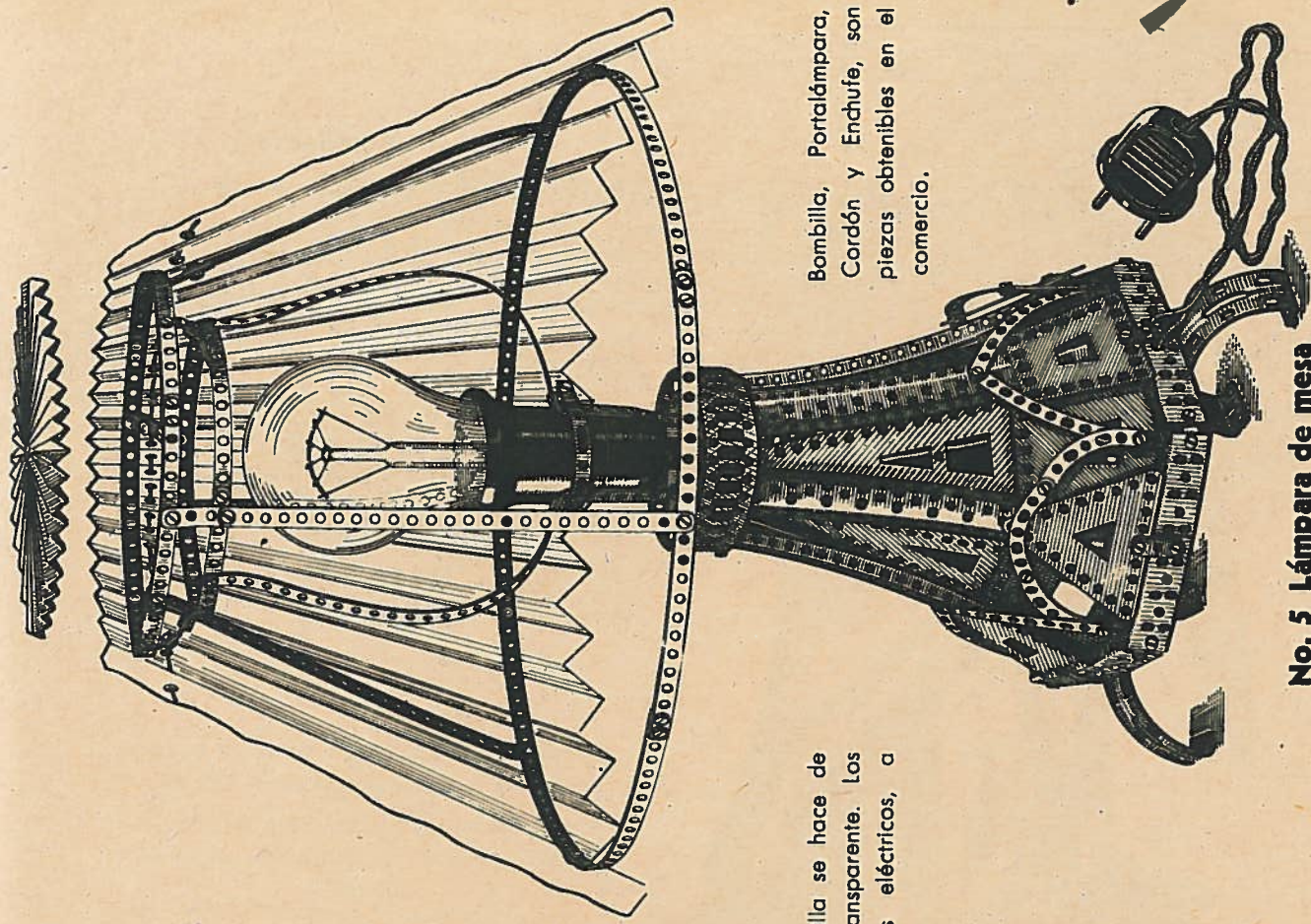
No. 3 Elevador

3 No. 2	2 No.36	1 No. 86
11 " 3	2 " 37	2 " 87
9 " 4	2 " 41	1 " 88
4 " 5	11 " 43	2 " 89
2 " 6	4 " 44	1 " 99
2 " 7	1 " 52	2 " 106
2 " 8	2 " 53	1 " 108
2 " 11	1 " 55	1 " 119
1 " 13	1 " 56	1 " 134
2 " 15	2 " 61	4 " 145
2 " 16	6 " 72	1 " 152
2 " 19	6 " 73	4 " 155
2 " 20	4 " 74	2 " 165
3 " 21	4 " 77	2 " 166
8 " 28	4 " 78	2 " 169
3 " 29	8 " 81	104 " 180
4 " 30	2 " 83	32 " 181
2 " 34		3 " 182
2 " 35		141 " 185



No. 4 Jardinera de cacto

2 No. 1	2 No. 63	2 No. 156
2 " 3	1 " 68	2 " 165
2 " 22	2 " 70	4 " 168
2 " 26	8 " 72	4 " 173
4 " 30	2 " 74	2 " 175
1 " 37	4 " 81	88 " 180
14 " 39	1 " 87	10 " 181
4 " 42	1 " 105	2 " 182
2 " 43	2 " 106	2 " 185
1 " 44	1 " 118	107 "



La pantalla se hace de
papel transparente. Los
elementos eléctricos, a
saber:

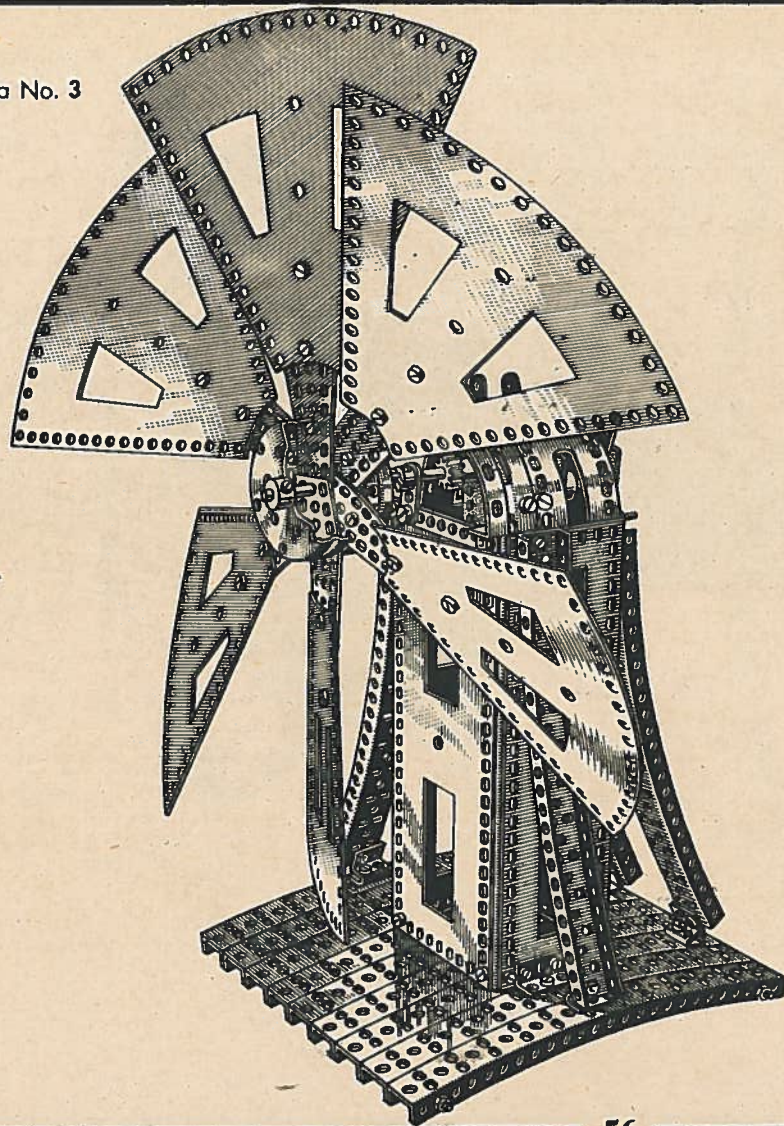
Bombilla, Portalámpara,
Cordón y Enchufe, son
piezas obtenibles en el
comercio.

No. 5 Lámpara de mesa

12	No. 1	6	No. 40	3	No. 173
3	" 2	9	" 41	3	" 176
6	" 3	14	" 42	3	" 177
6	" 6	9	" 43	3	" 178
6	" 8	2	" 46	3	" 179
1	" 11	3	" 55	134	" 180
6	" 22	3	" 63	4	" 181
15	" 24	1	" 66	6	" 182
6	" 39	3	" 168	146	" 185

Modelo

construido con la Caja No. 3



No. 6 Ventilador

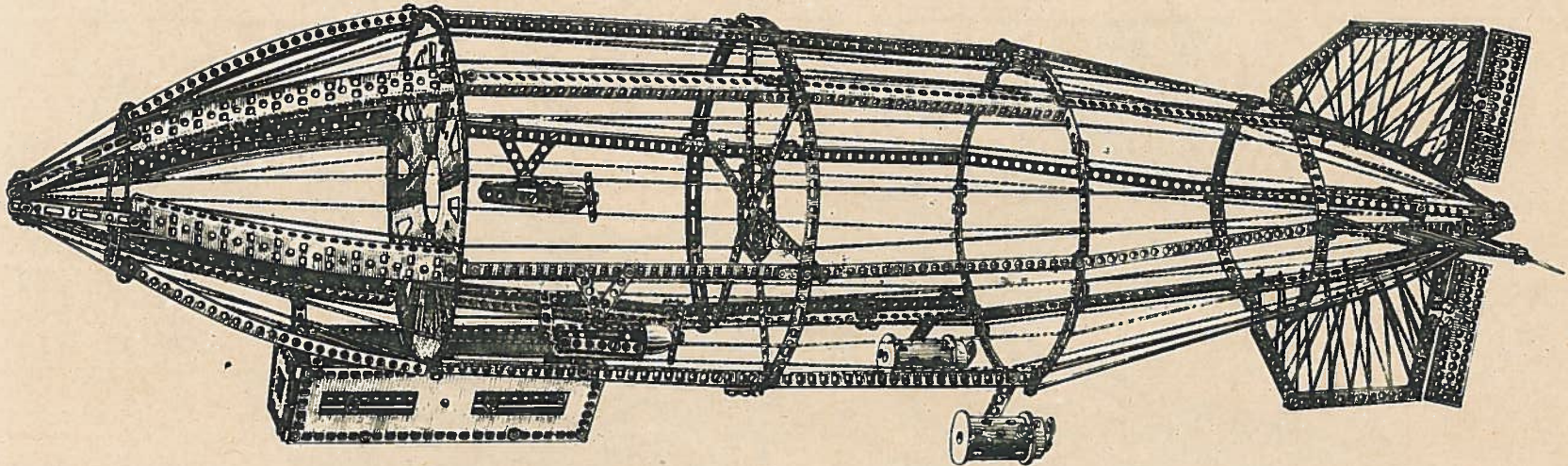
con motor de resorte No. 250

2 No. 4	2 No.107
2 " 8	1 " 118
2 " 14	1 " 137
2 " 15	8 " 145
4 " 28	1 " 164
2 " 31	2 " 167
13 " 39	2 " 170
2 " 41	6 " 172
4 " 52	50 " 180
1 " 63	15 " 181
1 " 65	6 " 182
1 " 66	76 " 185
1 " 89	1 " 250

El árbol de impulsión del motor de resorte deberá cambiarse por el árbol No. 89.

Para conseguir mayor corriente de aire, se pegará papel en las placas de segmento No. 172.

No. 7 Aeronave



12 No.1	1 No. 8	7 No.26	28 No.43	4 No. 56	2 No.167
4 " 2	4 " 11	8 " 28	6 " 44	6 " 57	6 " 171
12 " 3	6 " 12	4 " 29	2 " 45	4 " 77	2 " 178
9 " 4	2 " 15	4 " 30	2 " 48	4 " 94	194 " 180
10 " 5	2 " 20	6 " 39	4 " 52	2 " 105	65 " 181
8 " 6	7 " 22	13 " 41	4 " 53	2 " 113	2 " 182
6 " 7	9 " 24	16 " 42	2 " 55	1 " 164	269 " 185

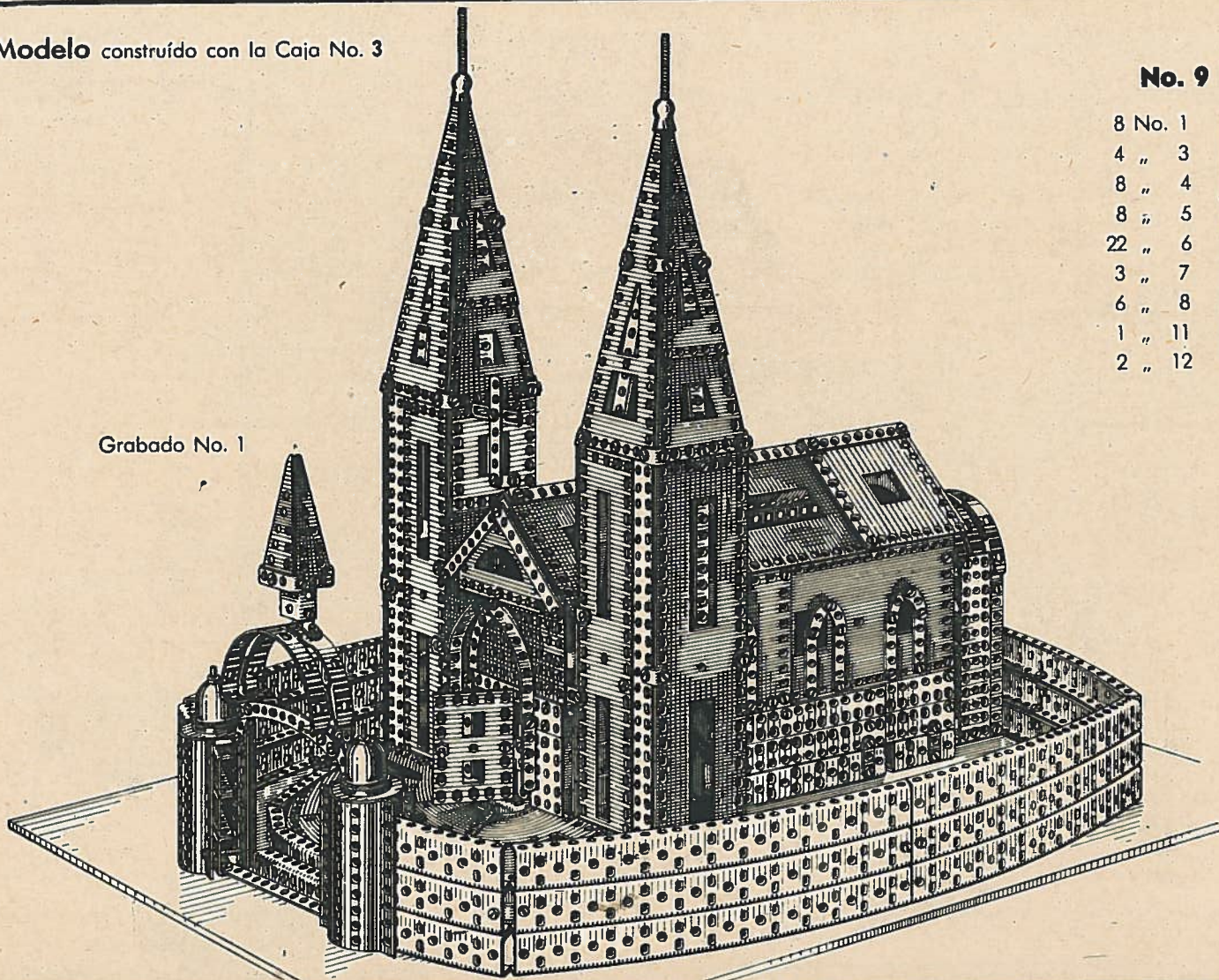
El modelo mide 770 milímetros de largo.
El cuerpo de la aeronave y los timones hay que encardarlos.

