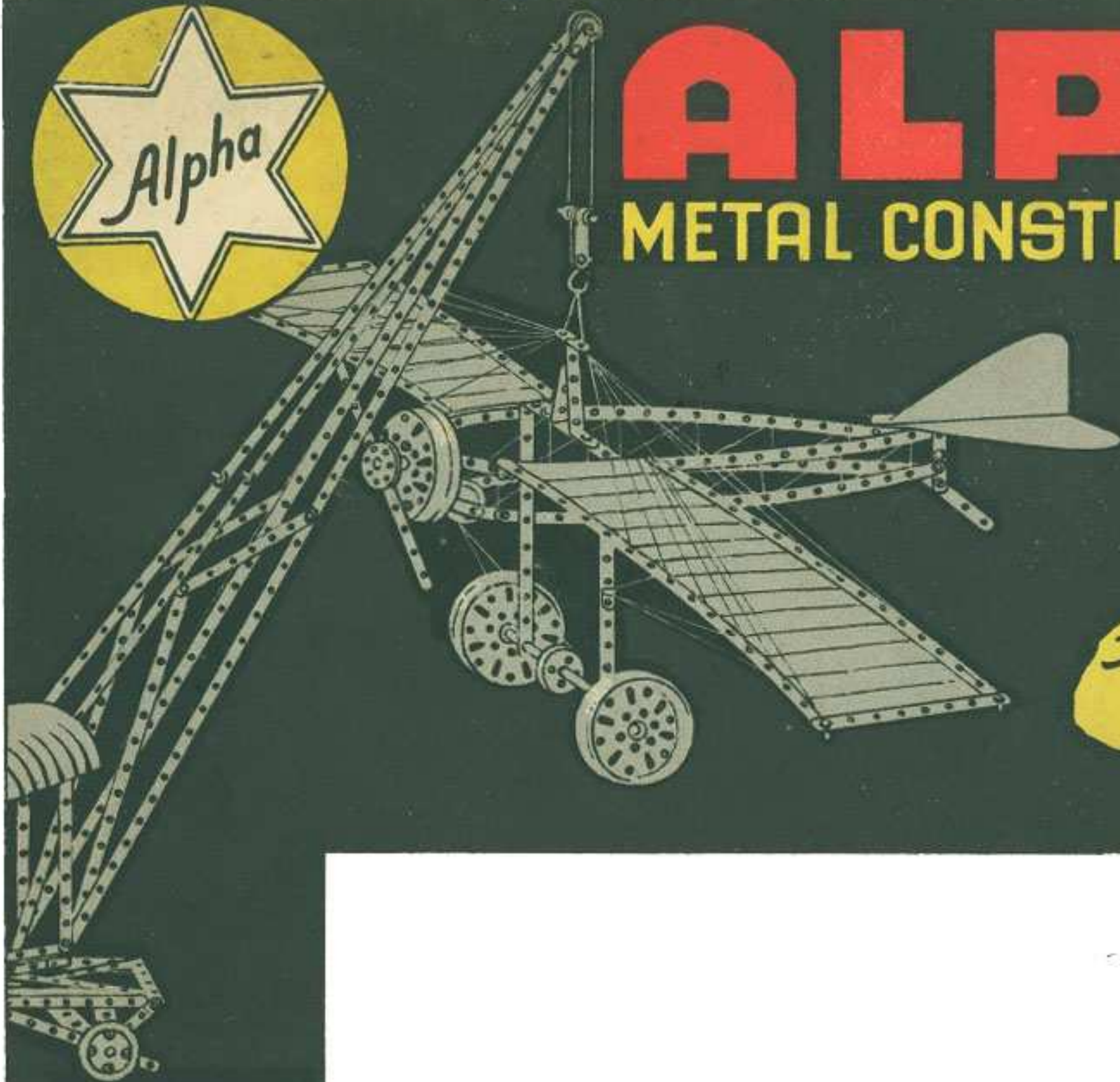




ALPHA

METAL CONSTRUCTION TOY



H. Wallenberg

MADE IN GERMANY

Modell-Abbildungen

Nr.

- 1 Stuhl
- 2 Tisch
- 3 Bank
- 4 Bett
- 5 Tragbahre
- 6 Schlitten
- 7 Barren
- 8 Reck
- 9 Hochsprung
- 10 Karren
- 11 Handkarren
- 12 Sackkarren
- 13 Sägebock
- 14 Schulbank
- 15 Güterwagen
- 16 Schaukel
- 17 Leiterwagen
- 18 Rollstuhl
- 19 Karren
- 20 Waage

Nr.

- 21 Schaukel
- 22 Windmühle
- 23 Schaukel
- 24 Waage
- 25 Briefwaage
- 26 Hammerwerk
- 27 Leiter
- 28 Signal
- 29 Bahnübergang
- 30 Barriere
- 31 Tankwagen
- 32 Prellbock
- 33 Güterwagen
- 34 Bahnsteigkarren
- 35 Flugzeug
- 36 Liegestuhl
- 37 Krankenstuhl
- 38 Roller
- 39 Drehbrücke
- 40 Schlagschere

Nr.

- 41 Spindelpressen
- 42 Transmission
- 43 Sägemaschine
- 44 Pollermaschine
- 45 Kleine Drehbank
- 46 Doppeldecker
- 47 Bandsäge
- 48 Fallhammer
- 49 Bohrmaschine
- 50 Grosse Drehbank
- 51 Kran
- 52 Flaschenzug
- 53 Holländer
- 54 Lastwagen
- 55 Omnibus
- 56 Windmühle
- 57 Karrussell
- 58 Feuerwehrlleiter

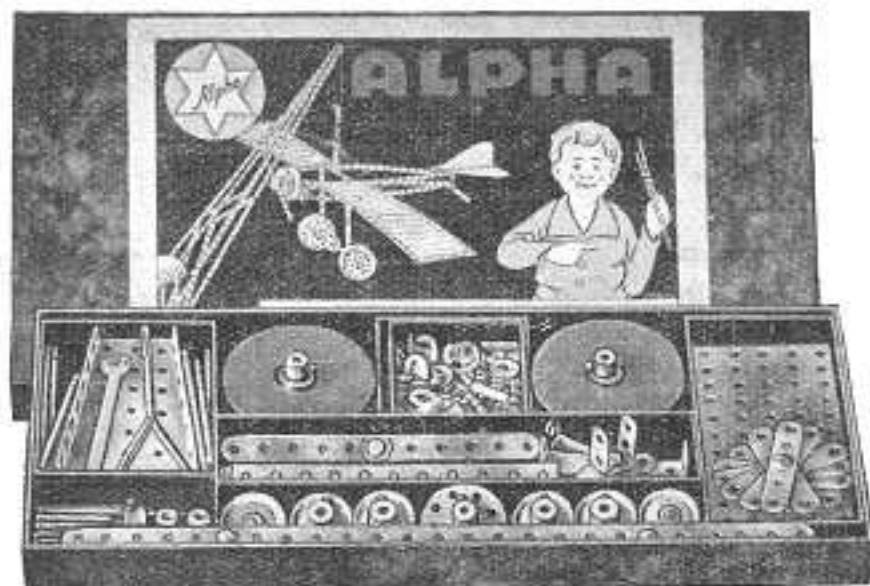


The „ALPHA“ METAL CONSTRUCTION BOX



with pressed parts made of a coloured artificial composition (patented).

Elementary Box No 1 (nickel plated)



This new metal construction box which leaves nothing to be desired, either technically or with regard to the various shapes, and makes it possible to obtain particularly attractive combinations as the results of its various colours, is undoubtedly the most acceptable occupation game for boys at the present time.

Childish fancy is hereby provided with a means of awakening its interest quite early in games of great intellectual value. Boys are thus initiated into the mysteries of mechanics by way of play, which forms for them a most invaluable preparation for their subsequent professions.

The „ALPHA“ new construction box is supplied in various sizes including a series of supplementary boxes for particular branches, such as electrical engineering, machine construction, etc. etc.

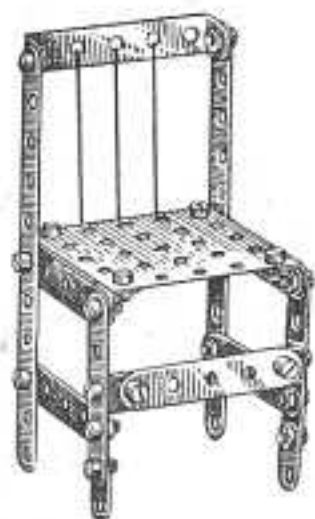
With the help of the Elementary Box No 0 it is possible to construct more than 100 of the most attractive combinations which can be still further increased by using the Supplementary Box No 0E. Construction Box No 1 contains more than 200 parts. The finish of the first Elementary Box is just as carefully executed as that of the larger combinations.

Each construction box is supplied with a book of instructions containing several illustrations of the models. It must be emphasised, however, that it is not advisable for the child to confine his attention to constructing models as given in the illustrations, but a free play should be given him to carry out his own ideas, and he will have all the greater satisfaction in his box by building after his own designs.

Just as technical progress is ceaseless and new machinery is constantly being produced, so too, the new „ALPHA“ construction box is unlimited in its scope, and because it is capable of constant extension, it is accordingly the most valuable educational toy of the present.