Modelo construido con la Caja No. 3

No. 9 Iglesia

8 No. 1	1 No.13
4 " 3	2 " 14
8 " 4	2 " 15
8 " 5	2 " 16
22 " 6	2 " 18
3 " 7	4 " 19
6 " 8	4 " 20
1 " 11	2 " 21
2 " 12	1 " 22
	6 " 24
	12 " 26
	1 " 28
	4 " 30
	1 " 32
	2 " 35
	2 " 37
	3 " 38
	15 " 39
	12 " 40
	7 " 41
	9 " 42
	30 " 43
	5 " 44
	2 " 48
	1 " 52
	1 " 53

Grabado No. 1



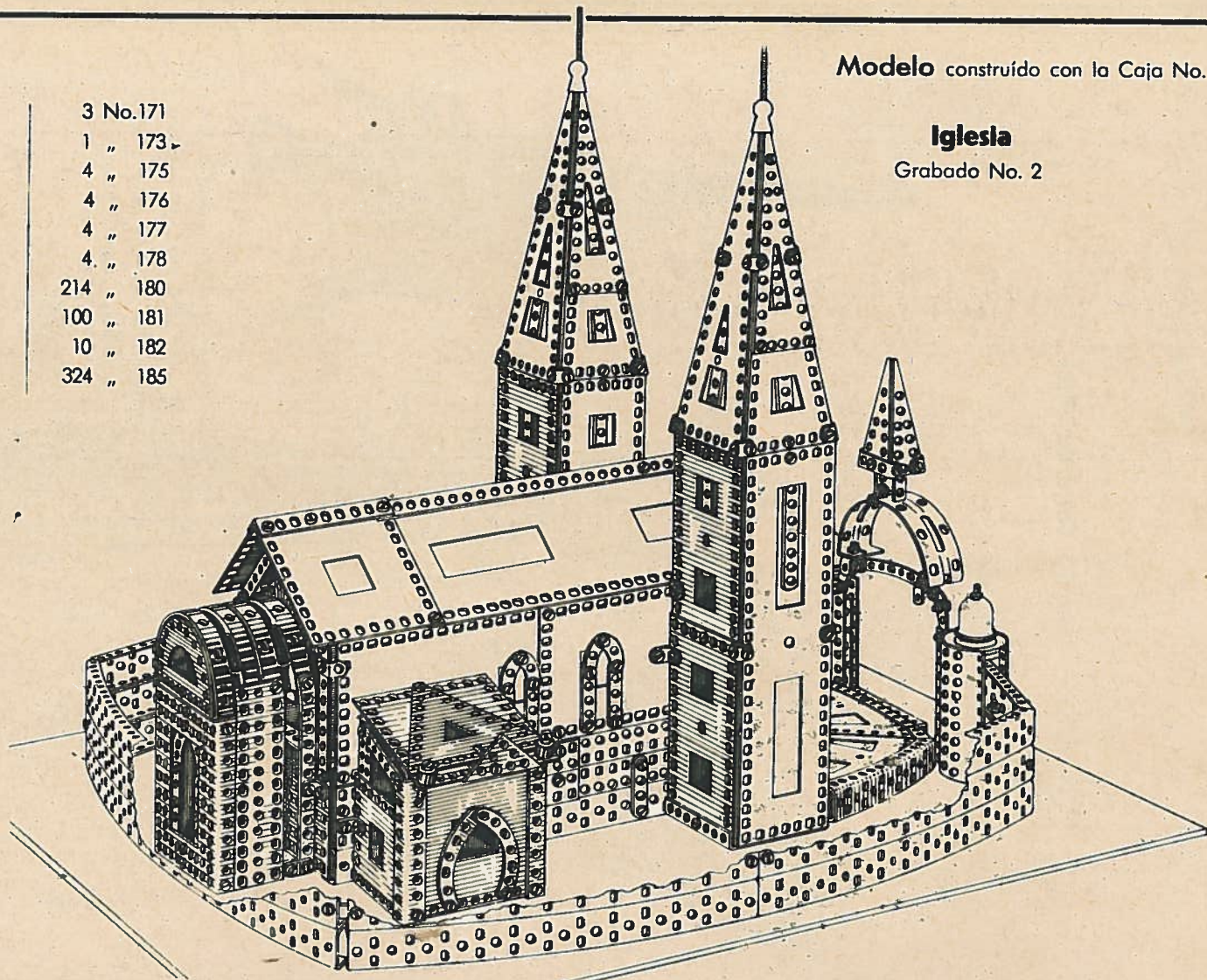
Modelo construido con la Caja No. 3

Iglesia

Grabado No. 2

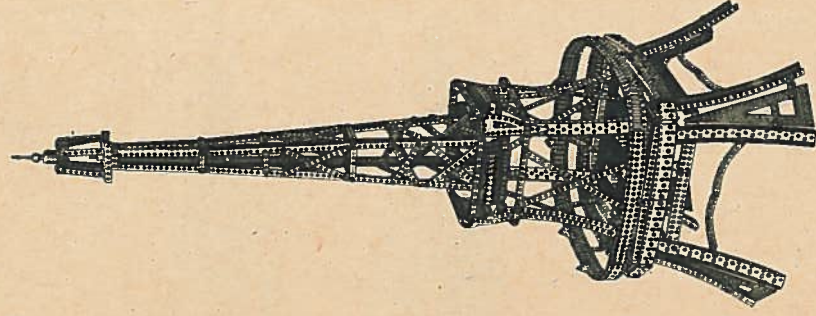
- 2 No. 55
- 1 " 56
- 3 " 57
- 2 " 61
- 3 " 62
- 3 " 63
- 4 " 64
- 2 " 68
- 2 " 69
- 1 " 70
- 2 " 71
- 1 " 72
- 2 " 75
- 2 " 79
- 2 " 81
- 2 " 83
- 2 " 106
- 2 " 107
- 2 " 112
- 2 " 113
- 2 " 164
- 4 " 165
- 4 " 166
- 2 " 167
- 4 " 168
- 4 " 169
- 2 " 170

- 3 No.171
- 1 " 173
- 4 " 175
- 4 " 176
- 4 " 177
- 4 " 178
- 214 " 180
- 100 " 181
- 10 " 182
- 324 " 185



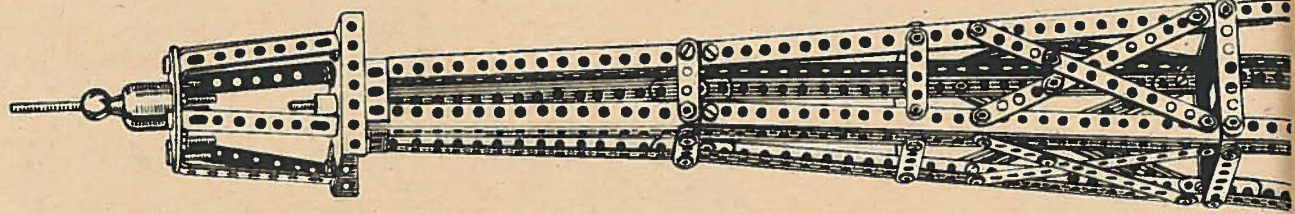
No. 10 Torre de Eiffel

- 12 No. 1
- 4 " 2
- 11 " 3
- 8 " 4
- 7 " 5
- 12 " 6
- 13 " 7
- 8 " 8
- 4 " 11
- 4 " 12
- 2 " 14
- 2 " 15
- 2 " 18
- 4 " 19
- 2 " 20
- 4 " 21
- 8 " 22
- 13 " 26
- 8 " 28
- 4 " 29
- 2 " 32
- 3 " 37
- 1 " 38
- 12 " 39
- 8 " 40
- 8 " 41
- 16 " 42
- 26 " 43
- 2 " 46
- 2 " 47
- 2 " 48
- 6 " 55
- 4 " 56
- 5 " 57
- 2 " 61
- 4 " 64
- 1 " 68
- 8 " 72
- 1 " 76
- 1 " 83

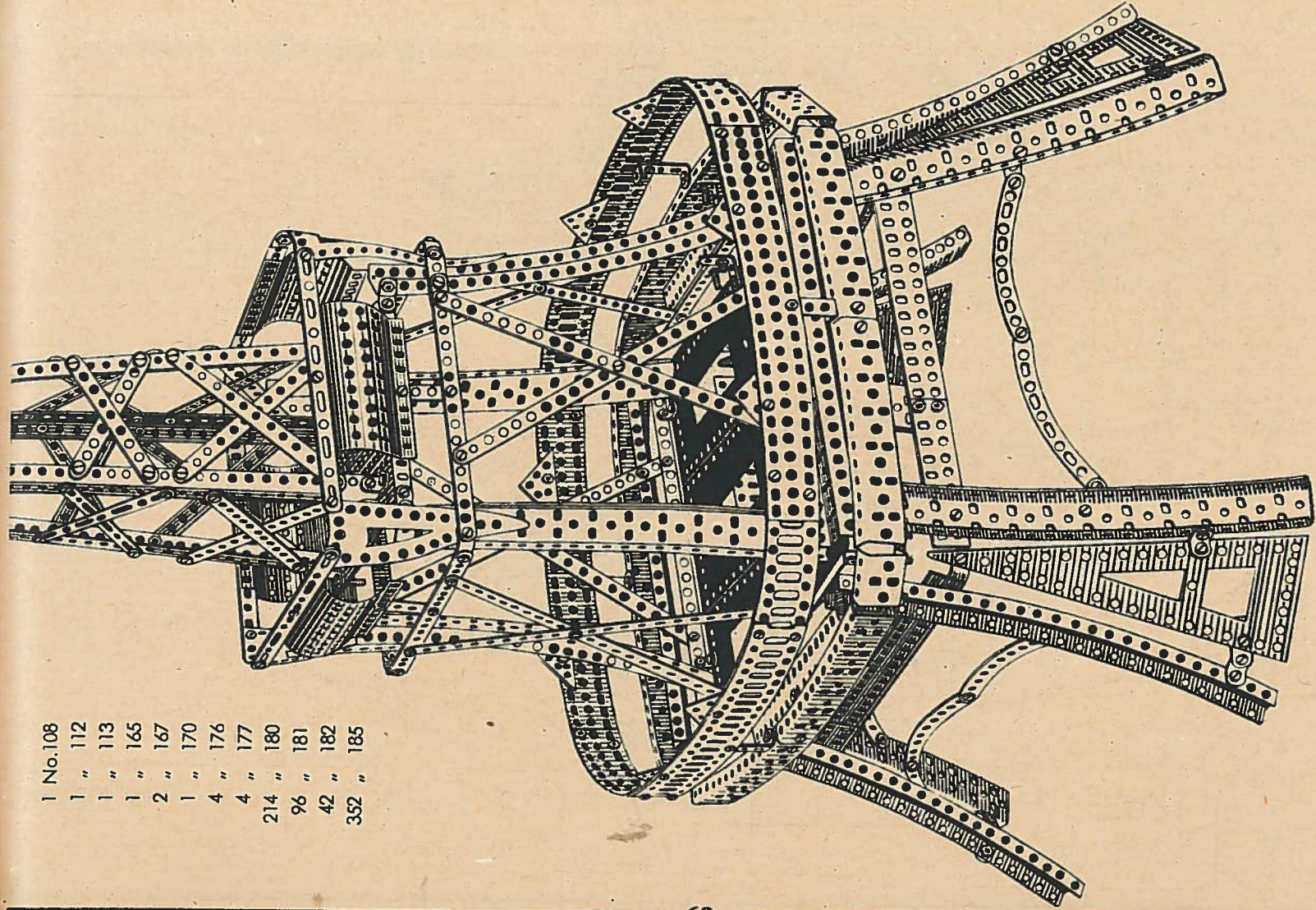


El grabado mide 1/8 del tamaño del modelo.

El modelo mismo mide 856 milímetros de altura.



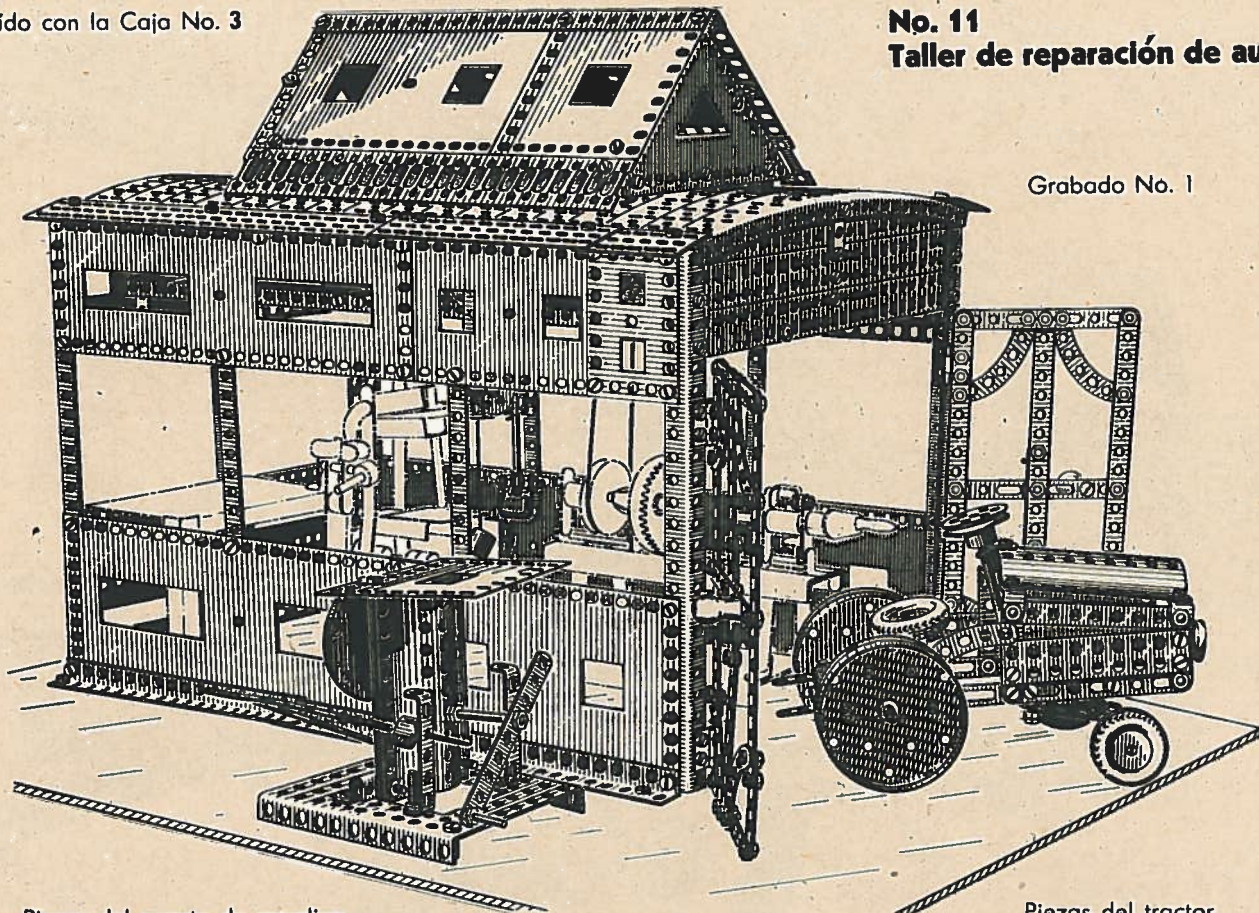
1	No. 108
1	" 112
1	" 113
1	" 165
2	" 167
1	" 170
4	" 176
4	" 177
214	" 180
96	" 181
42	" 182
352	" 185



Modelo construido con la Caja No. 3

No. 11 Taller de reparación de automóviles

- 6 No. 1
- 4 " 2
- 9 " 3
- 5 " 6
- 2 " 7
- 4 " 8
- 6 " 12
- 2 " 14
- 2 " 15
- 2 " 16
- 2 " 18
- 8 " 24
- 8 " 28
- 2 " 29
- 1 " 31
- 1 " 35
- 1 " 36
- 1 " 38
- 16 " 39
- 2 " 40
- 7 " 41
- 10 " 43
- 1 " 45
- 2 " 46
- 4 " 53
- 2 " 55



Grabado No. 1

- 3 No. 57
- 2 " 71
- 3 " 73
- 1 " 75
- 2 " 77
- 3 " 80
- 4 " 81
- 2 " 86
- 1 " 91
- 2 " 112
- 1 " 137
- 1 " 141
- 2 " 145
- 2 " 164
- 4 " 166
- 2 " 167
- 2 " 168
- 4 " 169
- 2 " 170
- 2 " 174
- 162 " 180
- 44 " 181
- 9 " 182
- 212 " 185

Piezas del puesto de gasolina

1 No. 4	2 No.64	1 No.107	7 No.182
1 " 43	1 " 70	1 " 148	18 " 185
2 " 52	1 " 76	1 " 179	
2 " 56	2 " 81	3 " 181	

Piezas del tractor

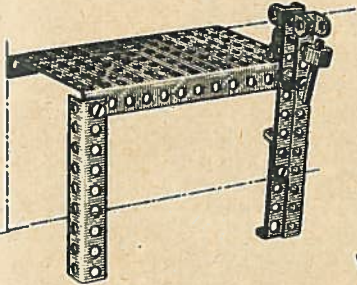
2 No. 4	2 No.24	4 No.56	1 No. 81	17 No.181
6 " 6	1 " 42	1 " 64	2 " 87	2 " 182
2 " 7	5 " 43	2 " 66	1 " 107	43 " 185
2 " 11	1 " 45	1 " 73	3 " 156	
2 " 20	1 " 55	5 " 74	16 " 180	

Taller de reparación de automóviles

Grabado No. 2

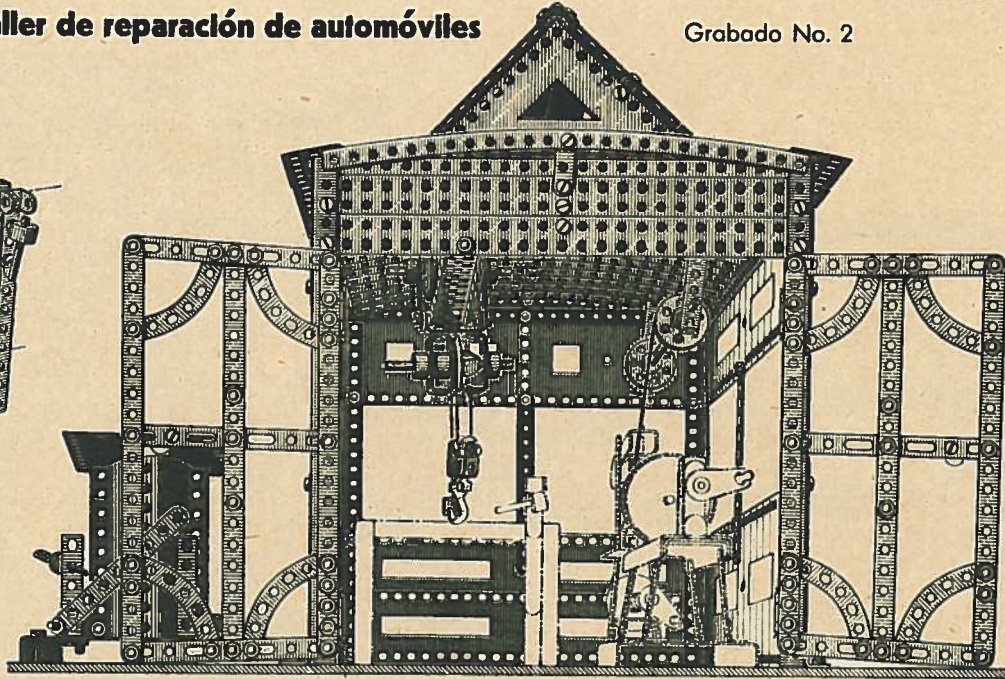
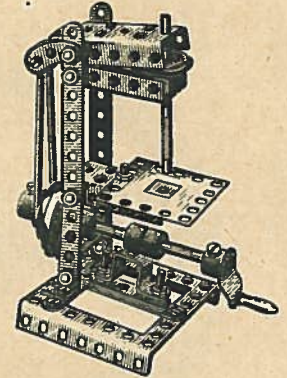
Grabado No. 3

Mesa de trabajo



Grabado No. 4

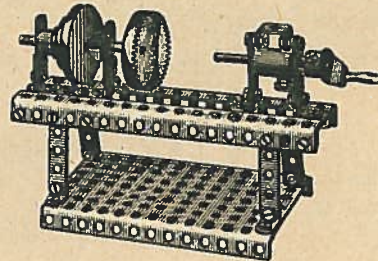
Taladradora



- | | |
|---------|----------|
| 2 No. 3 | 5 No. 81 |
| 2 " 5 | 1 " 85 |
| 2 " 7 | 1 " 86 |
| 2 " 26 | 1 " 87 |
| 3 " 37 | 1 " 99 |
| 1 " 50 | 1 " 149 |
| 1 " 51 | 13 " 180 |
| 1 " 68 | 4 " 181 |
| 1 " 69 | 2 " 182 |
| 1 " 74 | 21 " 185 |
| 1 " 79 | |