No 1. Chair

No. 3—5	No. 33—20
" 7—2	" 34—20
" 14—2	" 47—1
" 15—6	" 55—1



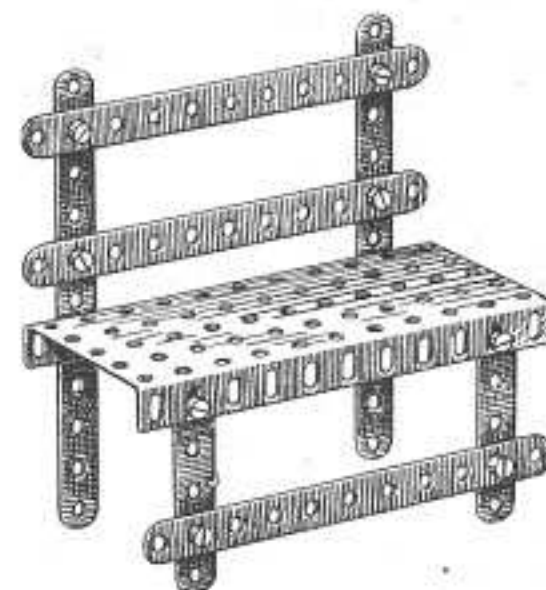
No 2. Table

No. 3—3	No. 34—18
" 7—6	" 36—1
" 15—6	" 47—1
" 33—18	



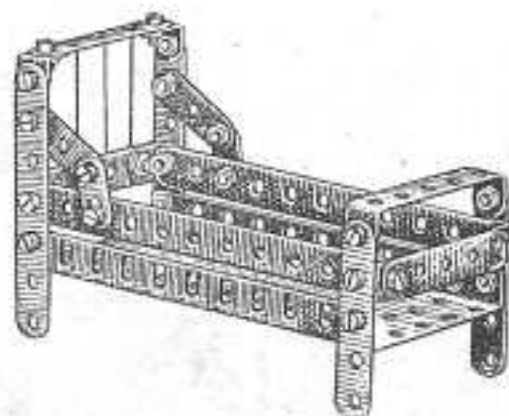
No 3. Bench

No. 3—2	No. 34—10
" 7—5	" 36—1
" 33—10	



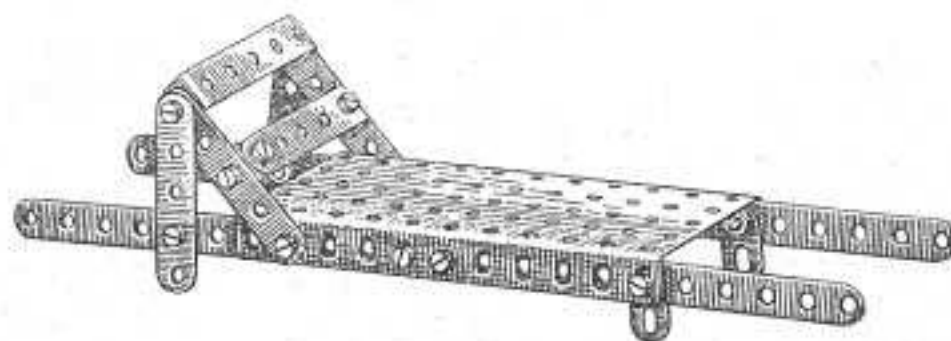
No 4. Bed

No. 1—2	No. 15—6
" 3—5	" 33—24
" 5—2	" 34—24
" 7—2	" 36—1
" 14—2	" 47—1



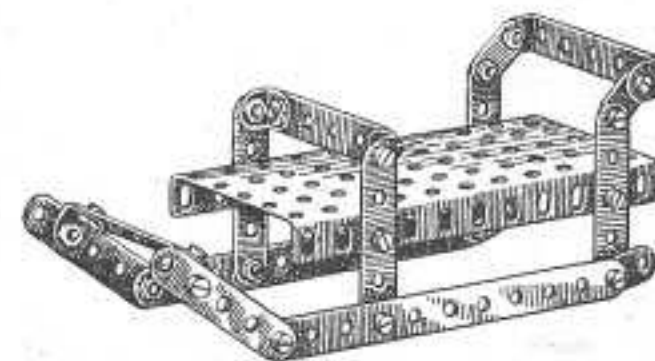
No 5. Stretcher

No. 3—5	No. 33—16
" 7—4	" 34—16
" 14—2	" 36—1
" 15—2	" 47—1



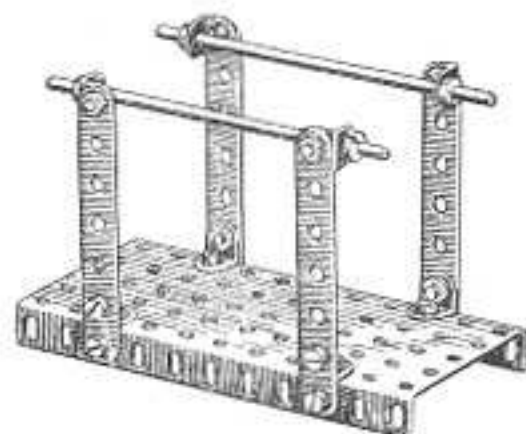
No 6. Sledge

No. 3—8	No. 33—22
" 7—2	" 34—22
" 14—4	" 36—1
" 15—4	" 74—1



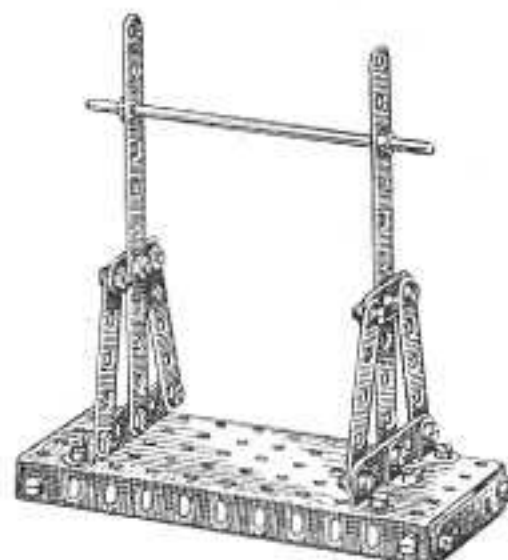
No 7. Parallel bars

No. 5—4	No. 33—12
" 15—8	" 34—12
" 20—2	" 36—1
" 29—4	



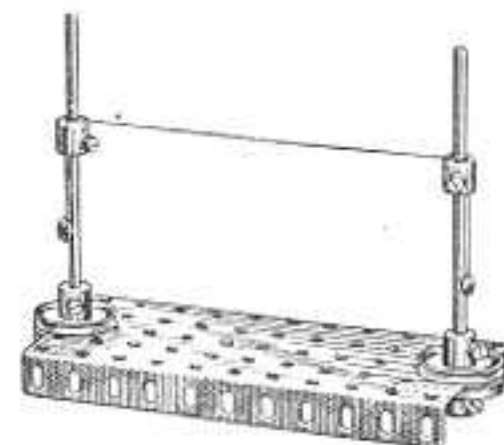
No. 1—2
" 3—1
" 7—2
" 15—8
" 20—1
" 29—2
" 33—24
" 34—24
" 36—1
" 47—1

No 8. Horizontal bar



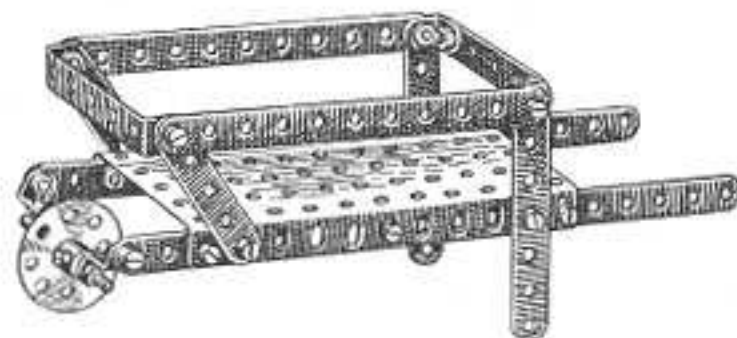
No 9. High jump

No. 20—2
" 31—2
" 36—1
" 42—4



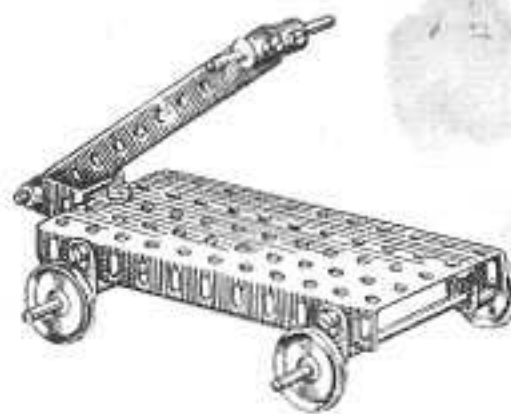
No 10. Wheelbarrow

No. 3—5	No. 33—20
" 5—2	" 34—20
" 7—4	" 36—1
" 15—6	" 41—1
" 17—1	" 47—1
" 29—2	



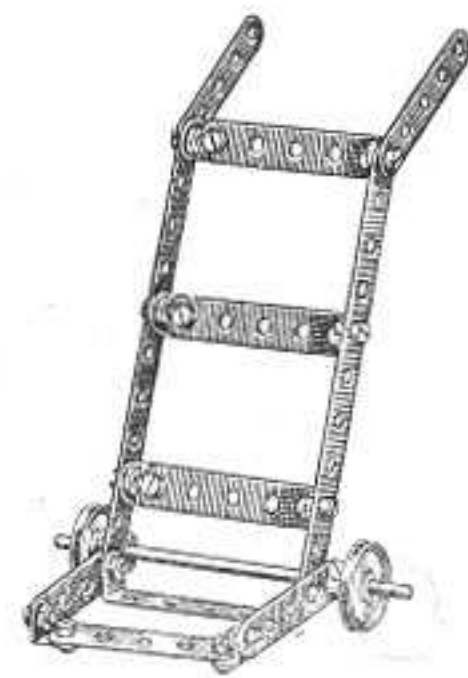
No 11. Hand truck

No. 7—1	No. 31—2
" 14—4	" 33—5
" 15—1	" 34—8
" 16—1	" 35—1
" 17—1	" 36—1
" 20—2	" 42—4
" 29—4	" 45—1

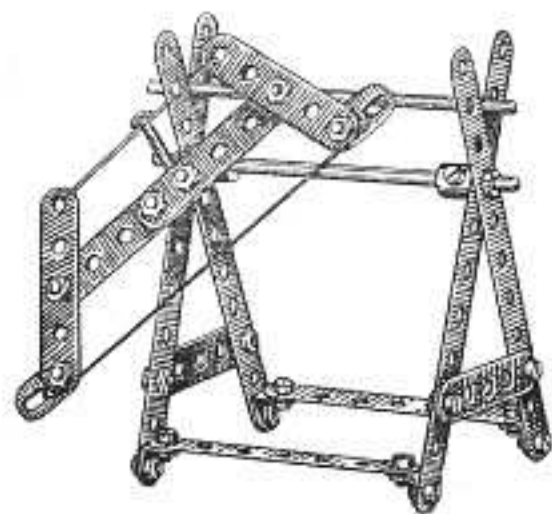


No 12. Sackbarrow

No. 3—8
" 7—2
" 15—8
" 20—1
" 33—18
" 34—18
" 42—2
" 47—1



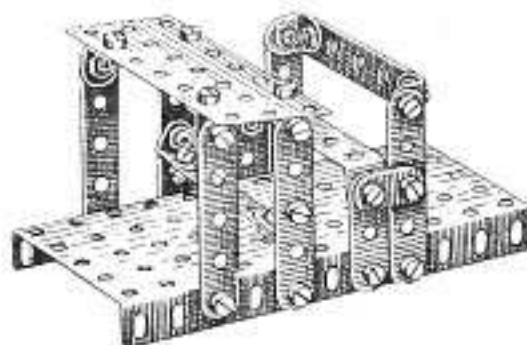
No 13. Sawing frame



No.	3—6
"	5—2
"	7—4
"	14—2
"	15—4
"	20—2
"	29—2
"	31—2
"	33—18
"	34—18
"	50—1

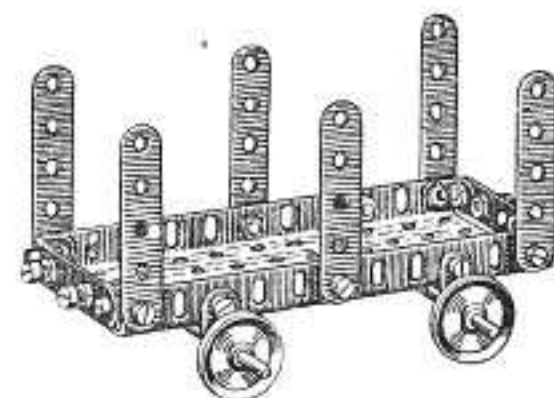
No 14. School desk

No.	1—2	No.	34—28
"	3—8	"	36—1
"	14—2	"	47—1
"	15—4	"	57—1
"	33—28		



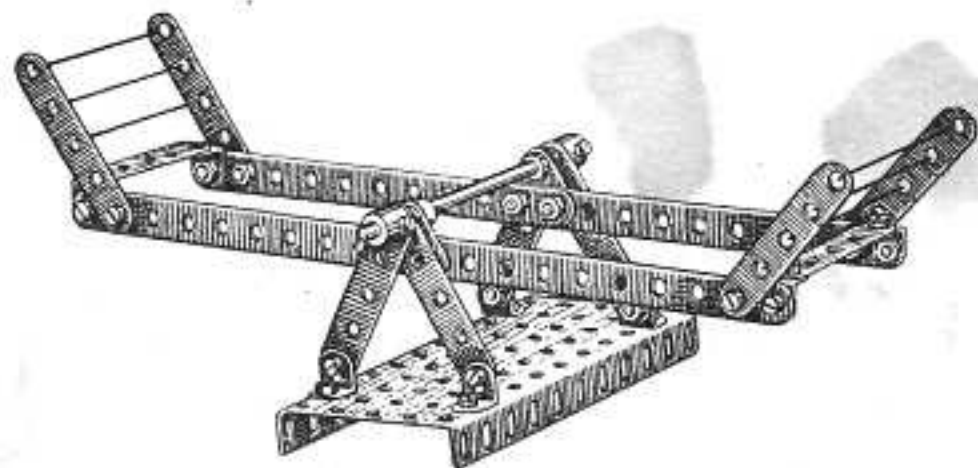
No 15. Railway truck

No.	3—8	No.	34—22
"	14—4	"	35—4
"	15—4	"	36—1
"	20—2	"	42—4
"	33—14		



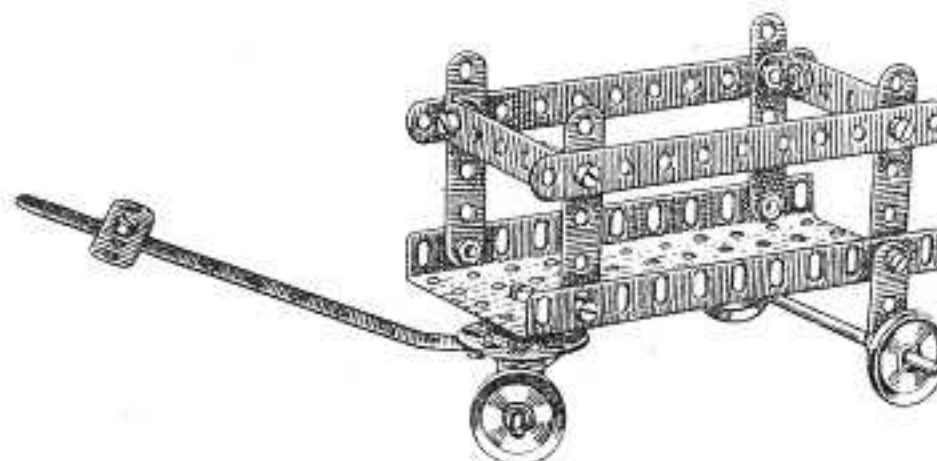
No 16. See-saw

No.	1—2	No.	29—2
"	3—8	"	31—2
"	7—4	"	33—23
"	14—4	"	34—23
"	15—6	"	36—1
"	20—1	"	47—1

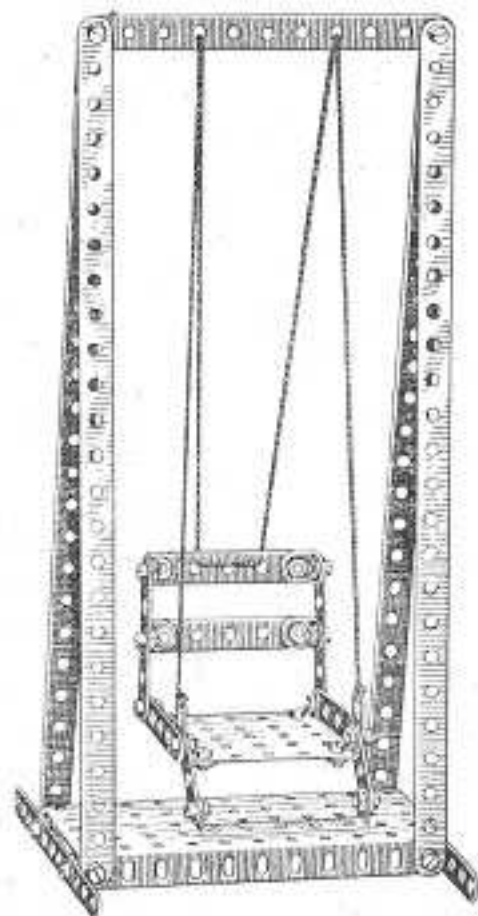


No 17. Hand truck

No.	1—2	No.	34—16
"	3—7	"	35—1
"	7—3	"	36—1
"	15—4	"	41—1
"	20—2	"	42—4
"	33—16	"	47—1

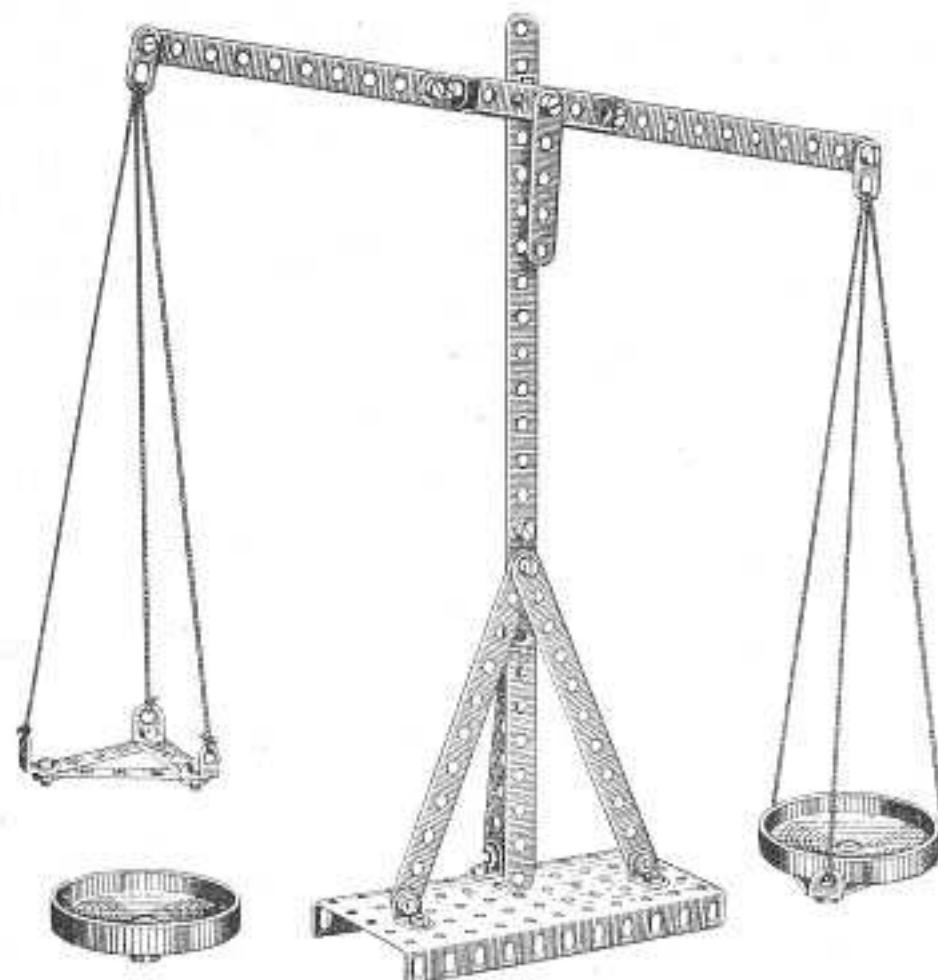


No 23. Swing



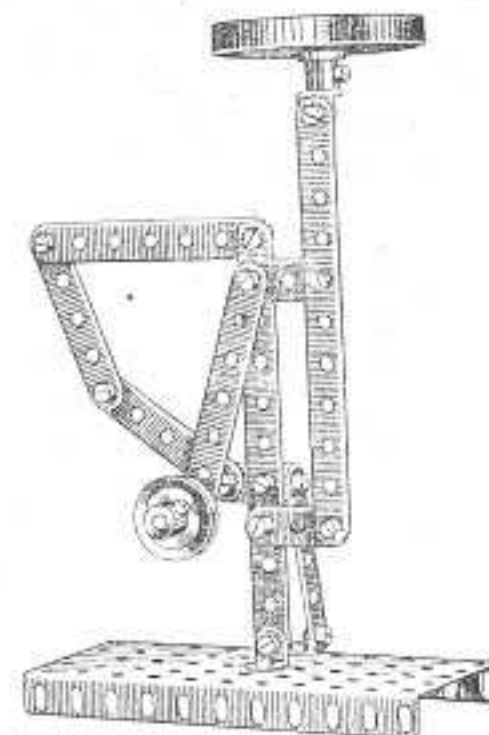
No.	1—2
"	3—6
"	7—3
"	11—4
"	14—2
"	15—12
"	33—28
"	34—28
"	36—1
"	47—1
"	55—1