- | | |
|---------|----------|
| 1 No. 4 | 1 No. 81 |
| 1 " 7 | 1 " 83 |
| 2 " 30 | 2 " 105 |
| 1 " 41 | 5 " 180 |
| 1 " 43 | 2 " 181 |
| 2 " 44 | 1 " 182 |
| 1 " 56 | 10 " 185 |
| 1 " 61 | |

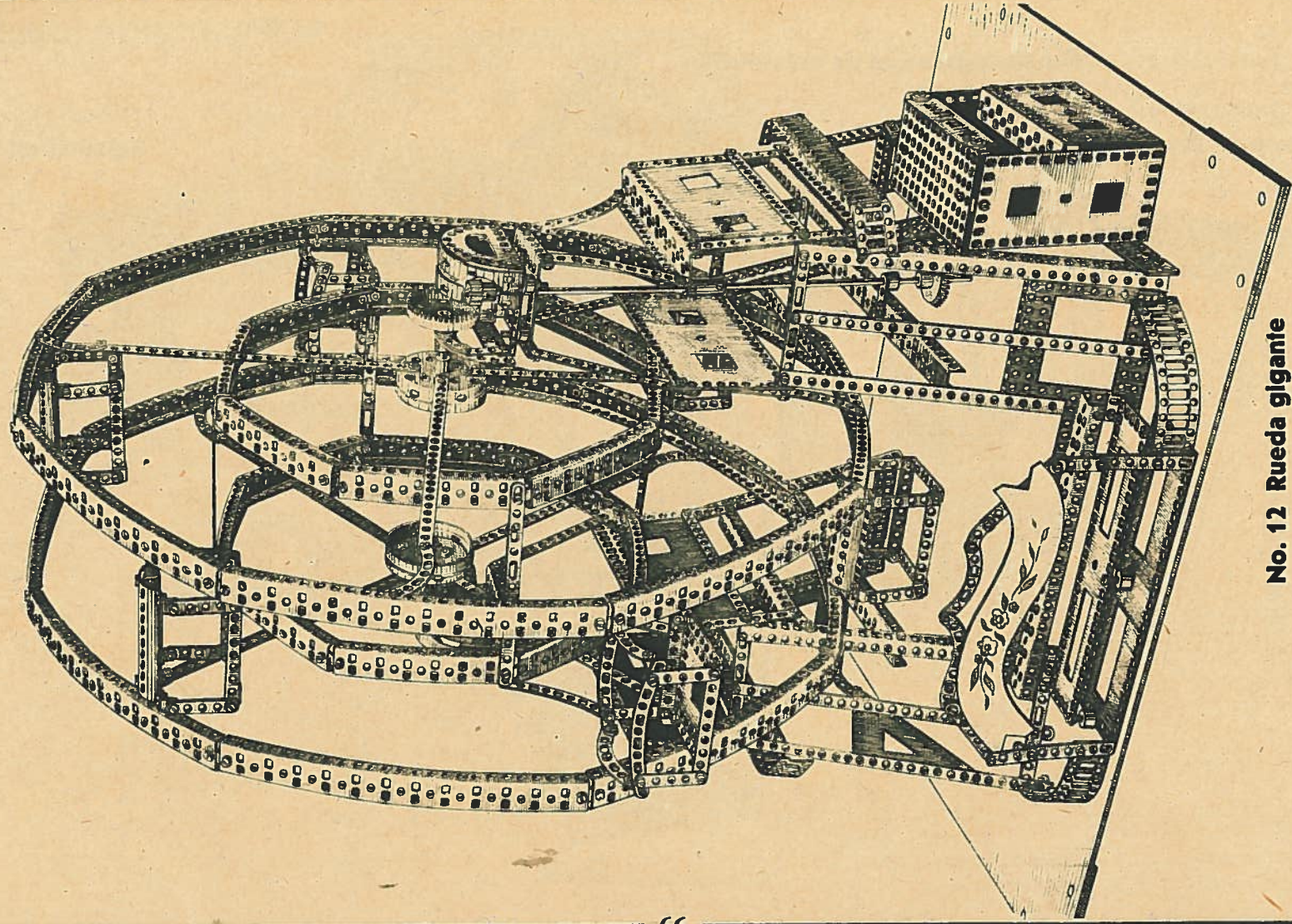
- | |
|---------|
| 4 No. 6 |
| 4 " 7 |
| 1 " 8 |
| 2 " 29 |
| 7 " 43 |
| 1 " 44 |
| 2 " 48 |
| 3 " 57 |
| 1 " 61 |
| 1 " 79 |



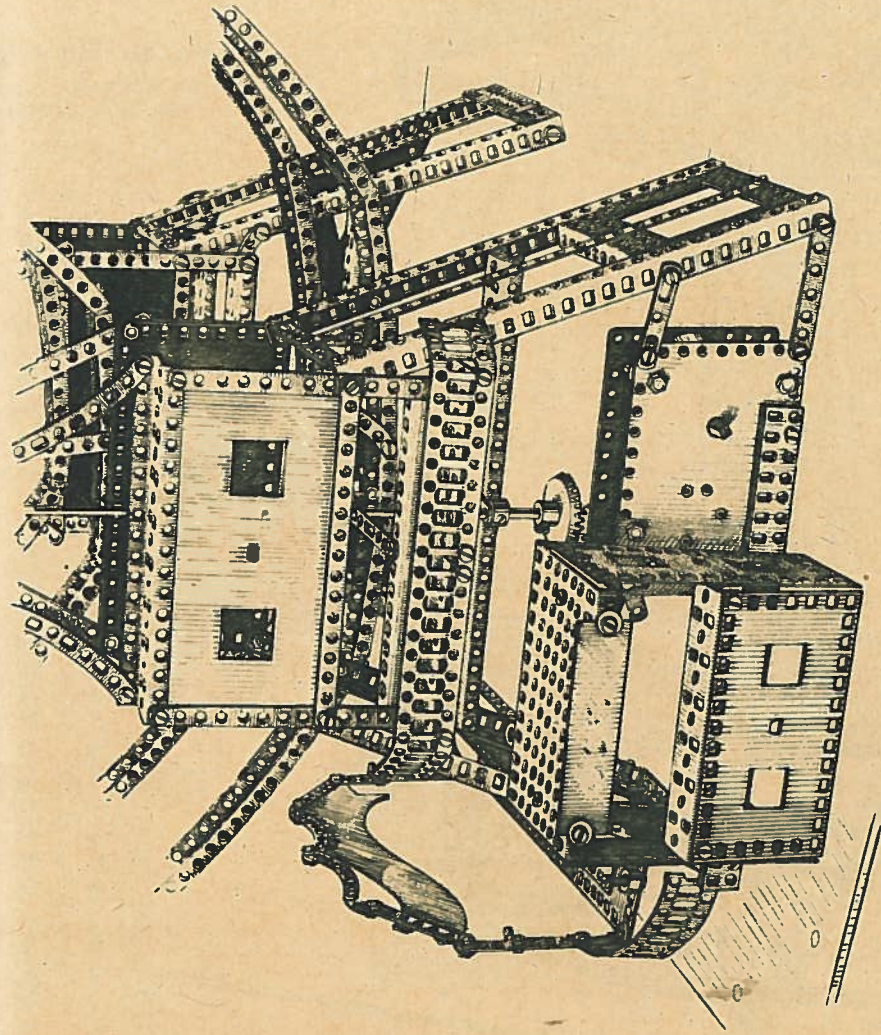
- | |
|----------|
| 1 No. 80 |
| 1 " 84 |
| 1 " 86 |
| 1 " 99 |
| 1 " 106 |
| 1 " 125 |
| 1 " 145 |
| 23 " 180 |
| 8 " 181 |
| 34 " 185 |

Grabado No. 5 Torno

Modelo construido con la Caja No. 3



No. 12 Rueda gigante
con motor de resorte No. 250 embutido

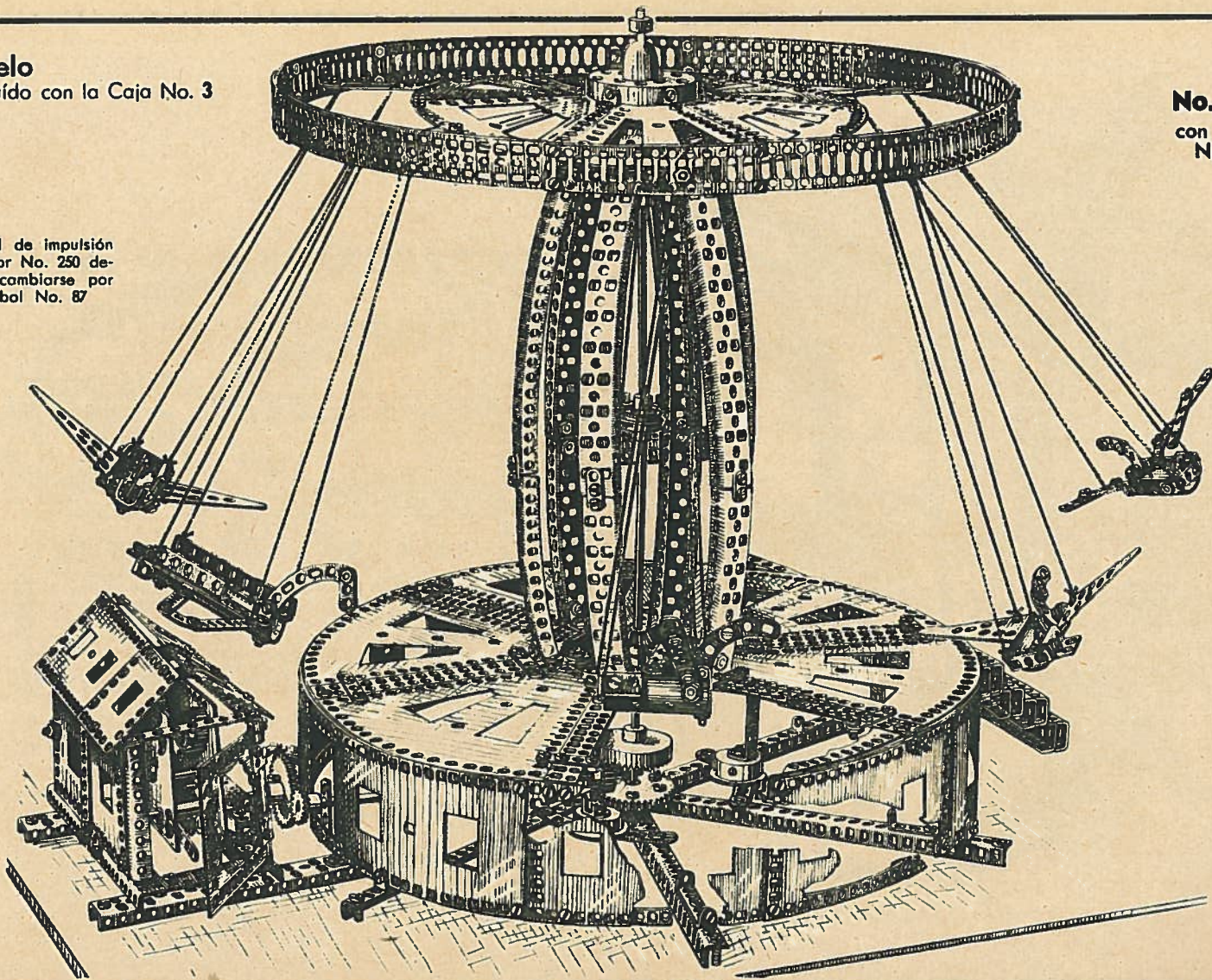


Rueda gigante (Vista parcial)

Piezas necesarias			
12 No. 1	4 No.29	2 No.52	2 No.108
4 "	4 "	4 "	1 "
12 "	30	55	118
8 "	1 "	56	122
8 "	2 "	57	123
8 "	4 "	61	125
24 "	2 "	62	145
5 "	1 "	63	164
4 "	16 "	64	165
6 "	16 "	66	166
1 "	16 "	68	167
2 "	18 "	70	169
2 "	19 "	80	174
2 "	20 "	81	220
8 "	22 "	82	91
16 "	24 "	89	43
10 "	26 "	90	367
8 "	28 "	91	1 "
			250

Modelo
construido con la Caja No. 3

El árbol de impulsión
del motor No. 250 de-
berá cambiarse por
el árbol No. 87

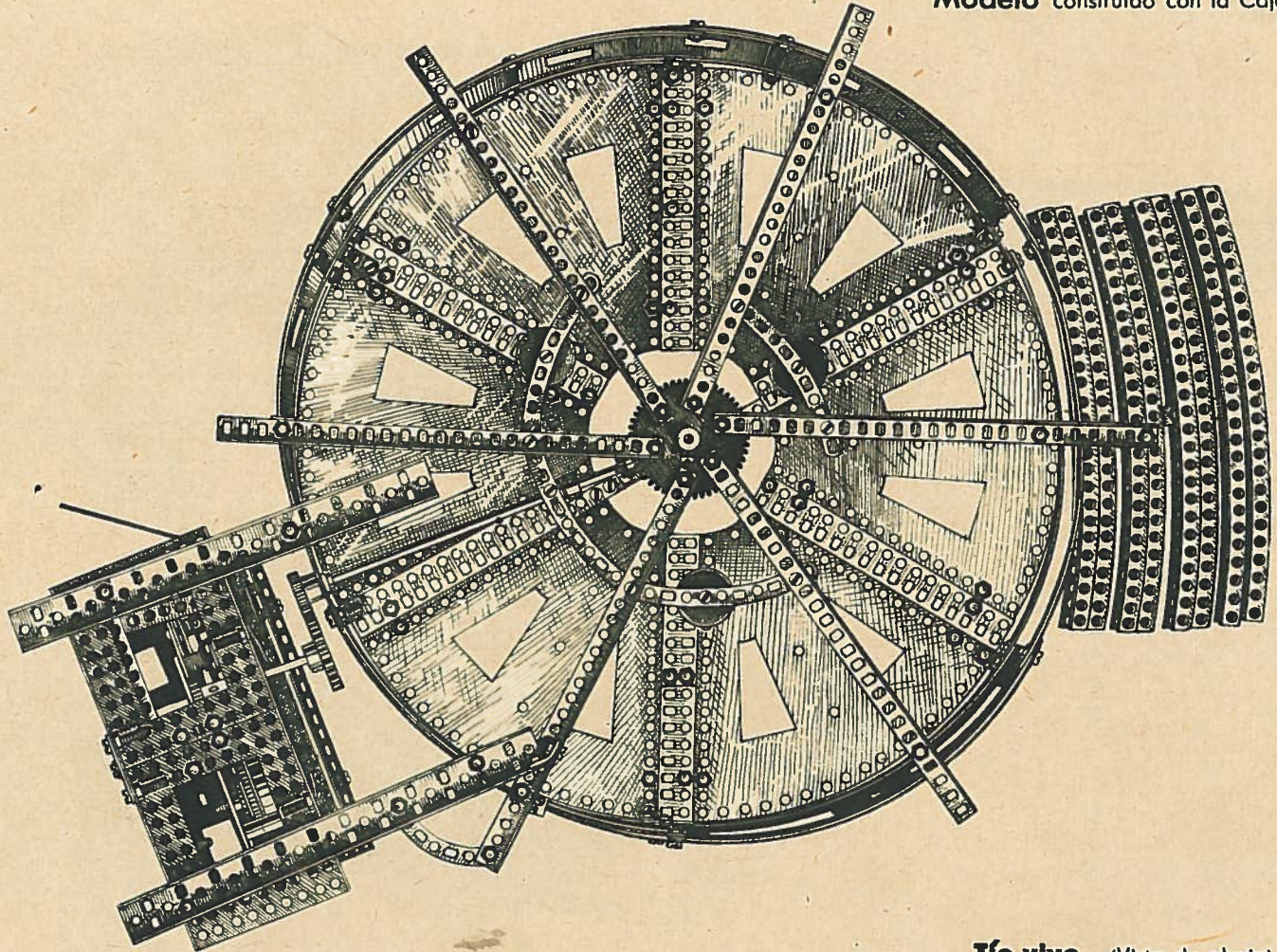


No. 13 Tío vivo
con motor de resorte
No. 250 embutido

12	No. 1
7	" 3
7	" 4
6	" 5
8	" 6
15	" 7
11	" 8
2	" 14
2	" 16
4	" 19
4	" 20
4	" 22
3	" 24
16	" 26
6	" 28
1	" 29
4	" 30
2	" 31
2	" 35
2	" 36
3	" 38
14	" 39
6	" 40
11	" 41
8	" 42
30	" 43
5	" 44
3	" 45
2	" 46
4	" 47
2	" 48
1	" 49

Modelo construido con la Caja No. 3

6	No.	52
4	"	53
6	"	55
7	"	56
5	"	57
2	"	64
1	"	65
2	"	70
4	"	73
2	"	77
1	"	78
7	"	81
2	"	87
1	"	89
1	"	90
1	"	91
4	"	94
1	"	113
1	"	118
1	"	119
1	"	120
1	"	121
1	"	122
1	"	125
2	"	165
2	"	166
4	"	168
4	"	169
2	"	170
6	"	171
6	"	172
4	"	175
198	"	180
93	"	181
54	"	182
354	"	185
1	"	250

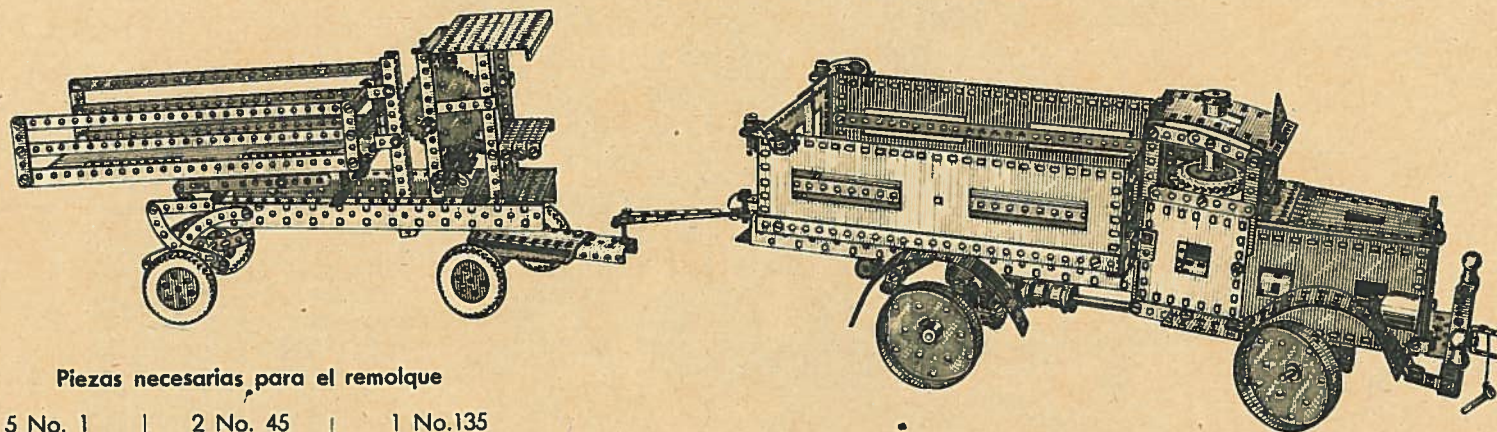


Tfo vivo (Vista de abajo)