No 24. Beam Scales

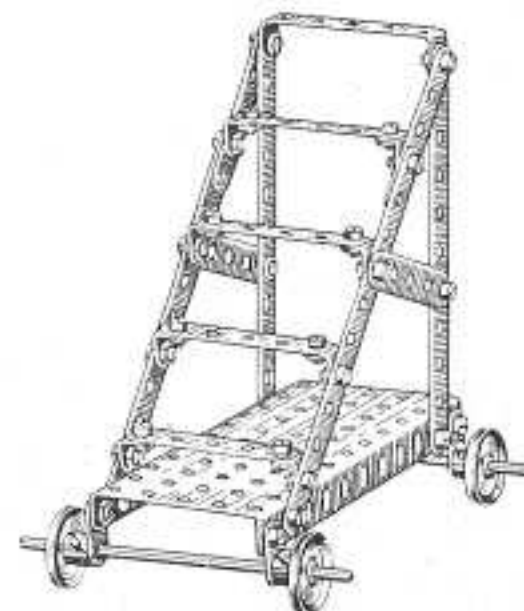


No.	1—2
"	3—3
"	5—2
"	7—2
"	14—1
"	15—4
"	16—1
"	29—1
"	33—11
"	34—19
"	35—5
"	36—1
"	40—1
"	42—2

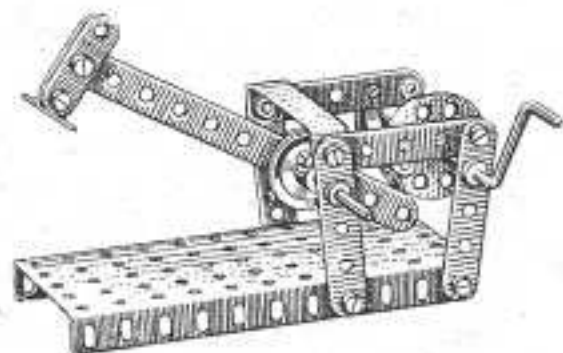
No 25. Letter Scales



No 27. Wheel steps



No 26. Hammer mill



No.	1—2
"	3—6
"	7—1
"	15—3
"	20—1
"	25—1
"	29—3
"	33—11
"	34—11
"	36—1
"	41—1
"	42—3
"	47—1

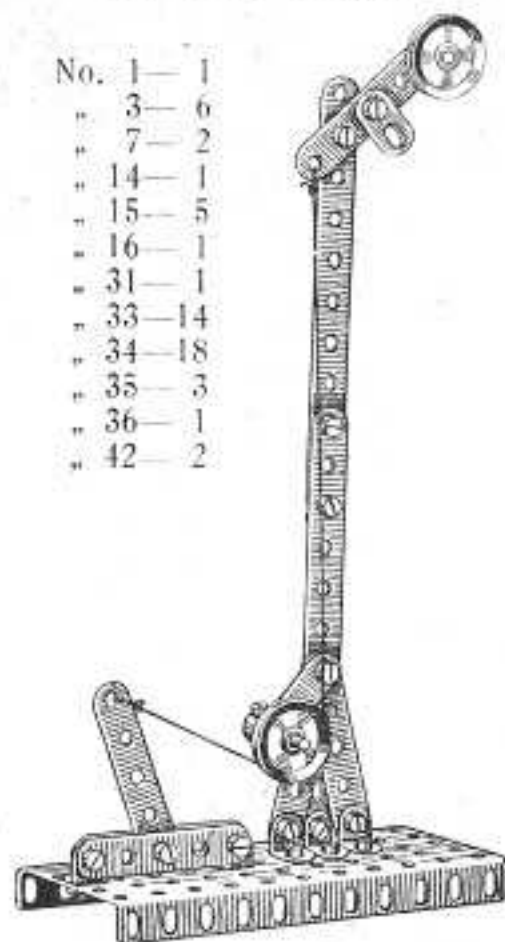
No.	3—7	No.	31—2
"	7—3	"	33—22
"	11—2	"	34—22
"	14—2	"	36—1
"	15—12	"	40—2
"	16—1	"	47—1



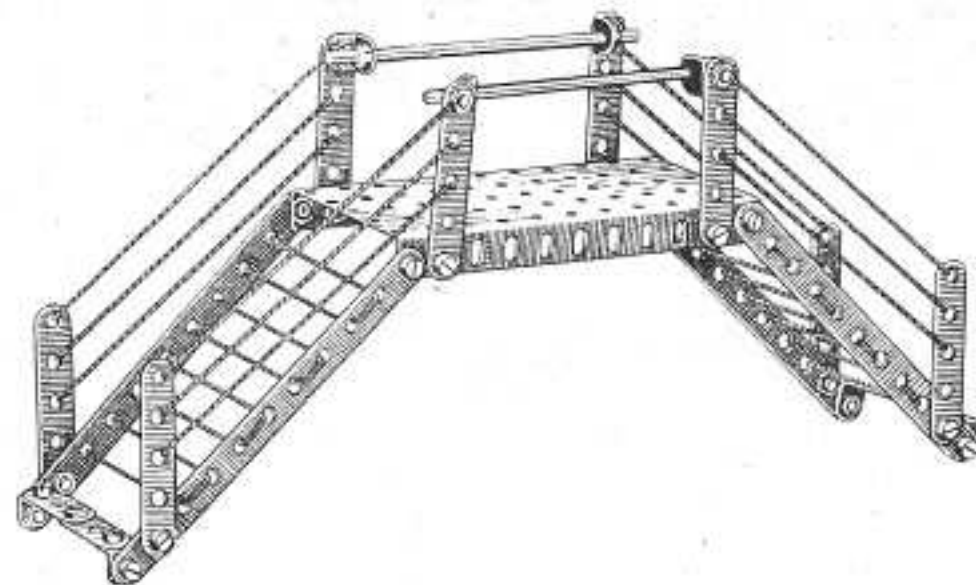
No.	3—8
"	7—4
"	14—4
"	15—8
"	20—2
"	33—28
"	34—28
"	36—1
"	42—4
"	47—1

No 28. Signal

No. 1—1
 " 3—6
 " 7—2
 " 14—1
 " 15—5
 " 16—1
 " 31—1
 " 33—14
 " 34—18
 " 35—3
 " 36—1
 " 42—2



No 29. Railway bridge

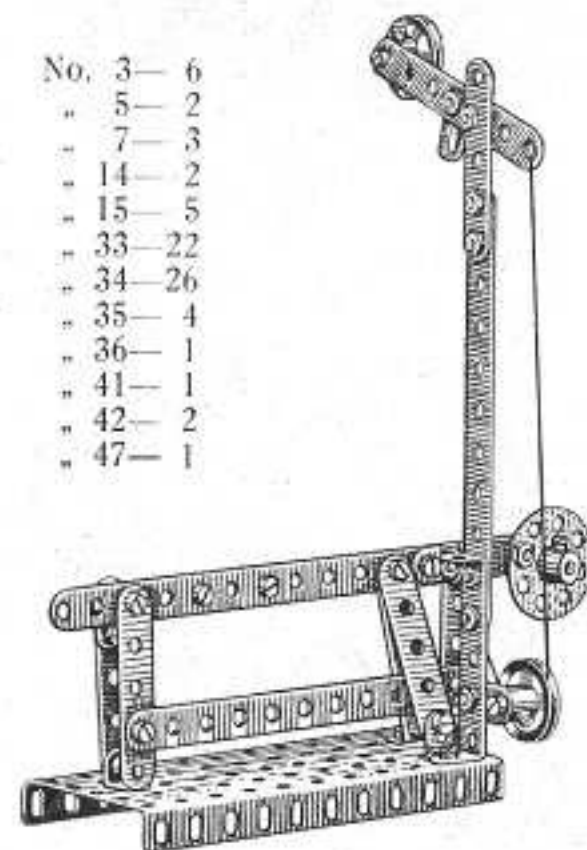


No. 1—2 No. 29—4
 " 3—8 " 33—23
 " 7—4 " 34—23
 " 15—6 " 36—1
 " 20—2 " 47—1



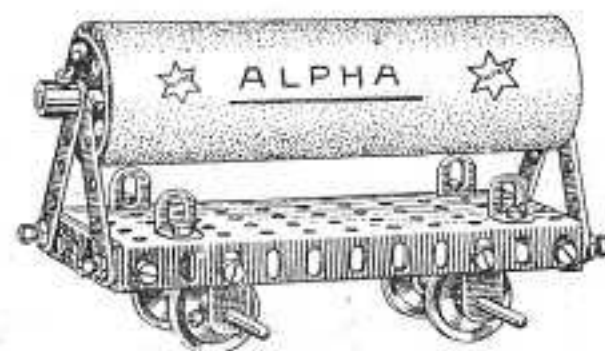
No 30. Railway barrier

No. 3—6
 " 5—2
 " 7—3
 " 14—2
 " 15—5
 " 33—22
 " 34—26
 " 35—4
 " 36—1
 " 41—1
 " 42—2
 " 47—1



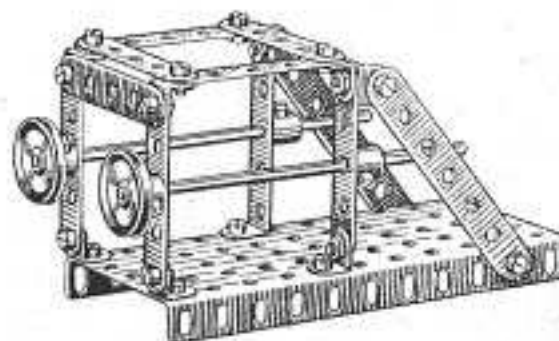
No 31. Tank waggon

No. 1—2 No. 20—2 No. 36—1
 " 3—5 " 31—1 " 41—1
 " 14—4 " 33—18 " 42—4
 " 15—12 " 34—29 " 47—2
 " 16—1 " 35—5