Modelo construido con la Caja No. 3

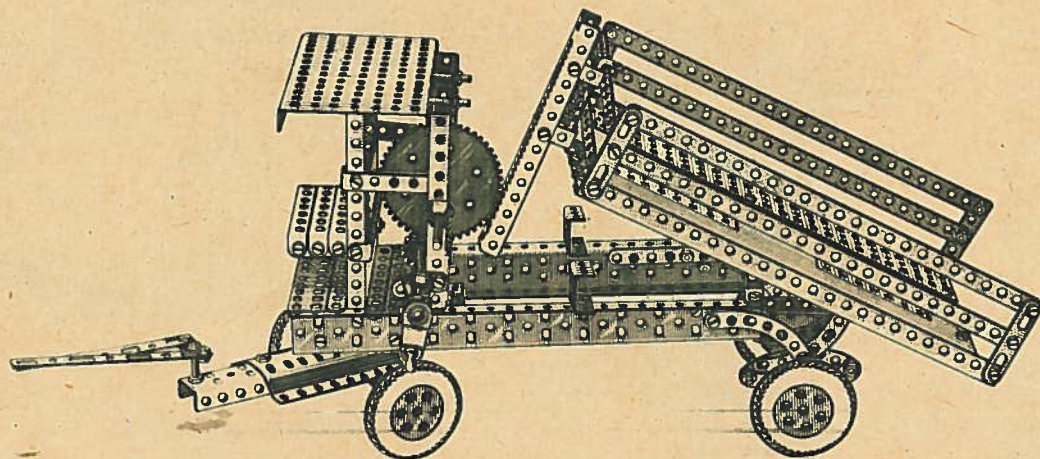
No. 14 Autocamión con remolque

y motor de resorte No. 250 embutido

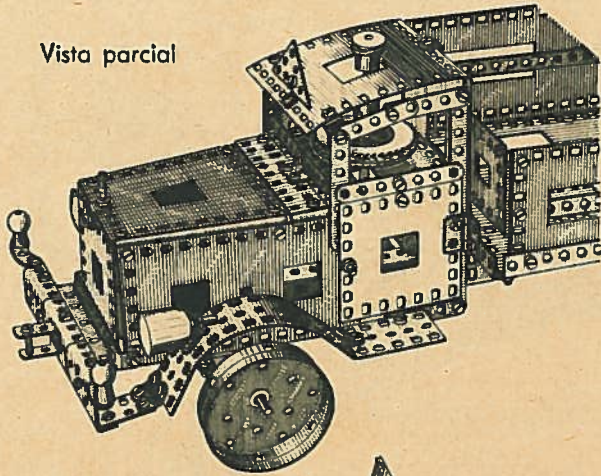


Piezas necesarias para el remolque

5 No. 1	2 No. 45	1 No.135
6 " 3	2 " 48	4 " 155
3 " 4	2 " 52	1 " 170
2 " 6	5 " 55	53 " 180
2 " 7	3 " 56	23 " 181
1 " 8	1 " 61	9 " 182
2 " 12	2 " 64	97 " 185
2 " 13	1 " 68	
2 " 14	1 " 70	
1 " 18	1 " 71	
1 " 20	4 " 73	
8 " 24	4 " 80	
2 " 26	2 " 81	
2 " 28	2 " 87	
2 " 32	2 " 89	
1 " 37	1 " 99	
2 " 38	1 " 118	
2 " 43	1 " 121	

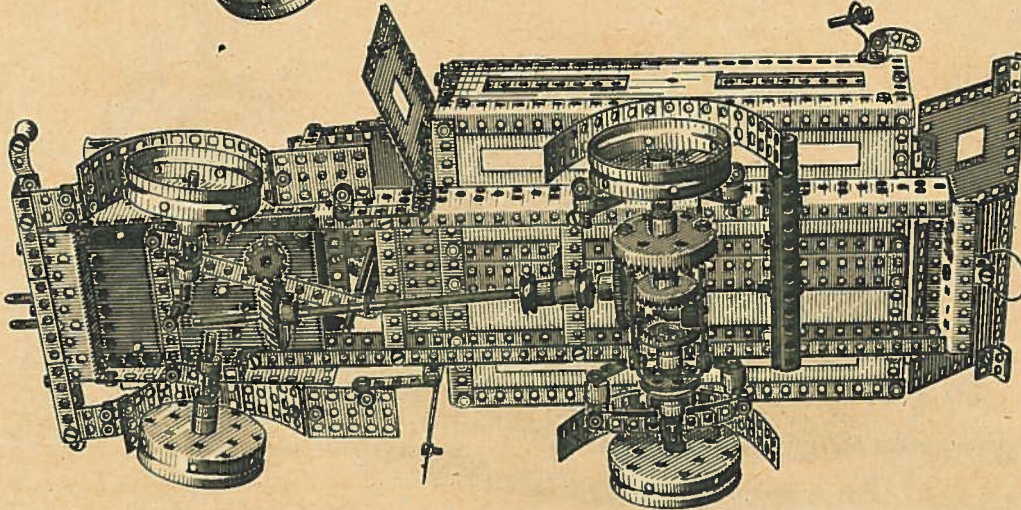


Vista parcial



Piezas necesarias para el autocamión

3 No. 1	1 No.18	2 No.34	1 No. 51	2 No.113
4 " 3	2 " 19	2 " 35	2 " 52	1 " 118
5 " 4	3 " 20	2 " 36	4 " 53	1 " 120
8 " 5	2 " 21	3 " 37	3 " 57	2 " 124
14 " 6	4 " 26	6 " 41	2 " 65	1 " 125
4 " 7	2 " 28	9 " 42	2 " 66	1 " 128
4 " 8	1 " 29	20 " 43	2 " 69	1 " 129
2 " 15	4 " 30	5 " 44	1 " 71	2 " 137
2 " 16	2 " 31	1 " 45	1 " 72	5 " 145
			2 " 73	1 " 146
			5 " 74	1 " 155
			1 " 80	2 " 164
			10 " 81	4 " 165
			1 " 84	3 " 166
			2 " 85	2 " 167
			4 " 86	2 " 168
			1 " 91	1 " 170
			2 " 96	1 " 179
			3 " 105	133 " 180
			2 " 106	38 " 181
			1 " 107	18 " 182
			1 " 108	210 " 185
			2 " 112	1 " 250



Vista de abajo

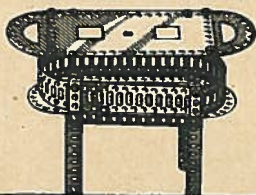
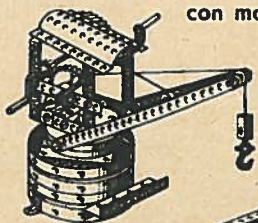
El funcionamiento exacto del engranaje diferencial dependerá del montaje cuidadoso de las ruedas dentadas (véase modelo de instrucción No. 26).

Modelo construido con la Caja No. 3

Piezas para los carriles, la barrera, la garita, la estacion de maniobra y el semaforo

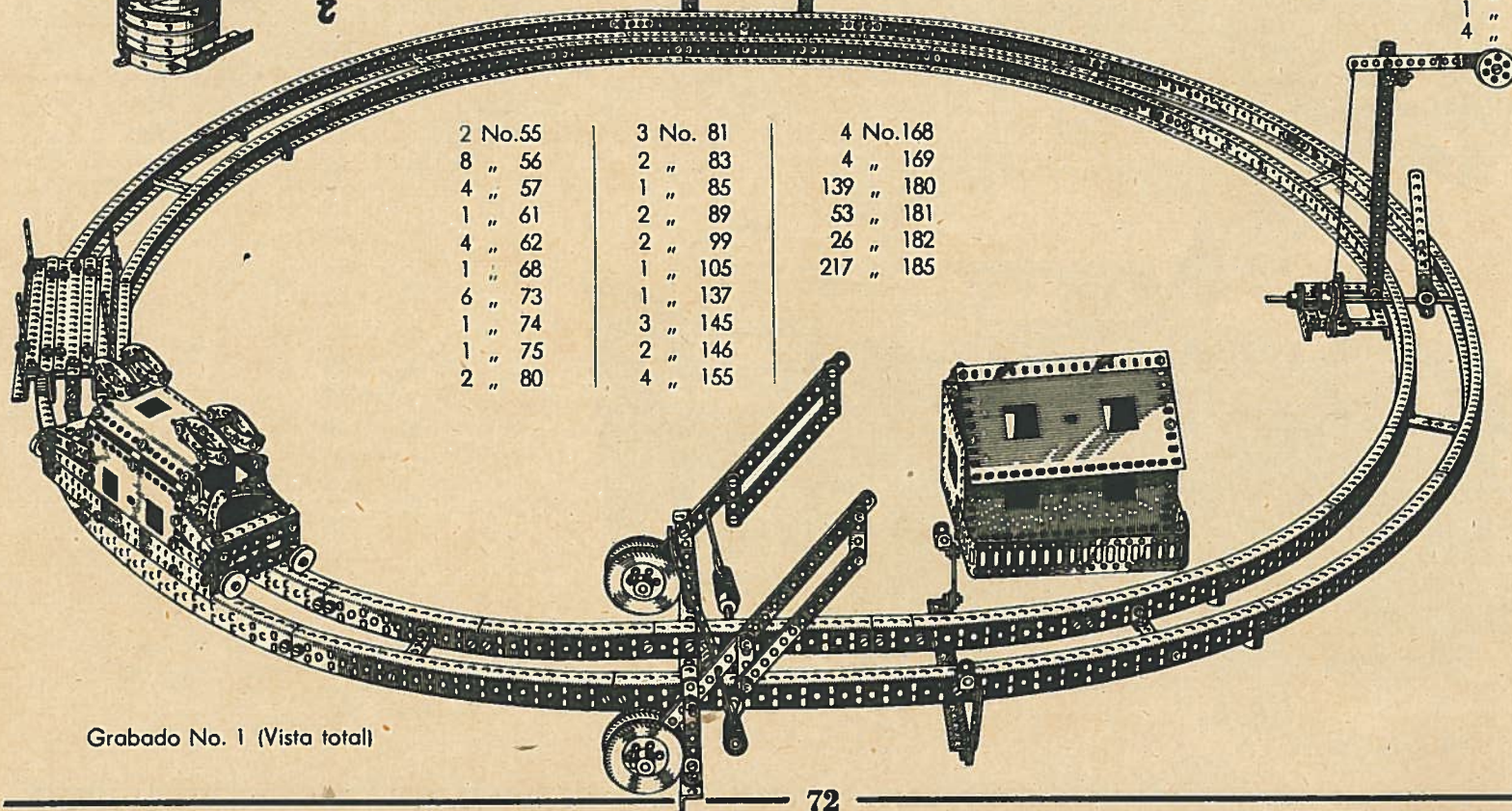
No. 15 Ferrocarril

con motor de resorte No. 250



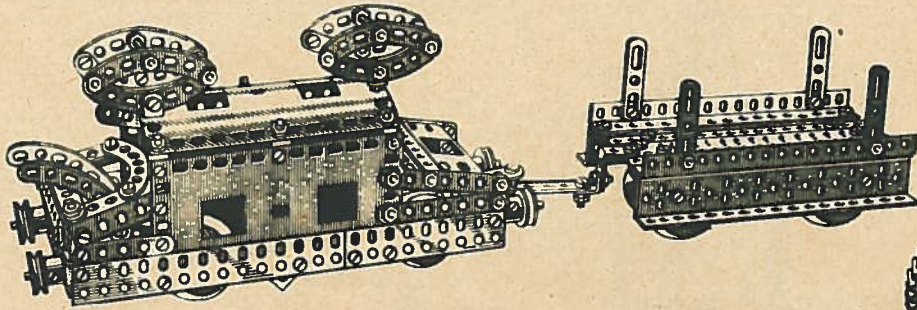
5 No.1	12 No. 7	1 No.28	2 No.38
7 " 3	10 " 8	2 " 29	16 " 39
2 " 4	1 " 16	2 " 30	18 " 40
3 " 5	1 " 24	2 " 35	11 " 41
12 " 6	1 " 26	2 " 36	5 " 42
			20 " 43
			3 " 44
			1 " 45
			1 " 46
			4 " 47

2 No.55	3 No. 81	4 No.168
8 " 56	2 " 83	4 " 169
4 " 57	1 " 85	139 " 180
1 " 61	2 " 89	53 " 181
4 " 62	2 " 99	26 " 182
1 " 68	1 " 105	217 " 185
6 " 73	1 " 137	
1 " 74	3 " 145	
1 " 75	2 " 146	
2 " 80	4 " 155	



Grabado No. 1 (Vista total)

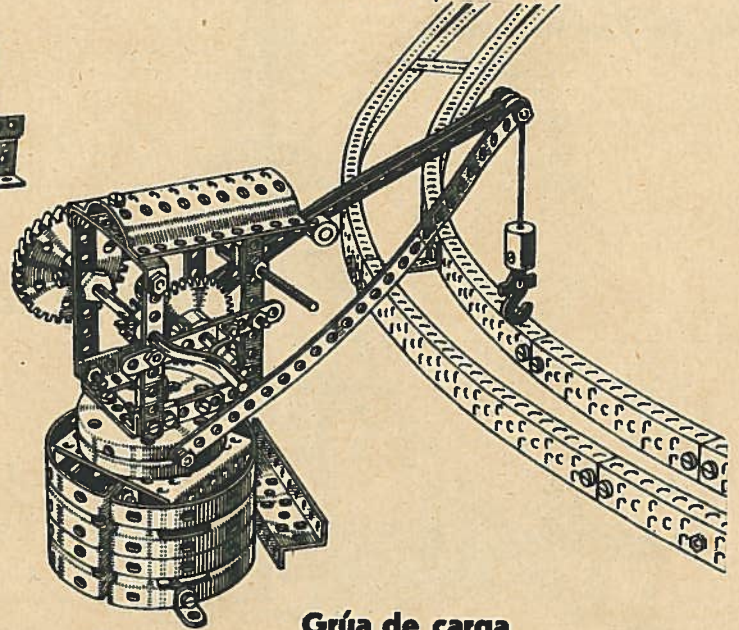
Grabado No. 2



Locomotora con vagón de carga

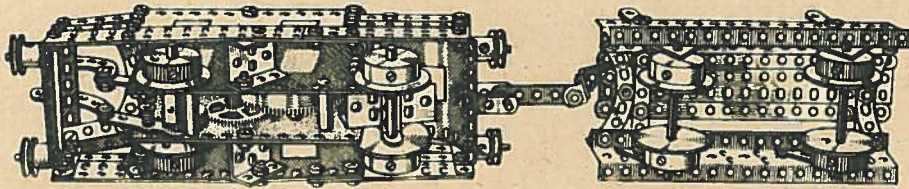
2 No. 2	1 No.26	1 No.45	2 No.105
7 " 5	2 " 29	1 " 48	1 " 165
7 " 6	2 " 31	3 " 55	3 " 166
4 " 7	2 " 33	2 " 57	56 " 180
2 " 8	3 " 37	4 " 72	40 " 181
4 " 13	2 " 38	4 " 74	10 " 182
3 " 19	1 " 41	4 " 77	113 " 185
2 " 20	6 " 42	4 " 78	1 " 250
13 " 24	3 " 43	3 " 86	

Grabado No. 4



Grúa de carga

2 No. 1	1 No. 65	2 No.118
5 " 4	1 " 68	1 " 120
5 " 6	1 " 71	1 " 130
1 " 21	1 " 74	1 " 137
1 " 26	1 " 75	1 " 141
1 " 34	2 " 80	1 " 145
1 " 43	2 " 81	1 " 146
2 " 49	1 " 84	18 " 180
2 " 52	1 " 87	7 " 181
1 " 55	1 " 98	12 " 182
4 " 63	1 " 106	50 " 185
1 " 64	1 " 108	