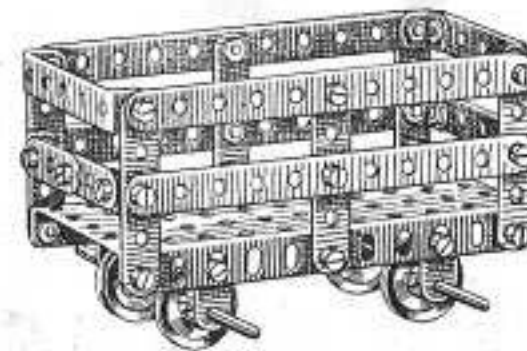
No 32. Buffer stop

No. 3—8* No. 33—19
 " 5—2 " 34—19
 " 15—8 " 36—1
 " 20—2 " 42—2
 " 31—2 " 47—1



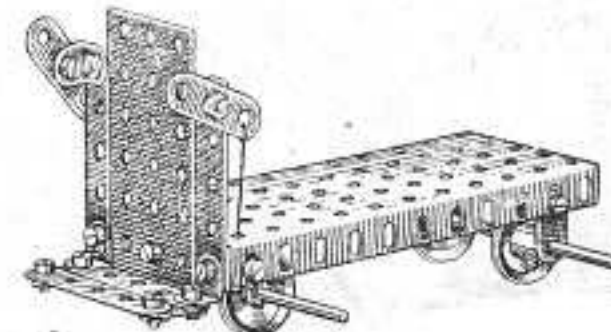
No 33. Railway baggage truck

No. 1—2 No. 15—6 No. 36—1
 " 3—8 " 20—2 " 42—4
 " 7—4 " 33—29 " 47—1
 " 14—4 " 34—29



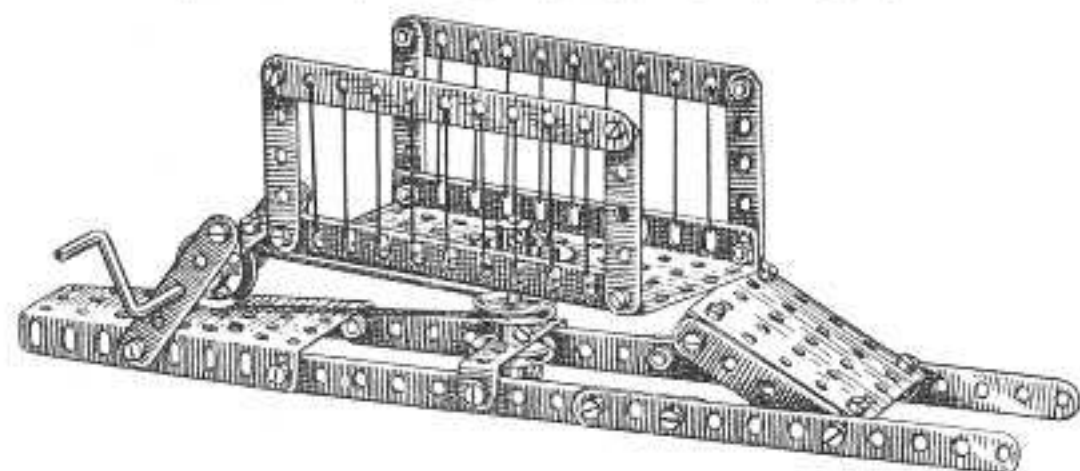
No 34. Electric truck

No. 1—2 No. 20—2 No. 36—1
 " 3—4 " 33—14 " 42—4
 " 14—4 " 34—20 " 45—1
 " 15—7 " 35—3



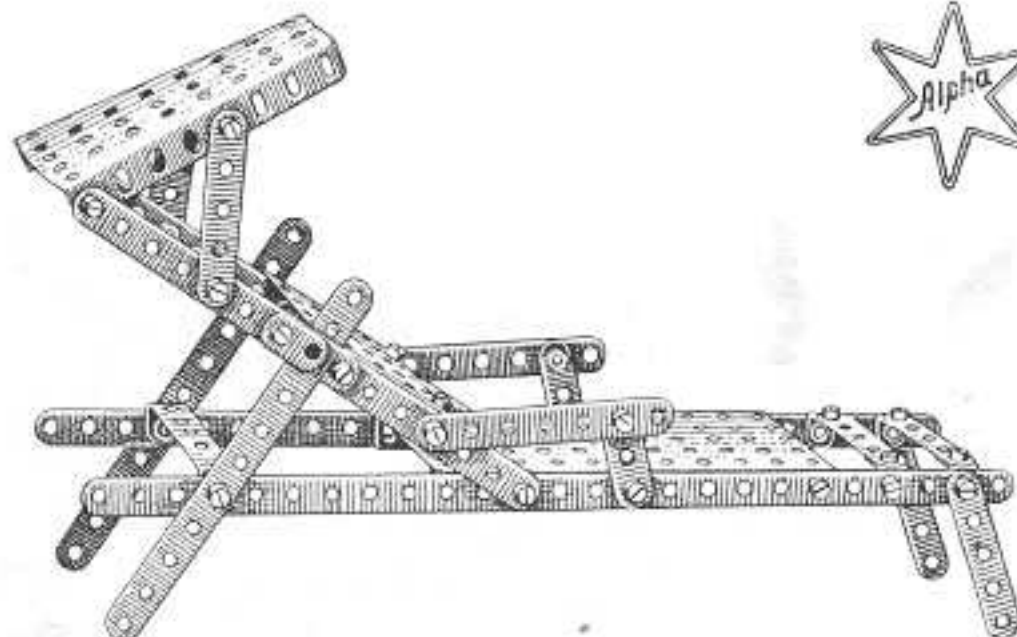
No 39. Swing bridge

No. 3—8	No. 25—1	No. 34—32	No. 41—1
" 7—6	" 29—2	" 35—4	" 42—3
" 15—4	" 31—1	" 36—1	" 47—2
" 17—1	" 33—28	" 39—1	" 55—1



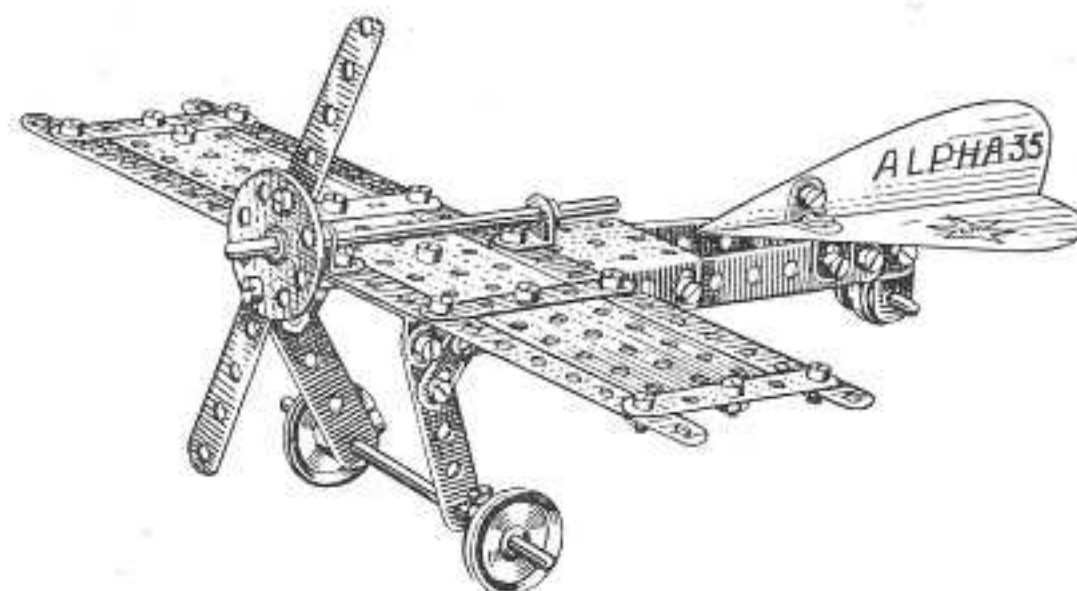
No 36. Hammock chair

No. 1—2	No. 11—2	No. 34—36	No. 47—1
" 3—8	" 14—4	" 35—4	" 55—1
" 5—2	" 15—6	" 36—1	
" 7—2	" 33—28	" 39—1	



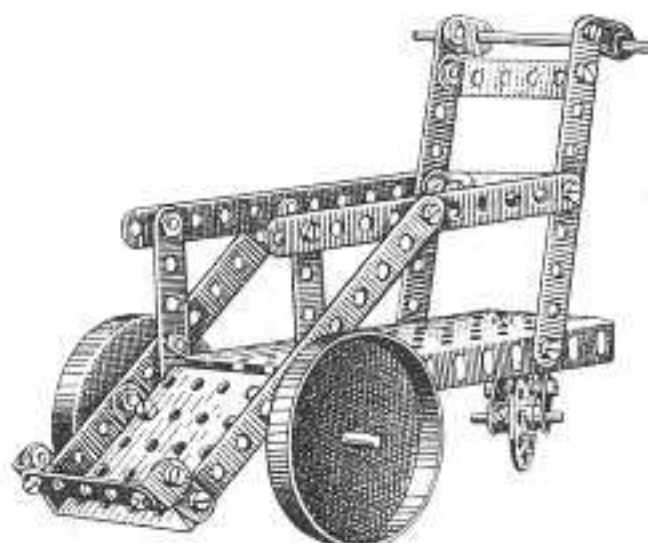
No 35. Aeroplane

No. 1—2
" 3—8
" 5—2
" 7—4
" 14—4
" 15—6
" 16—1
" 20—2
" 29—4
" 30—1
" 33—30
" 34—35
" 35—5
" 39—1
" 41—1
" 42—2
" 46—1
" 54—1
" 56—1
" 57—1



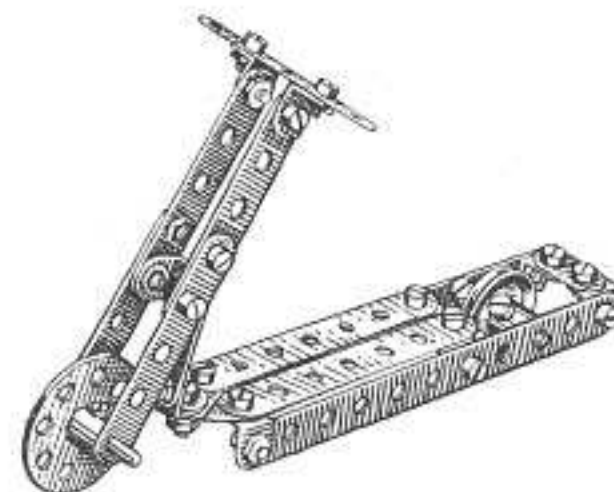
No 37. Invalid chair

No. 1—1	No. 16—1	No. 36—1
" 3—6	" 20—2	" 40—2
" 5—2	" 29—4	" 41—1
" 7—4	" 33—30	" 45—1
" 14—4	" 34—36	" 47—1
" 15—8	" 35—1	" 55—1