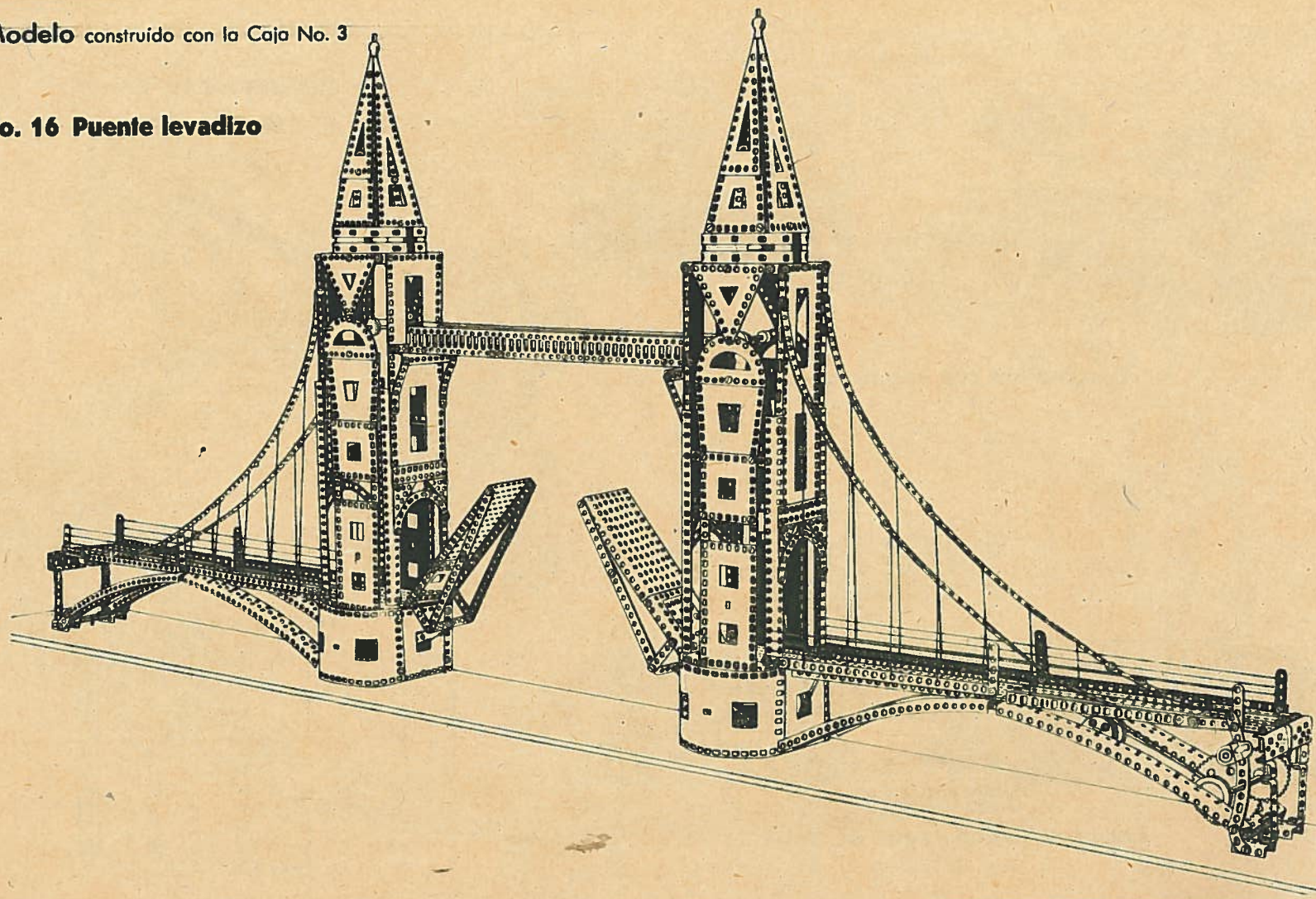
Grabado No. 3

Locomotora con vagón de carga

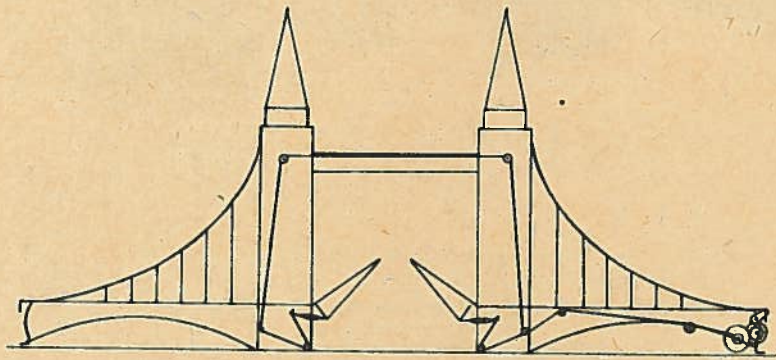
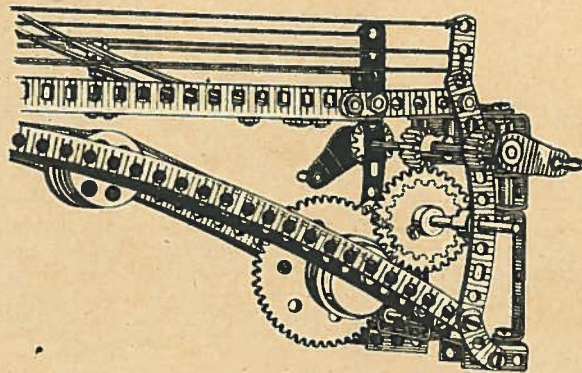
Vista de abajo

Modelo construido con la Caja No. 3

No. 16 Puente levadizo



Puente levadizo (Vista parcial)



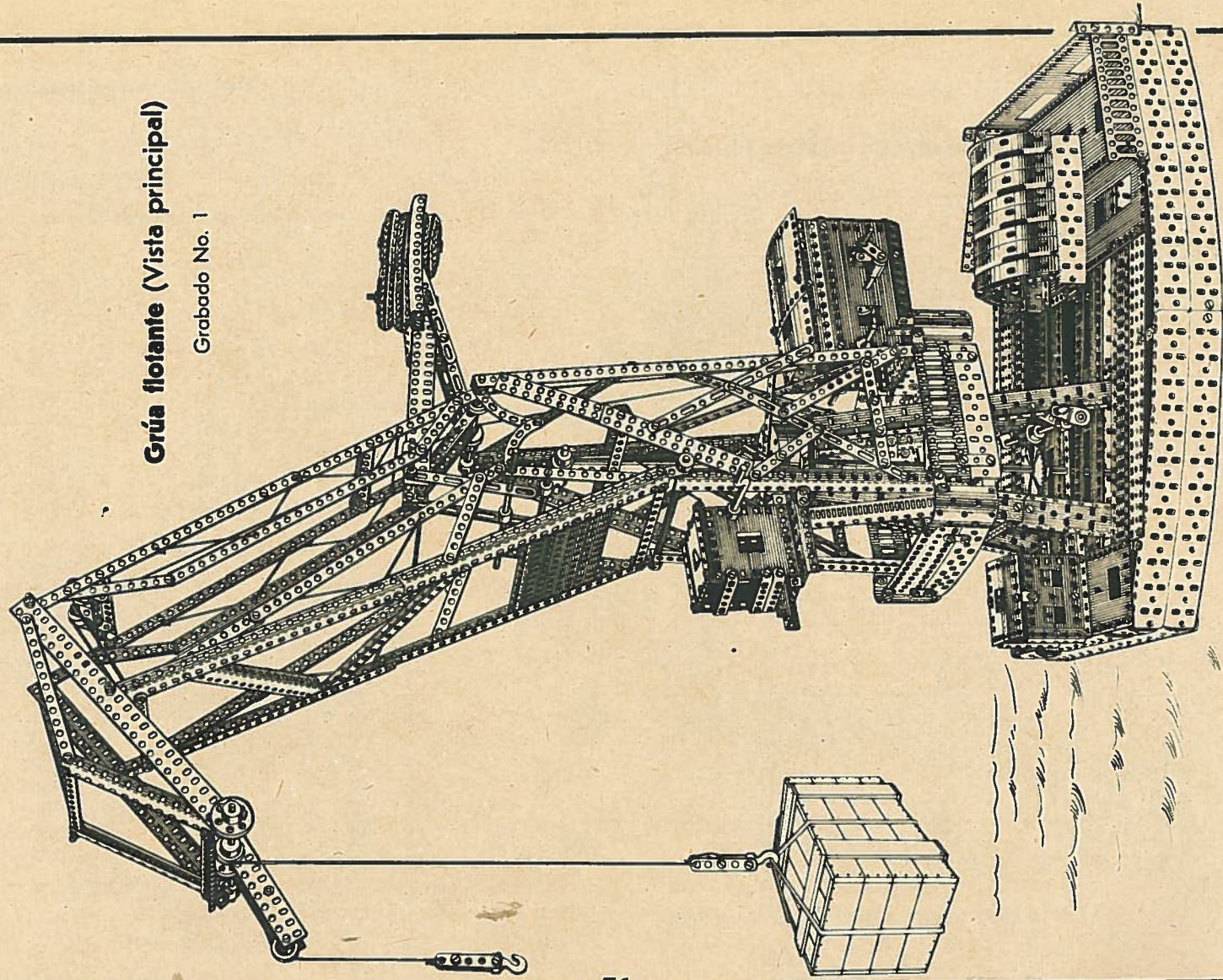
Esquema de la conducción de los cables

Piezas necesarias para el puente levadizo

9 No. 1	4 No.38	2 No. 99
4 " 2	8 " 39	2 " 105
12 " 3	14 " 41	2 " 106
10 " 4	4 " 42	2 " 112
9 " 5	28 " 43	2 " 118
20 " 6	4 " 44	1 " 119
15 " 7	2 " 45	1 " 120
12 " 8	2 " 46	1 " 121
4 " 11	2 " 47	1 " 128
6 " 12	8 " 52	1 " 137
3 " 13	4 " 53	2 " 145
2 " 14	2 " 54	2 " 152
2 " 15	6 " 55	2 " 164
2 " 18	6 " 56	4 " 165
4 " 19	2 " 61	4 " 166
4 " 20	4 " 62	2 " 167
5 " 21	4 " 63	4 " 168
2 " 22	2 " 68	4 " 169
8 " 24	2 " 69	2 " 170
5 " 26	2 " 70	4 " 173
8 " 28	2 " 71	4 " 176
4 " 29	8 " 72	4 " 177
4 " 30	4 " 73	4 " 178
2 " 31	6 " 74	4 " 179
2 " 32	2 " 75	200 " 180
2 " 33	1 " 78	100 " 181
4 " 34	12 " 81	54 " 182
2 " 35	3 " 86	380 " 185
2 " 36	3 " 87	
4 " 37	3 " 89	

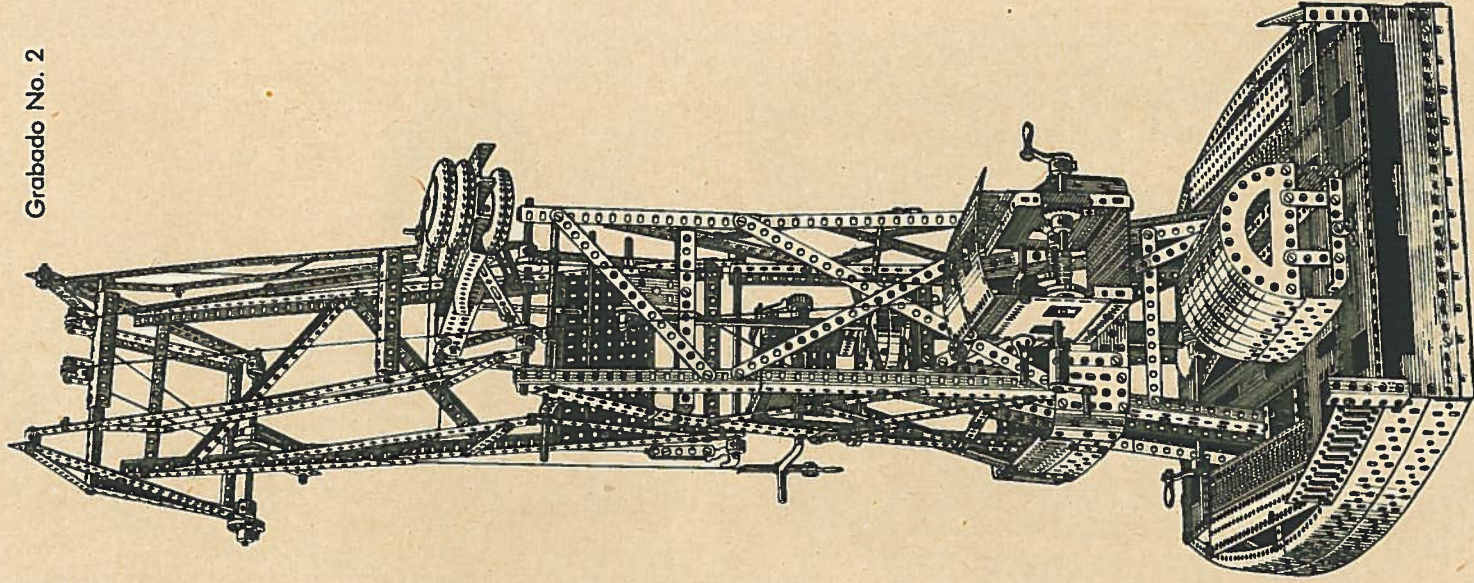
Grúa flotante (Vista principal)

Grabado No. 1



Grúa flotante (Vista posterior)

Grabado No. 2

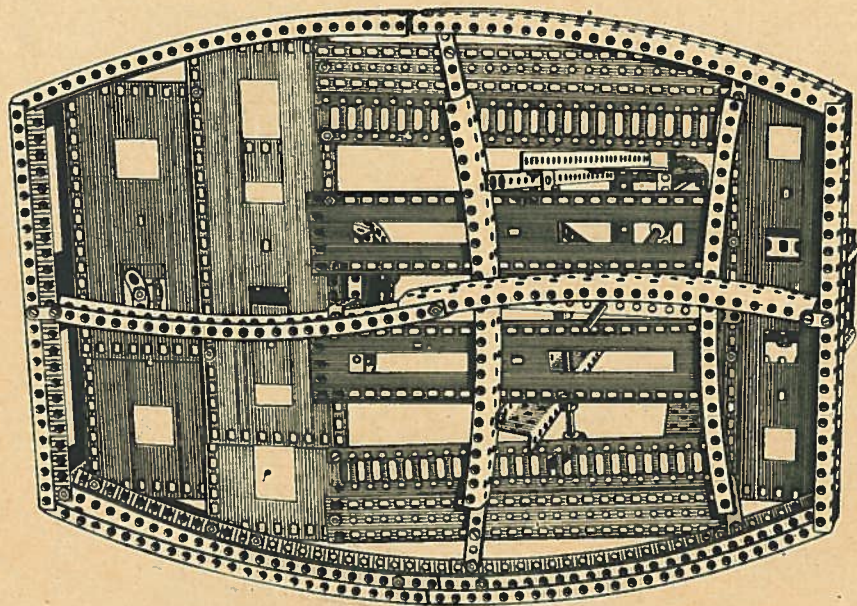


Piezas necesarias
para la grúa

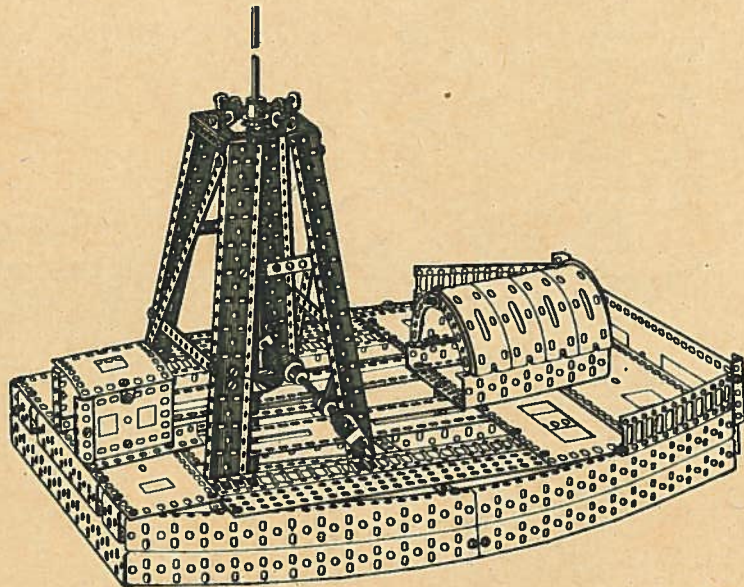
10 No. 1	2 No.75
3 " 2	4 " 77
10 " 3	1 " 78
6 " 4	4 " 80
5 " 5	9 " 81
15 " 6	2 " 83
6 " 7	1 " 84
10 " 8	1 " 85
4 " 11	1 " 86
6 " 12	2 " 87
2 " 15	1 " 88
2 " 16	2 " 89
2 " 18	4 " 94
4 " 19	4 " 96
4 " 20	1 " 98
2 " 24	1 " 99
2 " 26	1 " 100
8 " 28	2 " 106
4 " 29	2 " 107
2 " 30	1 " 108
2 " 34	1 " 118
1 " 36	1 " 119
3 " 37	1 " 122
1 " 38	1 " 135
7 " 40	2 " 137
5 " 41	1 " 138
6 " 42	2 " 141
18 " 43	2 " 145
1 " 44	2 " 152
2 " 45	5 " 155
2 " 47	2 " 165
2 " 55	2 " 166
5 " 56	2 " 168
4 " 57	4 " 178
2 " 61	154 " 180
1 " 65	63 " 181
4 " 73	10 " 182
5 " 74	238 " 185

Modelo construido con la Caja No. 3

Modelo construido con la Caja No. 3



Grúa flotante Grabado No. 3
Balsa (Vista de abajo)



Grúa flotante Grabado No. 4
Balsa con andamiada de apoyo de la grúa

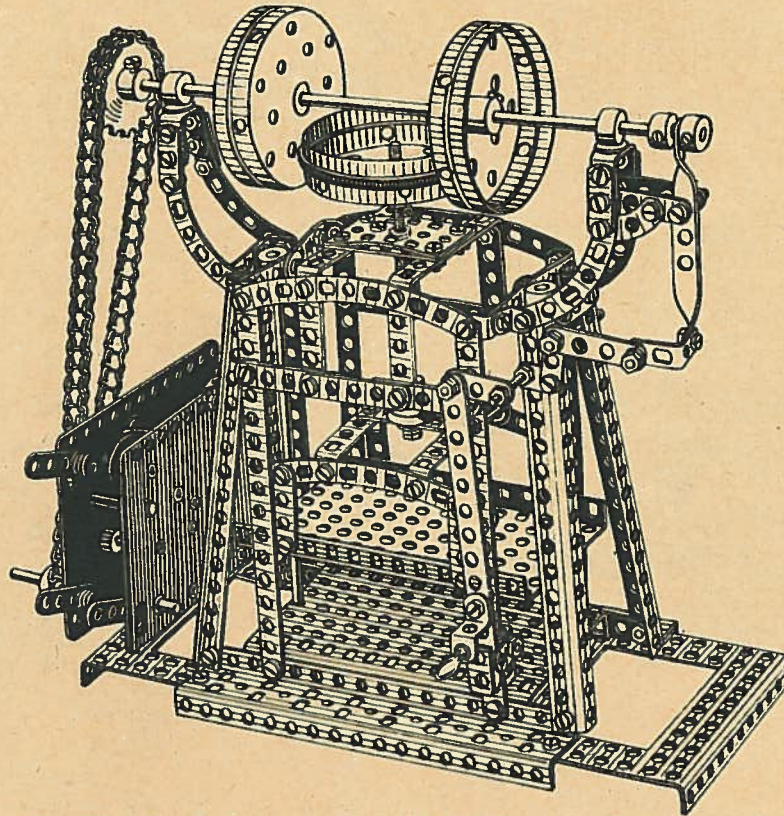
Piezas nesecarias para la balsa con la andamiada de apoyo de la grúa

2 No.1	2 No.14	2 No.34	7 No.43	1 No.62	1 No. 89	3 No.145	61 No.180
1 " 2	2 " 24	2 " 35	4 " 44	4 " 63	1 " 90	2 " 164	37 " 181
2 " 3	2 " 26	1 " 36	2 " 46	1 " 68	1 " 91	1 " 165	40 " 182
3 " 4	2 " 30	2 " 38	2 " 47	2 " 71	2 " 97	2 " 166	142 " 185
3 " 5	2 " 31	12 " 39	1 " 49	1 " 74	1 " 99	1 " 167	
7 " 7	2 " 32	2 " 40	1 " 55	2 " 81	1 " 120	2 " 169	
1 " 8	2 " 33	4 " 41	1 " 57	1 " 82	1 " 134	2 " 170	

No. 18 Prensa de fricción

con motor de resorte No. 250 embutido

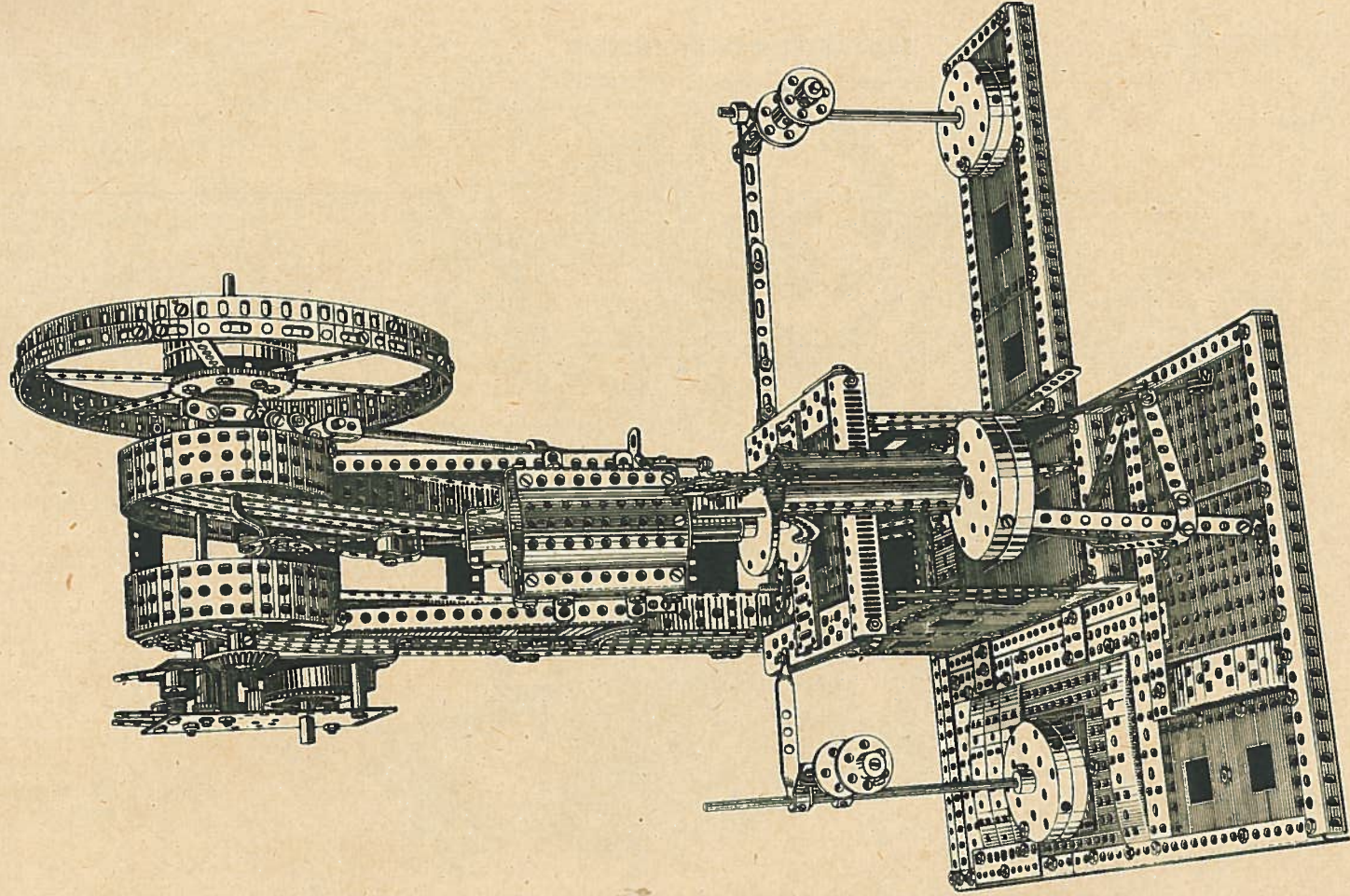
4	No. 2
1	" 3
1	" 4
11	" 6
7	" 7
8	" 8
2	" 16
4	" 22
4	" 24
3	" 26
4	" 29
2	" 33
2	" 41
5	" 43
2	" 45
1	" 48
2	" 49
1	" 52
1	" 54
6	" 55
2	" 61



2	No. 65
1	" 66
2	" 70
1	" 74
6	" 81
2	" 89
1	" 91
1	" 99-1*
1	" 107
1	" 108
1	" 131
1	" 132
1	" 136
5	" 145
51	" 180
38	" 181
2	" 182
103	" 185
3	" 186
1	" 250

*Significa sólo el mango de la manivela

Para obtener la mejor fricción posible, deberá pegarse un anillo de caucho en la ranura de la tapa del tambor No. 66



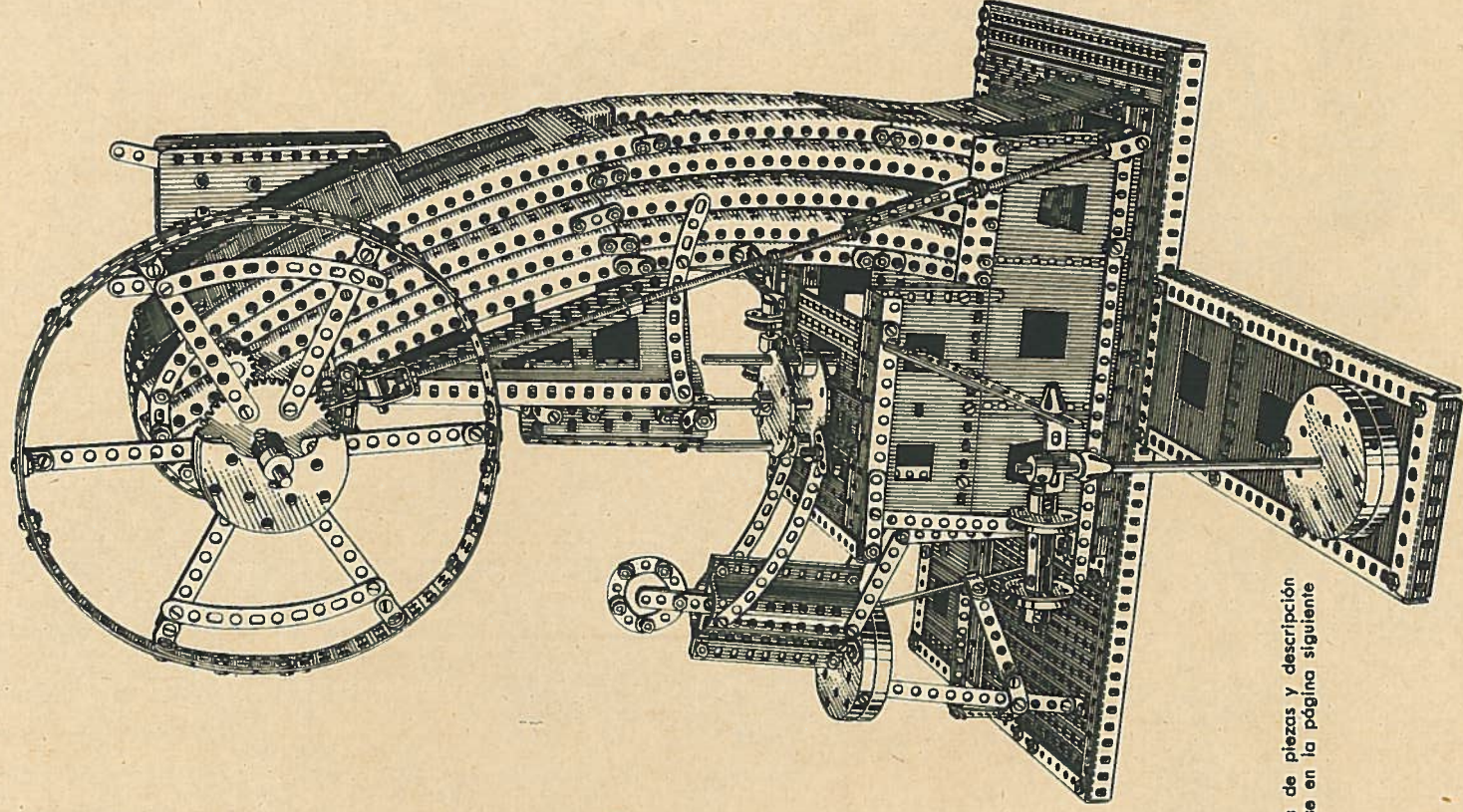
No. 19 Prensa de doble basildor

con motor de resorte No. 250 embuido

Grabado No. 1 (Vista principal)

Prensa de doble bastidor

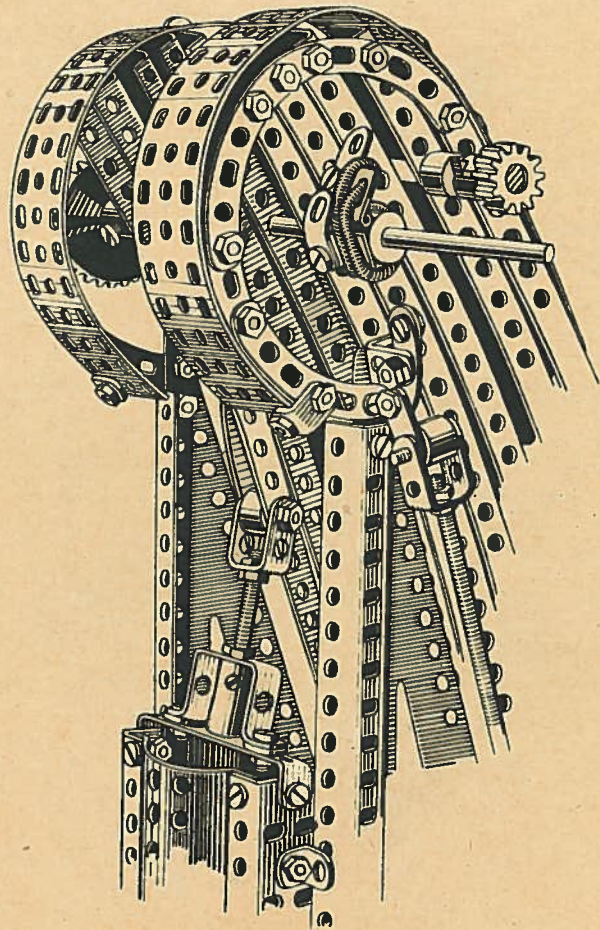
Grabado No. 2 (Vista lateral)



Lista de piezas y descripción
véase en la página siguiente

Modelo construido con la Caja No. 3

Piezas para la Prensa de doble bastidor



1 No. 1	2 No.32	2 No. 65	1 No.118
7 " 3	2 " 34	2 " 66	1 " 121
10 " 4	2 " 35	2 " 68	1 " 123
8 " 5	2 " 36	2 " 70	1 " 135
4 " 6	2 " 37	5 " 73	2 " 137
2 " 7	16 " 39	2 " 75	7 " 145
7 " 8	13 " 40	2 " 76	1 " 146
4 " 11	12 " 41	4 " 80	1 " 150
3 " 12	8 " 42	11 " 81	1 " 165
1 " 13	20 " 43	2 " 82	3 " 166
2 " 14	2 " 44	2 " 83	3 " 168
2 " 18	3 " 45	1 " 84	3 " 169
4 " 19	2 " 47	1 " 85	1 " 170
4 " 20	1 " 48	2 " 86	2 " 175
3 " 21	2 " 49	4 " 87	2 " 177
6 " 22	1 " 51	2 " 89	4 " 179
8 " 24	1 " 53	1 " 90	194 " 180
12 " 26	1 " 54	1 " 100	79 " 181
7 " 28	3 " 55	3 " 105	6 " 182
4 " 29	2 " 57	1 " 106	301 " 185
4 " 30	2 " 61	1 " 107	1 " 250
2 " 31	4 " 64	2 " 108	

Prensa de doble bastidor

Grabado No. 3 (Vista parcial — acoplamiento y palanca de desenganche)

Poniendo en marcha el motor de resorte No. 250, también se pondrá en movimiento el volante colocado "suelto" en el árbol cigüeñal prolongado (marcha en vacío). Para transmitir la fuerza del volante al árbol cigüeñal y, luego, al pisón, se aprieta el pedal. Apretando y volviendo a soltar inmediatamente el pedal, se efectúa un solo movimiento del pisón (apisonar con interrupción).

Apertando de continuo el pedal, se consigue un movimiento continuo del pisón (apisonar sin interrupción).

Descripción de los sistemas de conexión: El acoplamiento transmite la fuerza del volante al pisón.

Se compone de una pieza de cada uno de los Nos. 82, 53, 145, 42, 41 y 150. Durante la marcha en vacío la pieza 41 del acoplamiento toca la arandela de la palanca de desenganche.

Apertando el pedal hacia abajo, se suelta la pieza 41 del acoplamiento, la charnela No. 53 gira hacia afuera debido a la tracción del resorte y se coloca con su borde exterior junto a una fuerza de la rueda dentada No. 121. Así se transmite el movimiento del volante al árbol cigüeñal y, a continuación, al pisón. Soltando el pedal, las piezas vuelven a su posición inicial; es decir, vuelve a producirse marcha en vacío.

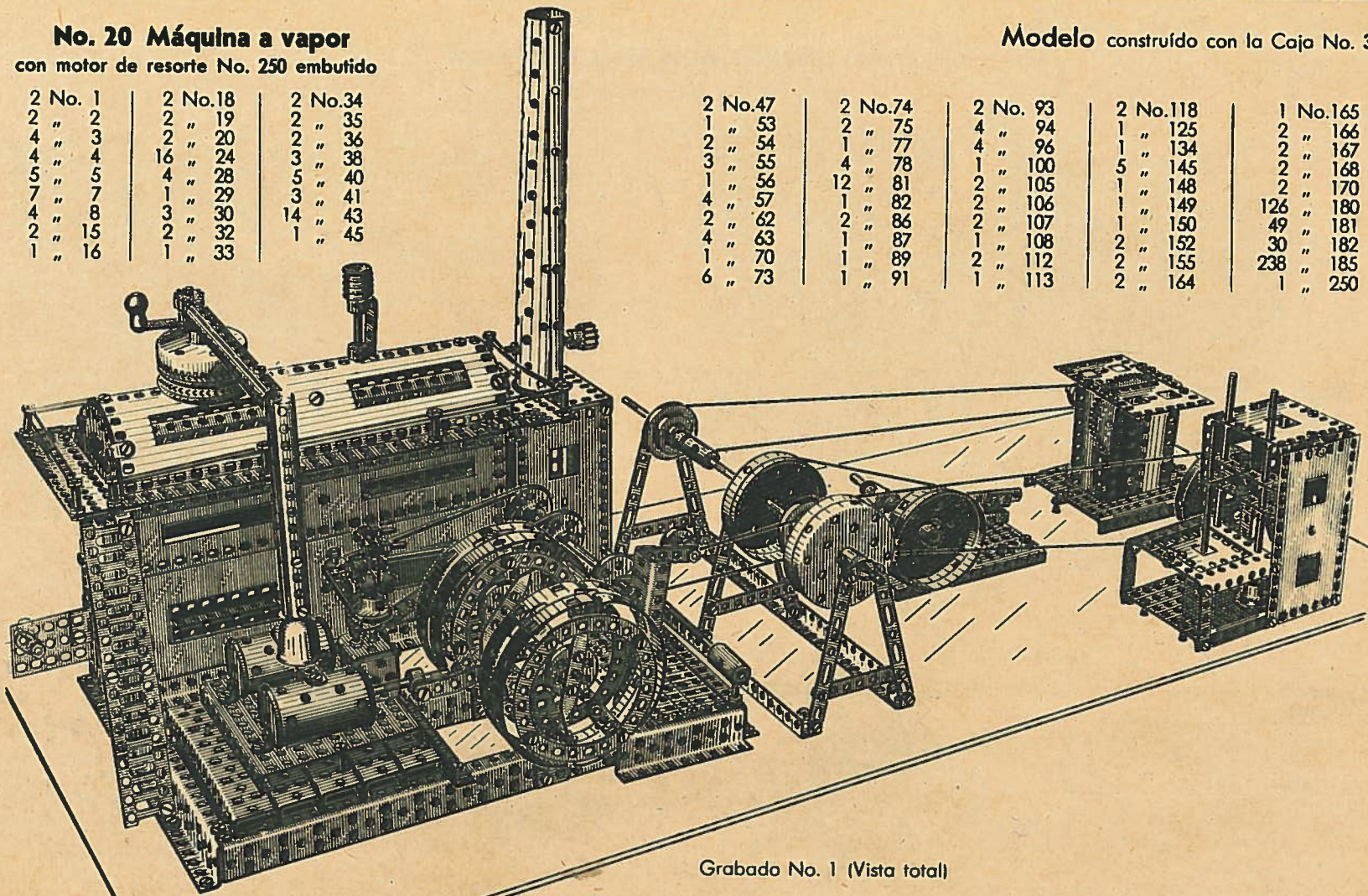
No. 20 Máquina a vapor

con motor de resorte No. 250 embutido

2	No. 1	2	No.18	2	No.34
2	" 2	2	" 19	2	" 35
4	" 3	2	" 20	2	" 36
4	" 4	16	" 24	3	" 38
5	" 5	4	" 28	5	" 40
7	" 7	1	" 29	3	" 41
4	" 8	3	" 30	14	" 43
2	" 15	2	" 32	1	" 45
1	" 16	1	" 33		