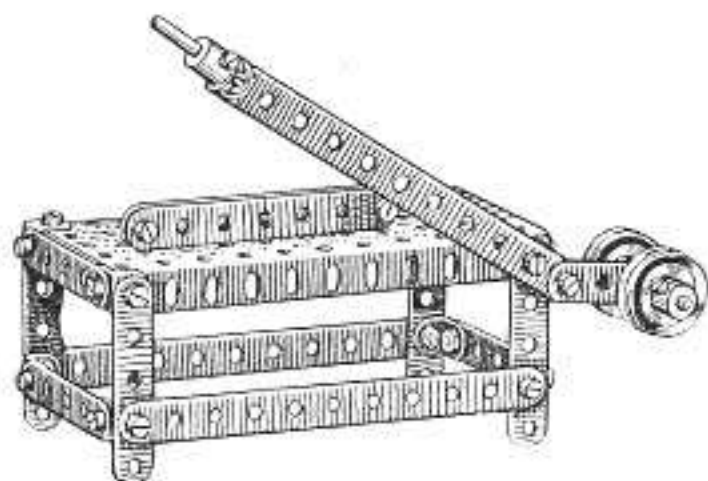
No 38. Scutter

No. 1—1	No. 15—11	No. 34—24
" 3—5	" 16—2	" 35—1
" 5—2	" 29—1	" 41—1
" 7—2	" 31—1	" 42—1
" 14—4	" 33—22	



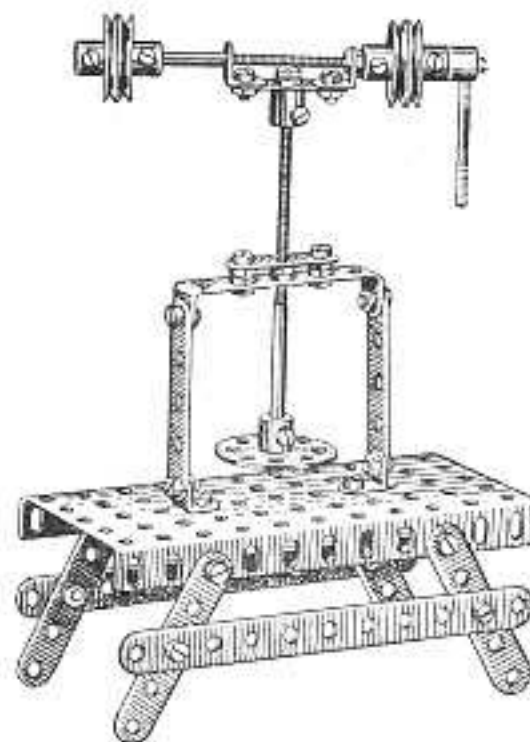
No 40. Shearing machine

No. 1—1	No. 33—20
" 3—8	" 34—25
" 5—2	" 35—2
" 7—3	" 36—1
" 15—11	" 42—4
" 17—1	" 61—1
" 31—1	



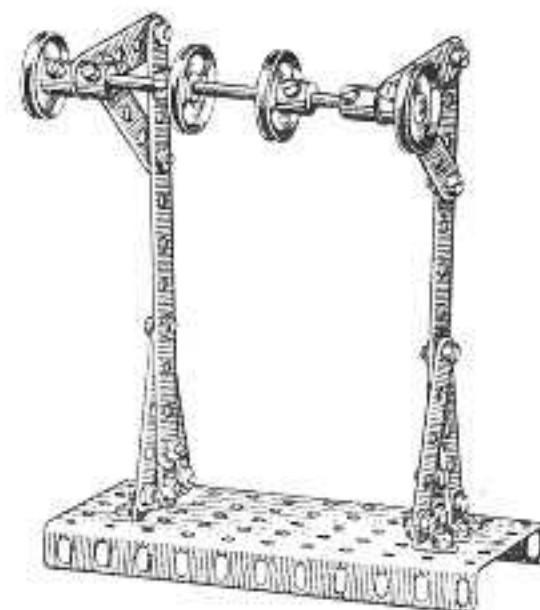
No 41. Spindle press

No. 1—2
" 3—6
" 7—2
" 15—4
" 31—2
" 33—16
" 34—28
" 35—2
" 36—1
" 41—1
" 42—4
" 47—1
" 61—1
" 64—2



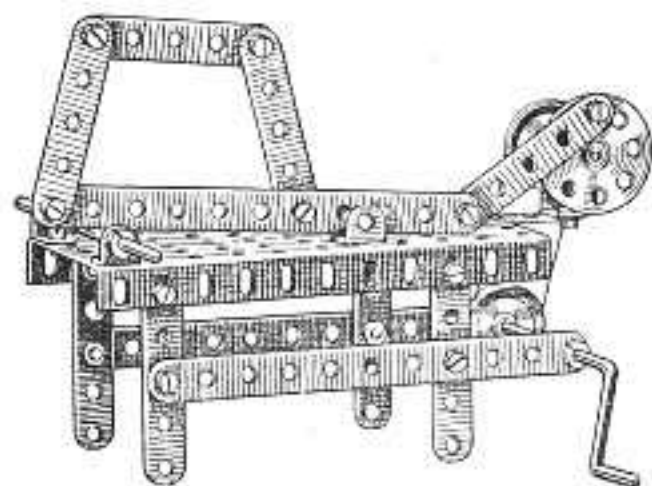
No 42. Transmission

No. 3—8
" 7—2
" 14—2
" 15—6
" 20—1
" 31—2
" 33—20
" 34—20
" 36—1
" 42—4



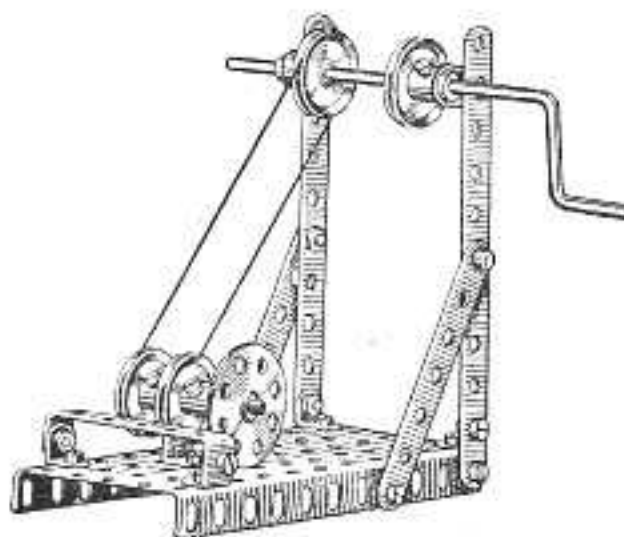
No 43. Bow saw

No. 1—1
" 3—8
" 7—3
" 15—4
" 17—1
" 20—1
" 25—1
" 29—4
" 33—17
" 34—21
" 35—2
" 36—1
" 41—1
" 42—2
" 45—1



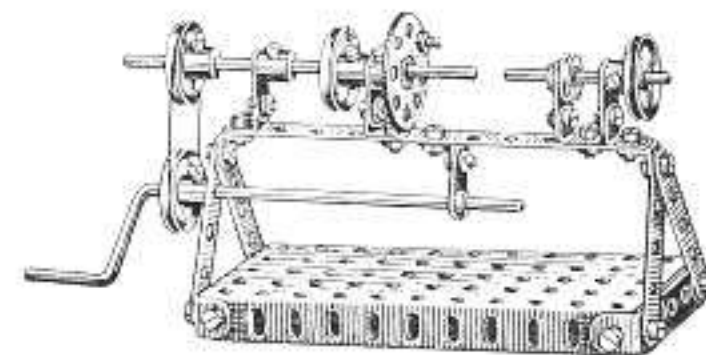
No 44. Polishing Machine

No. 5—2
" 7—2
" 14—2
" 15—4
" 17—1
" 25—1
" 29—2
" 33—17
" 34—17
" 36—1
" 41—1
" 42—4
" 45—1
" 47—1

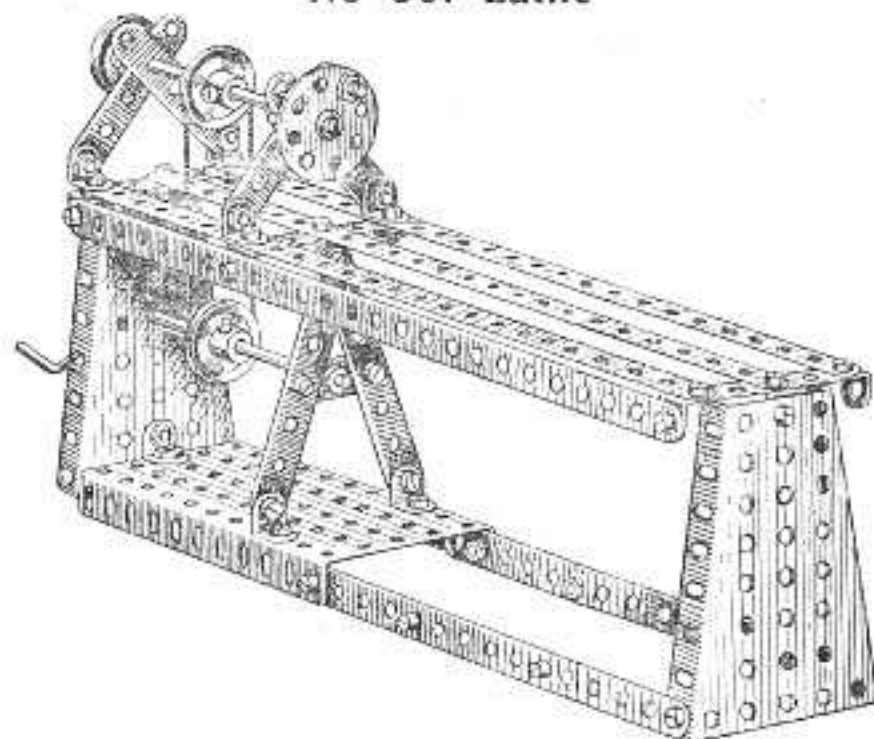


No 45. Small lathe

No. 3—5	No. 25—1	No. 35—1
" 7—1	" 29—2	" 36—1
" 14—3	" 30—1	" 41—1
" 15—6	" 31—1	" 42—4
" 17—1	" 33—18	" 45—1
" 20—1	" 34—19	" 47—1