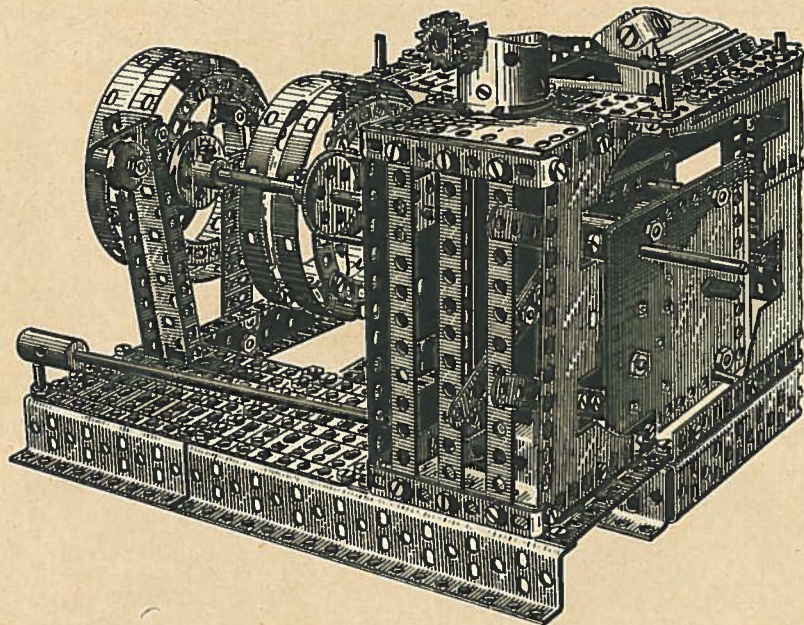
Modelo construido con la Caja No. 3

2	No.47	2	No.74	2	No. 93	2	No.118	1	No.165
1	" 53	2	" 75	4	" 94	1	" 125	2	" 166
2	" 54	1	" 77	4	" 96	1	" 134	2	" 167
3	" 55	4	" 78	1	" 100	5	" 145	2	" 168
1	" 56	12	" 81	2	" 105	1	" 148	2	" 170
4	" 57	1	" 82	2	" 106	1	" 149	126	" 180
2	" 62	2	" 86	2	" 107	1	" 150	49	" 181
4	" 63	1	" 87	2	" 108	2	" 152	30	" 182
1	" 70	1	" 89	2	" 112	2	" 155	238	" 185
6	" 73	1	" 91	1	" 113	2	" 164	1	" 250

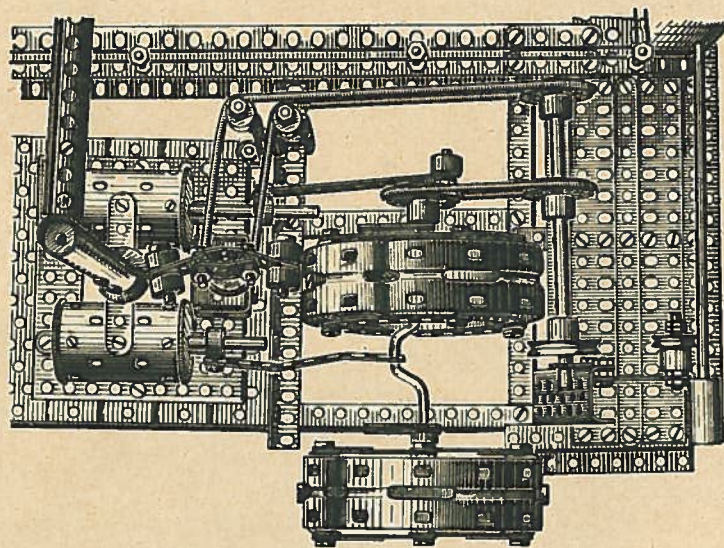


Grabado No. 1 (Vista total)

Vistas parciales de la Máquina a vapor



Grabado No. 2

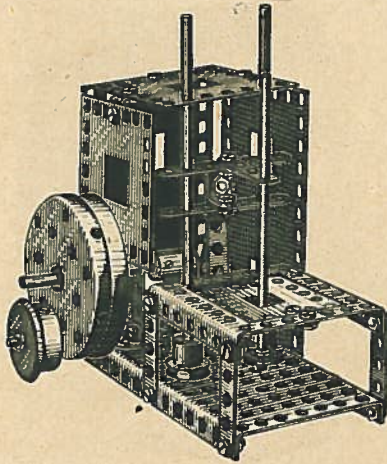


Grabado No. 3 (Vista de abajo)

Piezas para la transmisión

3 No. 5	4 No.44	1 No. 87
6 " 12	2 " 66	1 " 90
3 " 26	2 " 79	18 " 180
2 " 28	2 " 80	6 " 181
2 " 43	1 " 82	24 " 185

Grabado No. 4

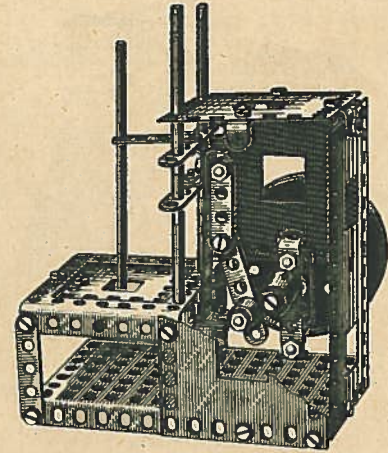


**Sierra en frío de
movimiento de corredera**

2	No. 5
6	" 6
1	" 7
3	" 41
3	" 43
1	" 44
1	" 51
2	" 55
1	" 56
1	" 61
1	" 65
1	" 68
1	" 69
2	" 74
1	" 77

1	No. 83
1	" 84
1	" 86
2	" 89
1	" 108
2	" 137
1	" 145
2	" 146
2	" 165
2	" 166
25	" 180
5	" 181
4	" 182
37	" 185

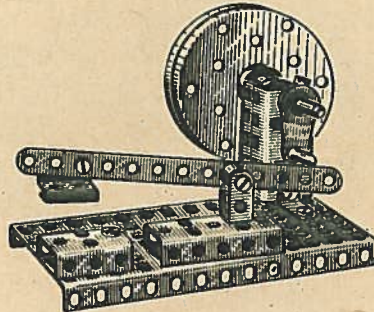
Grabado No. 5



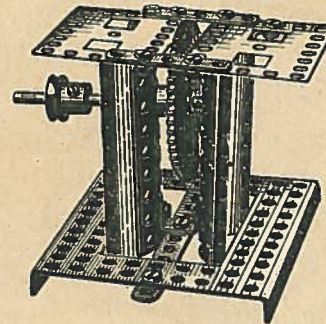
Herrería

1	No. 3	1	No. 74
3	" 37	1	" 80
1	" 38	1	" 83
1	" 45	1	" 87
1	" 48	1	" 99
1	" 52	3	" 180
1	" 61	6	" 182
1	" 65	8	" 185

Grabado No. 6



Grabado No. 7



Sierra circular

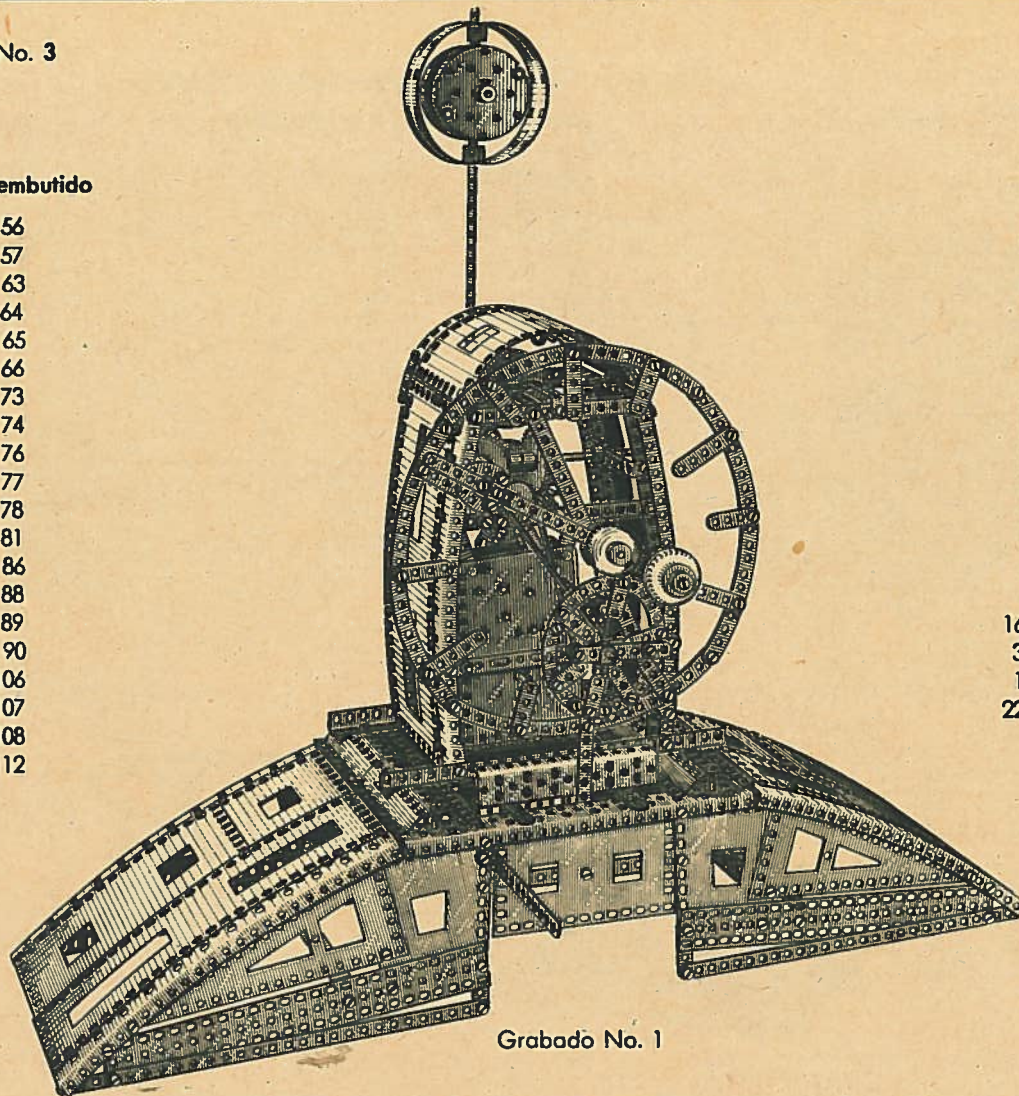
1	No. 3	1	No. 80
2	" 6	1	" 86
2	" 43	1	" 121
1	" 44	11	" 180
2	" 64	2	" 181
1	" 70	2	" 182
2	" 71	15	" 185
1	" 74		

No. 21 Reloj

con motor de resorte No. 250 embutido

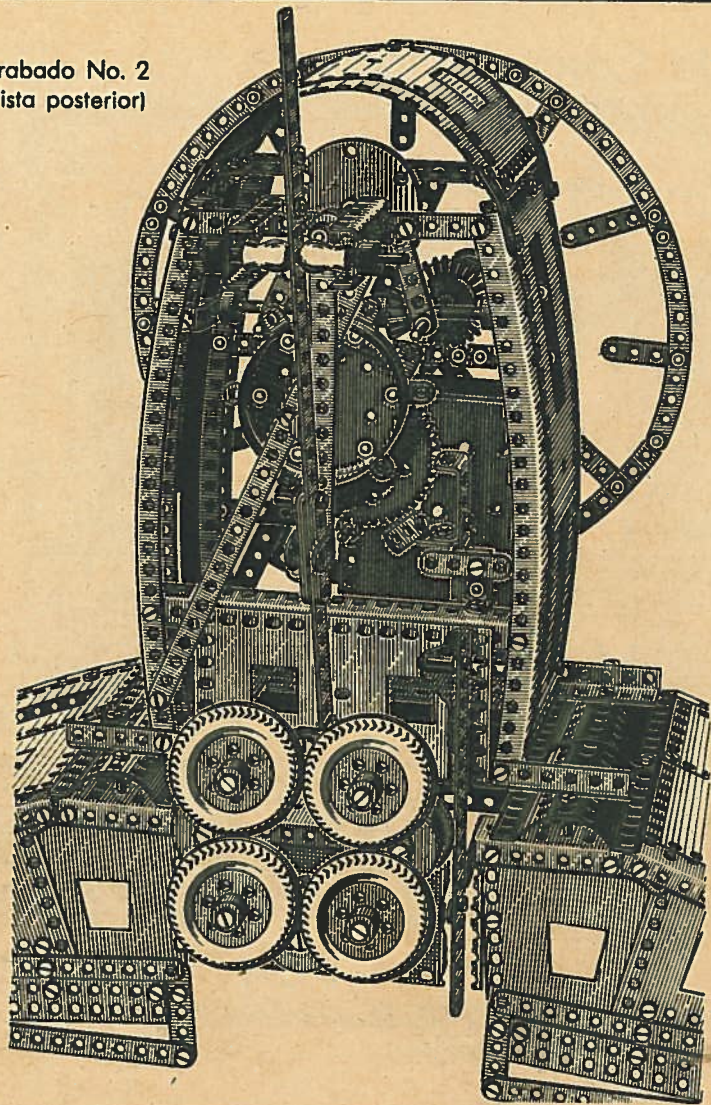
12 No. 1	1 No. 56
3 " 2	1 " 57
5 " 3	2 " 63
1 " 4	4 " 64
1 " 5	1 " 65
20 " 6	2 " 66
14 " 7	4 " 73
8 " 8	3 " 74
1 " 11	1 " 76
2 " 14	1 " 77
2 " 18	2 " 78
8 " 22	12 " 81
8 " 24	1 " 86
7 " 26	1 " 88
2 " 28	1 " 89
1 " 29	1 " 90
2 " 33	2 " 106
2 " 35	1 " 107
1 " 36	1 " 108
2 " 37	2 " 112
8 " 39	
9 " 41	
1 " 42	
12 " 43	
2 " 45	
1 " 52	
3 " 55	

1 No.118
1 " 120
1 " 121
1 " 122
1 " 123
2 " 124
1 " 134
4 " 145
1 " 146
1 " 148
4 " 155
5 " 156
3 " 166
2 " 167
2 " 168
4 " 169
2 " 170
4 " 177
4 " 179
164 " 180
34 " 181
18 " 182
225 " 185
1 " 250



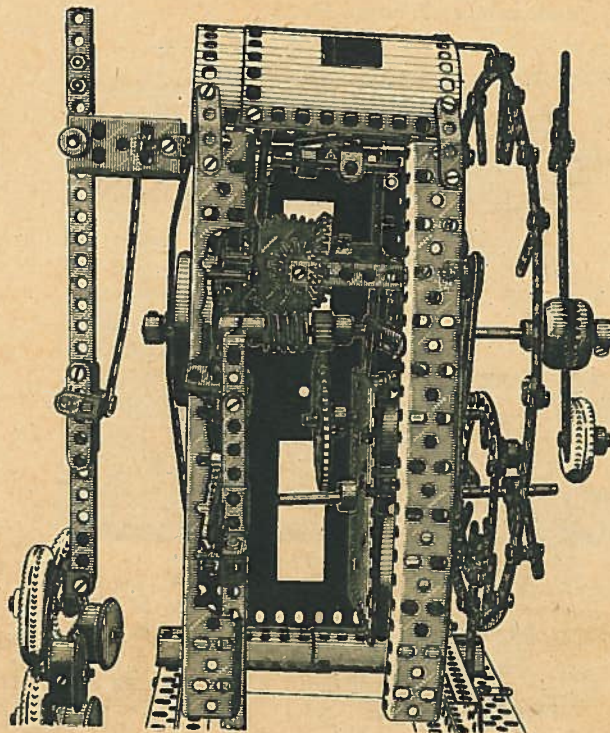
Grabado No. 1

Grabado No. 2
(Vista posterior)



Modelo construido con la Caja No. 3

Grabado No. 3 (Vista lateral)



La placa de revestimiento rectangular No. 170 se ha quitado en este grabado para ver bien el mecanismo.

Entre las piezas 65 y 66 están intercaladas en calidad de masa centrifuga del regulador 4 piezas No. 156.

En cuanto a su funcionamiento este modelo es un reloj de trinquete. La manivela grande indica los segundos; la pequeña, los minutos.

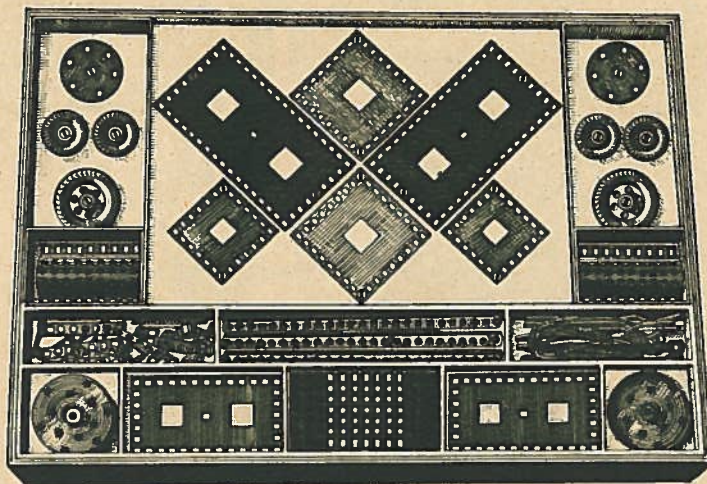
El reloj anda más ó menos 2 horas.

Mediante la palanca que sobresale de la parte inferior de la caja (grabado No. 1) puede ponerse en marcha y pararse el reloj.

Grabados de las Cajas de Construcciones

Las cajas se entregan en cajas de cartón vistosas y sólidas.

Caja de Construcciones Principal No. 1

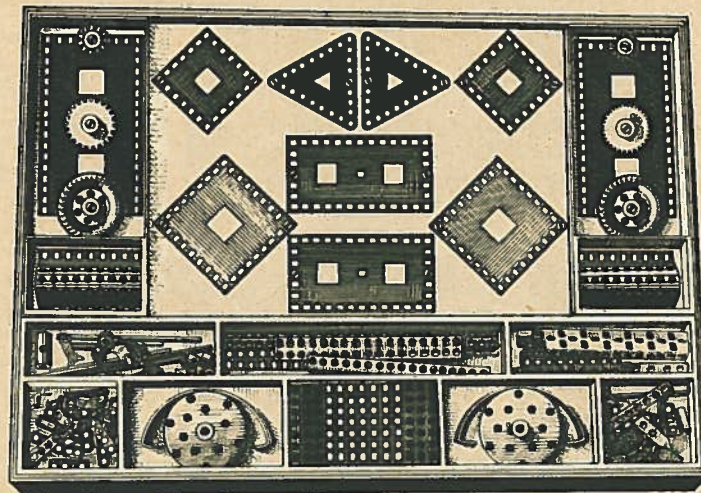


La Caja de Construcciones Principal No. 1 contiene 300 piezas.
Tamaño de la caja de cartón 36,5 x 25,5 x 3,2 cm
Peso completo: 850 grs.

La Caja de Construcciones Principal No. 2 contiene 622 piezas.
Tamaño de la caja de cartón: 41 x 28 x 3,4 cm
Peso completo: 1310 grs.

La Caja de Construcciones Principal No. 3 contiene 1447 piezas.
Tamaño de la caja de cartón: 52 x 32,5 x 5 cm
Peso completo: 2950 grs.