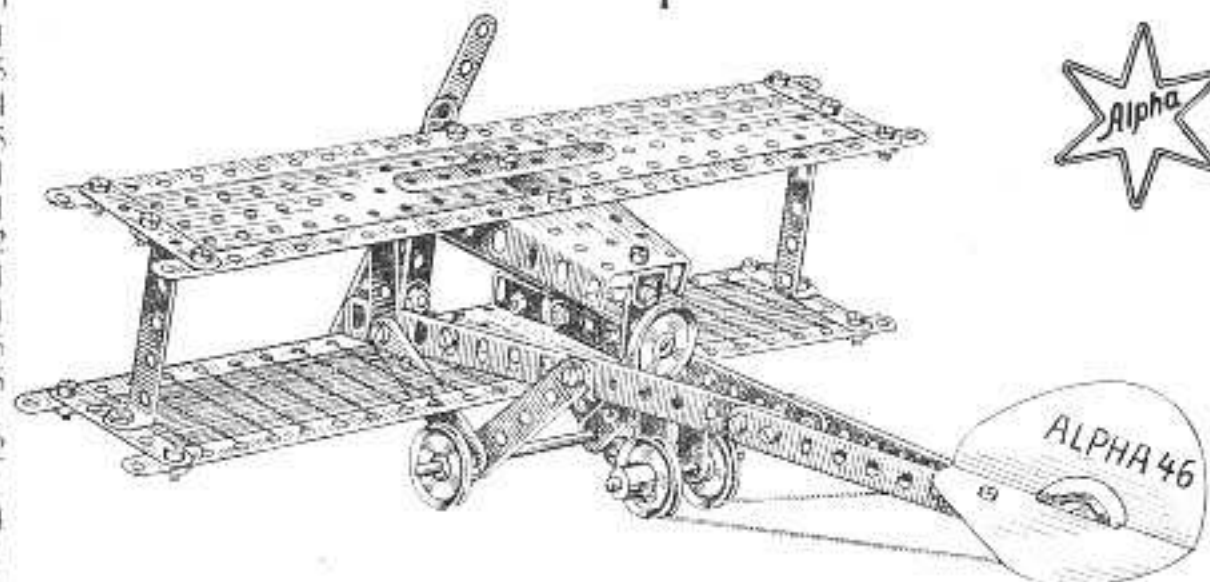


No 50. Lathe



No.	1—1	No.	1—2
"	3—6	"	3—10
"	5—2	"	5—1
"	7—4	"	7—5
"	11—4	"	11—4
"	15—12	"	15—5
"	20—1	"	16—1
"	25—1	"	17—1
"	29—1	"	20—2
"	31—1	"	29—1
"	33—35	"	31—1
"	34—36	"	33—35
"	35—1	"	34—35
"	36—1	"	35—1
"	39—2	"	39—2
"	41—1	"	41—1
"	42—4	"	42—4
"	47—1	"	43—1
		"	45—1
		"	47—2
		"	54—2

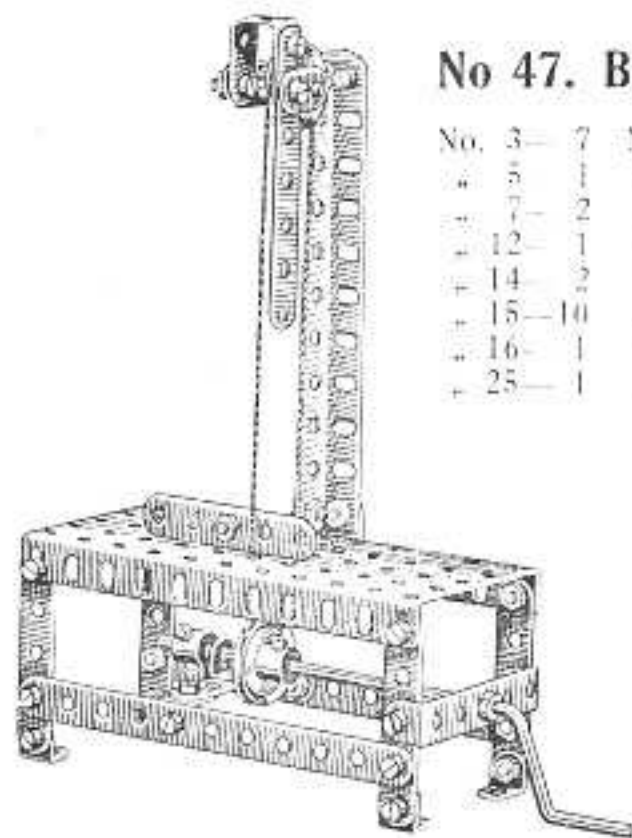
No 46. Biplane



No 49. Pillar drilling machine

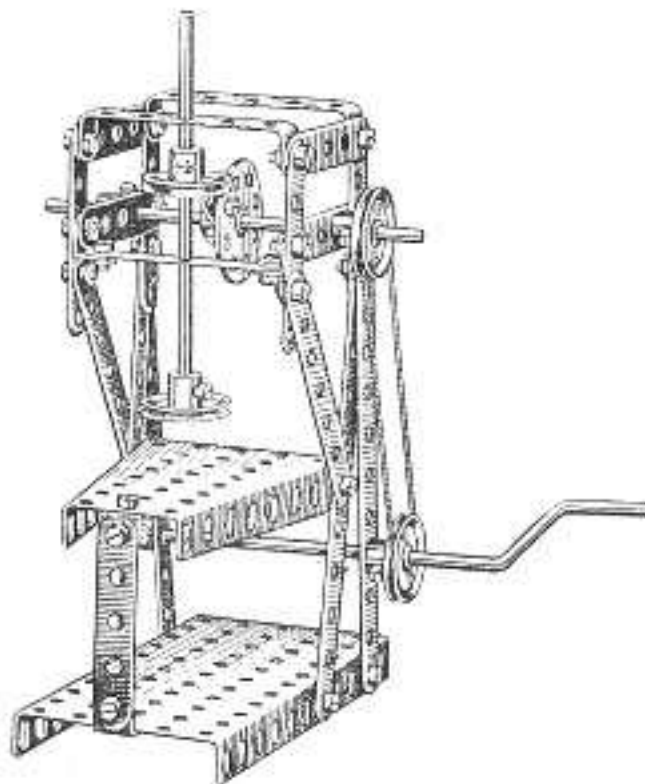
No 48. Drop hammer

No 47. Band saw

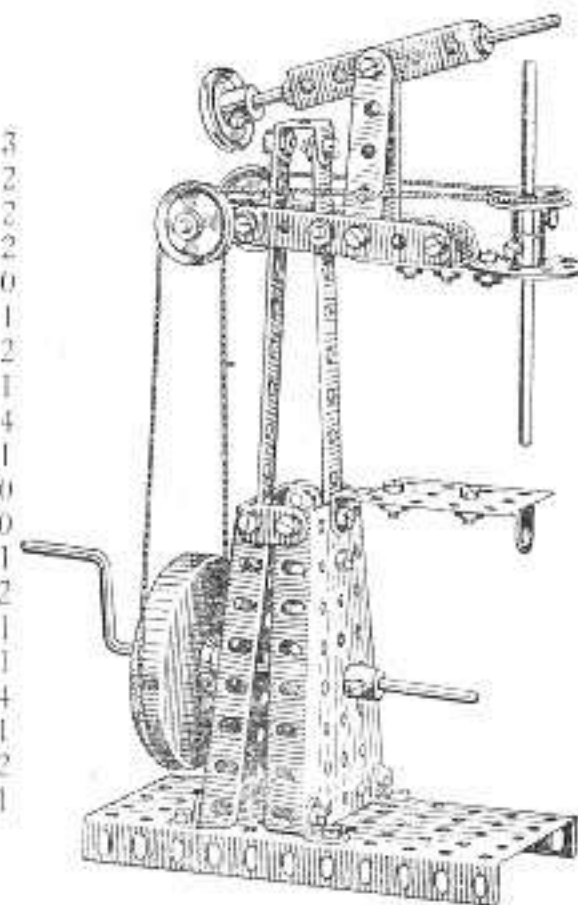


No.	3—7	No.	29—2
"	5—1	"	31—1
"	7—2	"	35—35
"	12—1	"	34—35
"	14—2	"	36—1
"	15—10	"	42—2
"	16—1	"	45—1
"	25—1	"	47—1

No.	3—9
"	5—2
"	7—4
"	14—1
"	15—4
"	20—2
"	25—1
"	31—2
"	33—25
"	34—25
"	36—1
"	39—1
"	41—1
"	42—4
"	47—2