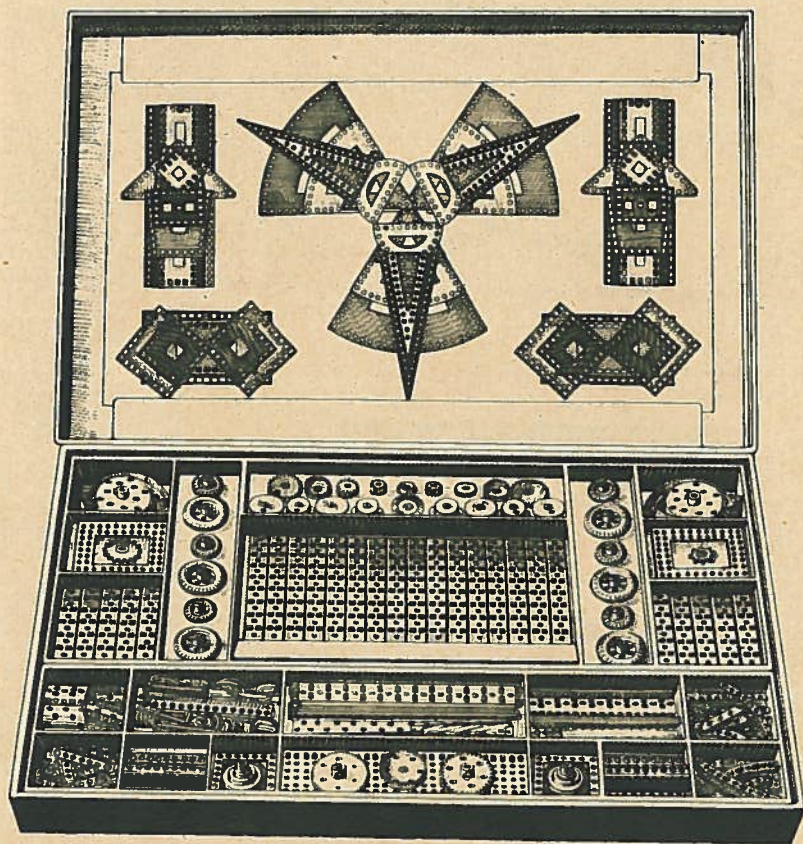
Caja de Construcciones Suplementaria No. 1 S



La Caja de Construcciones Suplementaria No. 1S contiene 322 piezas.
Tamaño de la caja de cartón: 36,5 x 25,5 x 2,7 cm
Peso completo: 890 grs.

La Caja de Construcciones Suplementaria No. 2S contiene 826 piezas.
Tamaño de la caja de cartón: 41 x 30 x 4,4 cm
Peso completo: 2320 grs.

Las Cajas de Construcciones Principales contienen una guía de 96 páginas con 172 modelos, empezando con las formas fundamentales sencillas y modelos de instrucción para terminar con las construcciones más complicadas.



Caja de Construcciones Principal No. 3

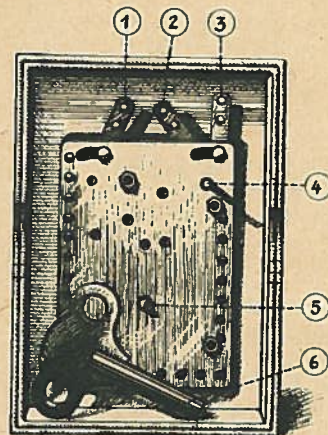
Motor de resorte No. 250

Para cumplir con el deseo de todo muchacho de hacer funcionar mediante una fuerza motriz los modelos contruidos por él mismo, hemos fabricado y puesto a la venta un motor de resorte.

El motor está contruido de modo que se presta casi para cada modelo, pudiendo embutirlo de la manera más sencilla. Gracias a su estabilidad especial se tiene la garantía de una larga duracion. A pesar de su muy reducido tamaño se distingue por su elevada capacidad.

El mecanismo tiene marcha adelante y atrás y dos velocidades. Se entrega en una solida caja de cartón de color con llave para dar resorte y modo de empleo.

Peso completo: 190 grs.







- 1. Marcha rápida y lenta
- 2. Palanca de parada
- 3. Marcha adelante y atrás





- 4. Arbol de impulsión
- 5. Eje del resorte
- 6. Llave para dar resorte

Contenido de las Cajas de Construcciones Metálicas

No. 1 } Caja de Construcciones Principal
 No. 2 }
 No. 3 }

No. 15 } Caja de Construcciones Suplementaria
 No. 25 }

		Piezas en				
		1	1S	2	2S	3
		4	—	4	8	12
No. 1	Cinta plana de 25 agujeros	4	—	4	8	12
No. 2	" " " 17 "	—	—	—	4	4
No. 3	" " " 13 "	4	—	4	8	12
No. 4	" " " 9 "	2	2	4	6	10
No. 5	" " " 7 "	2	2	4	6	10
No. 6	" " " 5 "	8	2	10	14	24
No. 7	" " " 4 "	2	2	4	12	16
No. 8	" " " 3 "	2	2	4	8	12
		—	—	—	4	4
No. 11	Cinta plana con hendiduras longitudinales, 101 mm de largo	—	—	—	4	4
No. 12	" " " " " 65 mm de largo	—	2	2	4	6
No. 13	" " " " " 29 mm de largo	—	2	2	2	4
		—	—	—	2	2
No. 14	Cinta plana de 3 filas de 25 agujeros de largo	—	—	—	2	2
No. 15	" " " " " 13 "	—	—	—	2	2
No. 16	" " " " " 5 "	—	—	—	2	2
		—	—	—	2	2
No. 18	Cinta plana doble de 25 agujeros de largo	—	—	—	2	2
No. 19	" " " " " 17 "	—	2	2	2	4
No. 20	" " " " " 9 "	—	2	2	2	4
No. 21	" " " " " 3 "	—	—	—	6	6

		Piezas en				
		1	1S	2	2S	3
		—	—	—	8	8
No. 22	Cinta curvada 11 agujeros	—	—	—	8	8
No. 24	" " " 7 "	—	4	4	12	16
No. 26	" " " 3 "	—	4	4	12	16
		—	4	4	4	8
No. 28	Viga angular 25 agujeros	—	4	4	4	8
No. 29	" " " 17 "	—	2	2	2	4
No. 30	" " " 9 "	4	—	4	—	4
No. 31	" " " 5 "	—	—	—	2	2
		—	—	—	2	2
No. 32	Viga en Z 25 agujeros	—	—	—	2	2
No. 33	" " " 17 "	—	—	—	2	2
No. 34	" " " 9 "	—	—	—	4	4
		—	—	—	2	2
No. 35	Viga en U 25 agujeros	—	—	—	2	2
No. 36	" " " 13 "	—	2	2	—	2
No. 37	" " " 5 "	—	—	—	4	4
No. 38	" " " 3 "	—	—	—	4	4



No. 39 Viga curvada en U 25 agujeros
 No. 40 " " " " 13 "



No. 41



No. 42

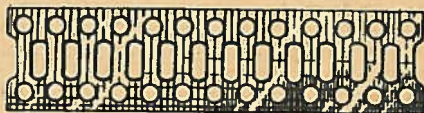


No. 43

No. 41 Brida
 No. 42 " angular
 No. 43 Unión angular



No. 44 Unión en U, corta 3 agujeros
 No. 45 " " " larga 5 "



No. 46 Guardalado 25 agujeros
 No. 47 " 13 "



No. 48 Angulo 4 agujeros

Piezas en					
1	1S	2	2S	3	
—	—	—	16	16	
—	—	—	18	18	
4	2	6	10	16	
4	2	6	10	16	
8	8	16	14	30	
2	2	4	2	6	
1	1	2	2	4	
—	—	—	2	2	
—	—	—	4	4	
—	—	—	2	2	
—	—	—	2	2	



No. 49 Angulo doble



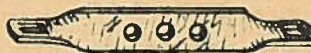
No. 50 Soporte 5 agujeros
 No. 51 " 7 "



No. 52 Guía



No. 53 Charnela

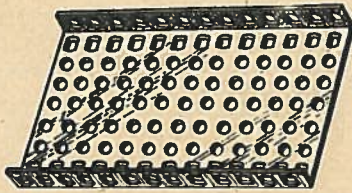


No. 54 Guía de árboles

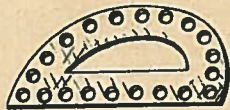


No. 55 Cinta angular 9 agujeros
 No. 56 " " 7 "
 No. 57 " " 5 "

Piezas en				
1	1S	2	2S	3
—	—	—	2	2
—	—	—	1	1
—	1	1	—	1
—	4	4	4	8
—	—	—	4	4
—	1	1	1	2
2	2	4	2	6
2	2	4	4	8
2	2	4	2	6



No. 61 Placa de base



No. 62 Placa semicircular



No. 63



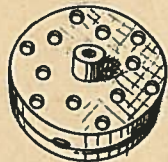
No. 64

No. 63 Arco semicircular

No. 64 Placa arqueada



No. 65

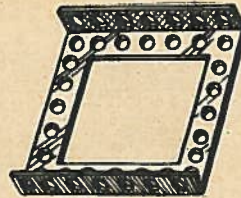


No. 66

No. 65 Fondo de tambor

No. 66 Tapa de tambor

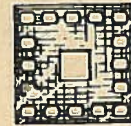
Piezas en				
1	1S	2	2S	3
1	1	2	—	2
—	—	—	4	4
—	2	2	2	4
2	2	4	—	4
1	1	2	—	2
1	1	2	—	2



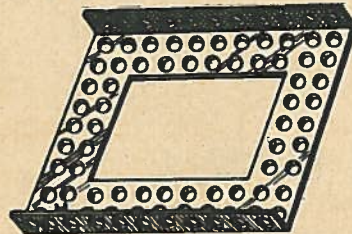
No. 68

No. 68 Marco cuadrado

No. 69 Placa cuadrada



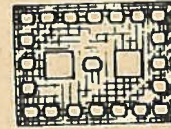
No. 69



No. 70

No. 70 Marco rectangular

No. 71 Placa rectangular



No. 71

No. 72 Placa de unión



No. 73




No. 73 Roldana grande

No. 74 " pequeña



No. 74

Piezas en				
1	1S	2	2S	3
—	—	—	2	2
—	—	—	2	2
—	—	—	2	2
—	—	—	2	2
—	—	—	8	8
2	2	4	2	6
4	—	4	2	6

No. 75 

 No. 76

No. 75 Roldana
No. 76 Disco perforado



No. 77




No. 78



No. 79

No. 77 Rueda de corona
No. 78 " " rayada
No. 79 Polea escalonada

No. 80 

 No. 81

No. 80 Resorte de graducción
No. 81 Anillo de ajuste



No. 82



No. 83



No. 84

No. 82 Manguito de acoplamiento
No. 83 " " " roscado
No. 84 Manguito de enlace



No. 85 Arbol de 20 mm.
No. 86 " " 45 "
No. 87 " " 65 "
No. 88 " " 85 "
No. 89 " " 100 "
No. 90 " " 130 "
No. 91 " " 160 "

	Piezas en				
	1	1S	2	2S	3
No. 75	1	—	1	1	2
No. 76	2	—	2	—	2
No. 77	—	—	—	4	4
No. 78	—	—	—	4	4
No. 79	—	—	—	2	2
No. 80	—	—	—	8	8
No. 81	4	6	10	2	12
No. 82	—	1	1	1	2
No. 83	—	1	1	1	2
No. 84	—	—	—	1	1
No. 85	1	—	1	1	2
No. 86	2	—	2	2	4
No. 87	1	1	2	2	4
No. 88	—	—	—	1	1
No. 89	—	2	2	1	3
No. 90	—	—	—	1	1
No. 91	—	—	—	1	1

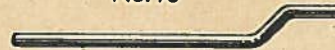


No. 93 Tubo de media sección de 19 mm. de ø 25 agujeros
No. 94 " " " " " " " 5 "



No. 96 Tubo de media sección de 8 mm. de ø 13 agujeros
No. 97 " " " " " " " 5 "

No. 98



No. 99

No. 98 Manivela
No. 99 Manivela pequeña



No. 100 Arbol cigüeñal



No. 105 Vástago roscado 20 mm.
No. 106 " " 35 "
No. 107 " " 55 "
No. 108 " " 75 "

No. 112



No. 113

No. 112 Mango circular
No. 113 Casquete

	Piezas en				
	1	1S	2	2S	3
No. 93	—	—	—	2	2
No. 94	—	—	—	4	4
No. 96	—	—	—	4	4
No. 97	—	—	—	2	2
No. 98	1	—	1	—	1
No. 99	—	1	1	1	2
No. 100	—	—	—	1	1
No. 105	2	1	3	—	3
No. 106	1	—	1	1	2
No. 107	1	1	2	—	2
No. 108	—	2	2	—	2
No. 112	—	—	—	2	2
No. 113	—	—	—	2	2

No. 118



No. 119

No. 120



No. 121

No. 118 Rueda dentada con acoplamiento 12 dientes
 No. 119 Rueda dentada, 18 dientes
 No. 120 " " 33 "
 No. 121 " " 48 "

No. 122



No. 123

No. 122 Rueda cónica, 15 dientes
 No. 123 " " 30 "

No. 124



No. 125

No. 124 Engranaje a corona, 24 dientes
 No. 125 " " " 38 "



No. 128 Rueda helicoidal, 11 dientes

No. 129



No. 130

No. 129 Rueda helicoidal, 21 dientes
 No. 130 " " 31 "

Piezas
en

1	1S	2	2S	3
	1	1	1	2
			1	1
	1	1		1
			1	1
			1	1
			1	1
			2	2
			1	1
	1	1		1
	1	1		1
			1	1

No. 131



No. 132

No. 131 Rueda a cadena, 8 dientes
 No. 132 " " " 16 "



No. 134 Tornillo sin fin



No. 135 Cremallera



No. 136 Cadena de transmisión



No. 137 Acoplamiento

No. 138



No. 141

No. 138 Trinquete
 No. 141 Gancho porta-carga

No. 145



No. 146

No. 145 Arandela
 No. 146 " elástica

Piezas
en

1	1S	2	2S	3
			1	1
			1	1
			1	1
			1	1
			1	1
	1	1	1	2
	1		1	2
4		4	4	8
4		4		4

No. 147 Resorte de tensión



Piezas en				
1	1S	2	2S	3
—	—	—	1	1
1	—	1	—	1
—	—	—	1	1
—	1	1	—	1
—	—	—	3	3
1	—	1	1	2
2	2	4	2	6
4	—	4	2	6
—	—	—	1	1
—	—	—	1	1

No. 148 Resorte espiral, 150 mm.



No. 149 " " 110 "

No. 150 " " 70 "



No. 151 Resorte de presión



No. 152 Cordón de transmisión



No. 155 Neumático grande

No. 156 " pequeño



No. 159 Llave tubular



No. 160 Destornillador grande

No. 161 Destornillador pequeño

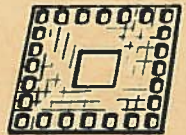


No. 162 Llave de tuercas



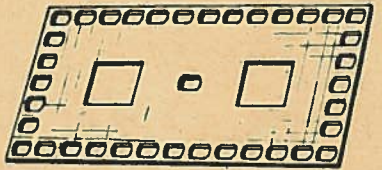
No. 165 Placa de revestimiento cuadrada de 7/7 agujeros

No. 168 " " " " " 9/9 "



No. 166 Placa de revestimiento rectangular, 13/7 agujeros

No. 169 " " " " " 17/9 "



No. 164 Placa de revestimiento rectangular, 25/5 agujeros

No. 167 " " " " " 25/7 "

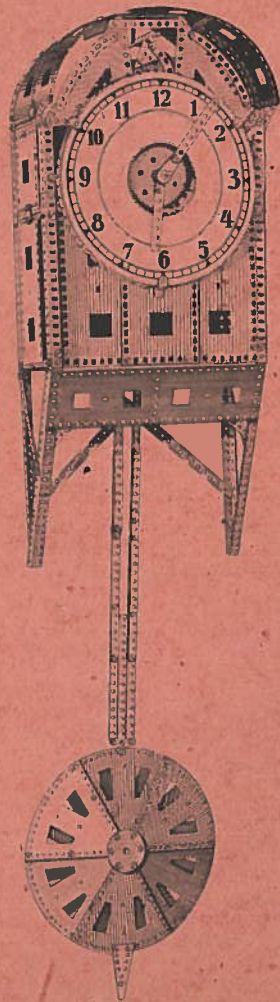
No. 170 " " " " " 25/9 "



Piezas en				
1	1S	2	2S	3
1	—	1	—	—
2	—	2	—	2
2	2	4	—	4
2	2	4	—	4
2	2	4	—	4
2	2	4	—	4
—	—	—	2	2
—	—	—	2	2
—	—	—	2	2

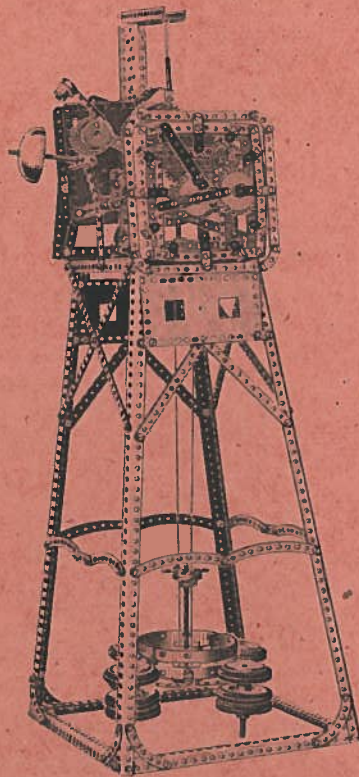
Reloj de pared

(Cuerda de 12 horas)



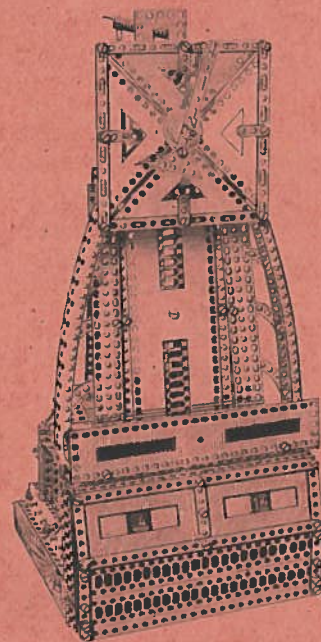
Reloj anuario

(Cuerda de 15 horas)



Reloj de chimenea

(Cuerda de 3 horas)



Estos 3 modelos están contruidos de piezas de nuestras Cajas de Construcciones y señalan la hora con bastante exactitud.

Los ejemplos demostrados para construir aparatos de mecánica de precisión con las piezas de nuestras Cajas de Construcciones — en este caso relojes — indican la alta calidad y la exactitud de las medidas de dichas piezas.