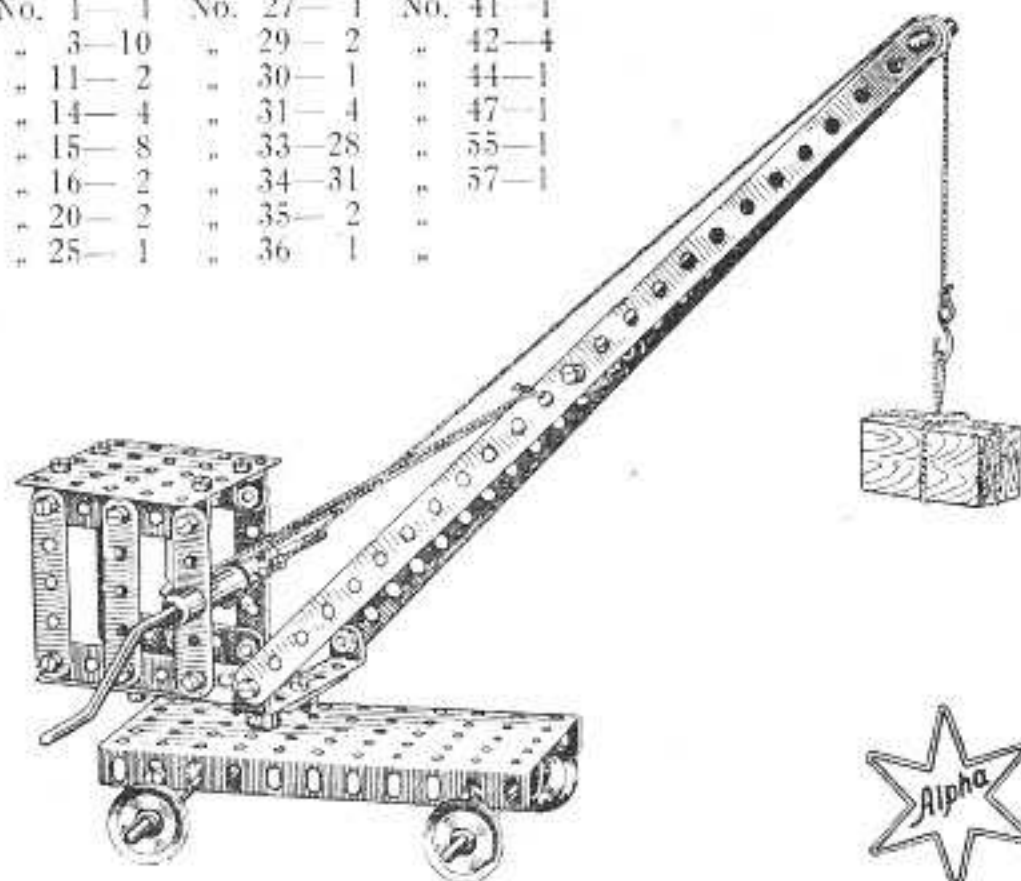


No.	3—3
"	5—2
"	7—2
"	14—2
"	15—10
"	17—1
"	20—2
"	25—1
"	29—4
"	31—1
"	33—30
"	34—30
"	36—1
"	39—2
"	40—1
"	41—1
"	42—4
"	45—1
"	47—2
"	56—1



No 51. Railway slewing crane

No. 1—1	No. 27—1	No. 41—1
" 3—10	" 29—2	" 42—4
" 11—2	" 30—1	" 44—1
" 14—4	" 31—4	" 47—1
" 15—8	" 33—28	" 55—1
" 16—2	" 34—31	" 57—1
" 20—2	" 35—2	
" 25—1	" 36—1	

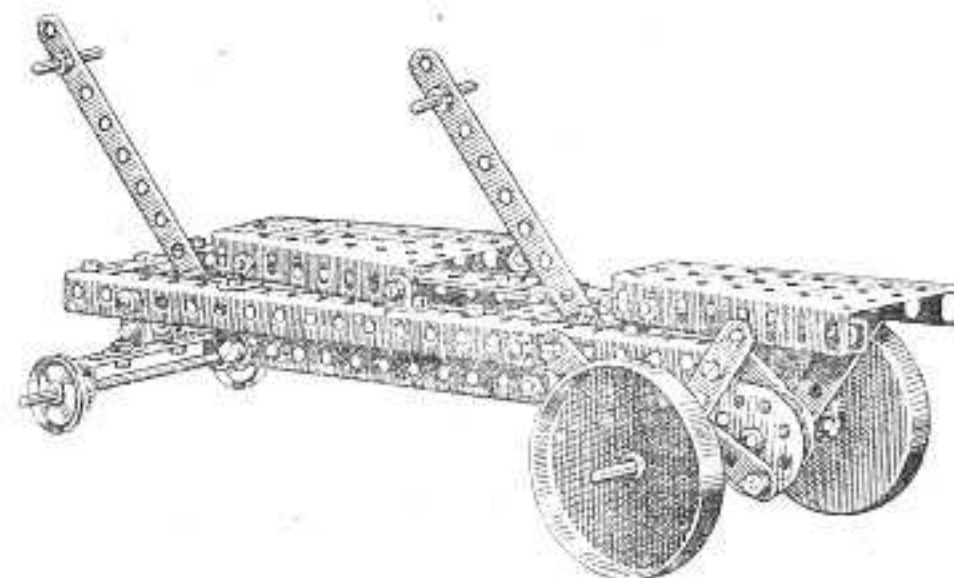


No 52. Pulley block



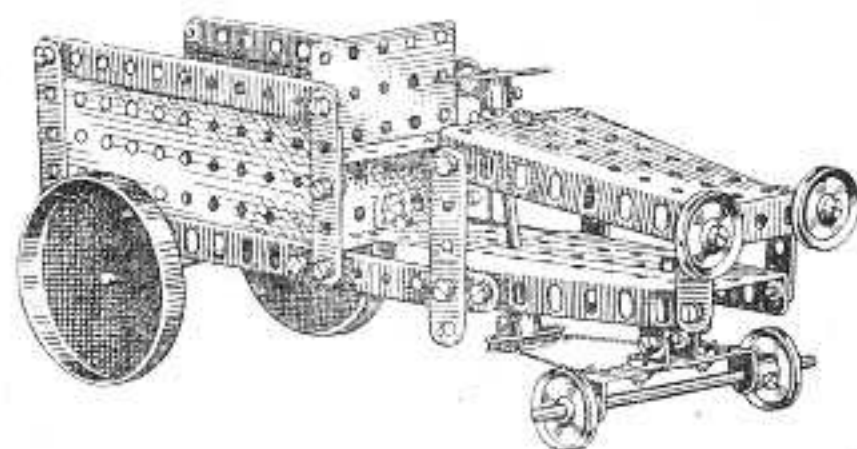
No 53. Double racer

No. 3—9	No. 16—2	No. 31—4	No. 40—2
" 5—2	" 17—2	" 33—26	" 41—1
" 7—2	" 18—2	" 34—34	" 42—4
" 12—4	" 20—1	" 35—4	" 45—1
" 15—8	" 29—4	" 39—2	" 47—1



No 54. Lowry

No. 1—2	No. 7—4	No. 19—1	No. 33—31
" 3—7	" 14—3	" 20—3	" 34—35
" 5—2	" 15—5	" 31—1	" 35—3

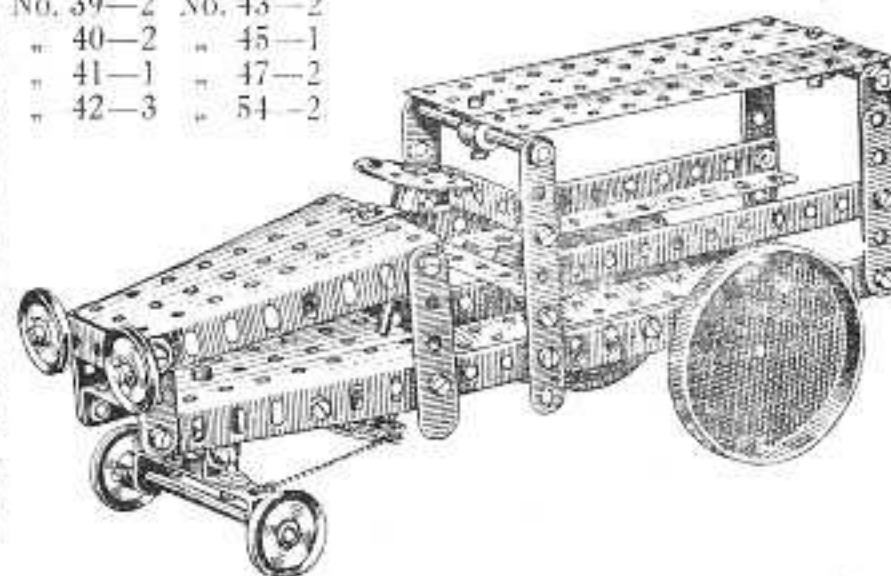


No. 36—1
" 39—2
" 40—2
" 41—1
" 42—3
" 43—2
" 45—1
" 47—2
" 54—2
" 55—1
" 56—1

No. 3—2
" 5—2
" 14—4
" 15—10
" 16—2
" 27—1
" 33—16
" 34—16
" 42—4

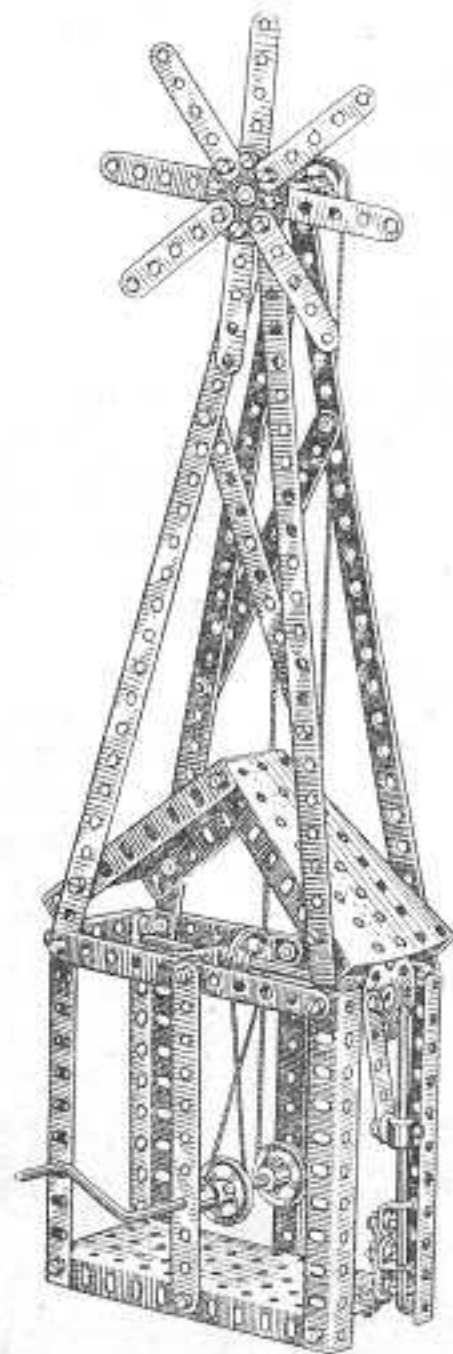
No 55. Motor omnibus

No. 1—2	No. 39—2	No. 43—2
" 3—8	" 40—2	" 45—1
" 5—2	" 41—1	" 47—2
" 7—2	" 42—3	" 54—2
" 12—2		
" 14—3		
" 15—4		
" 18—2		
" 19—1		
" 20—2		
" 29—4		
" 31—3		
" 32—2		
" 33—31		
" 34—35		
" 35—3		
" 36—1		





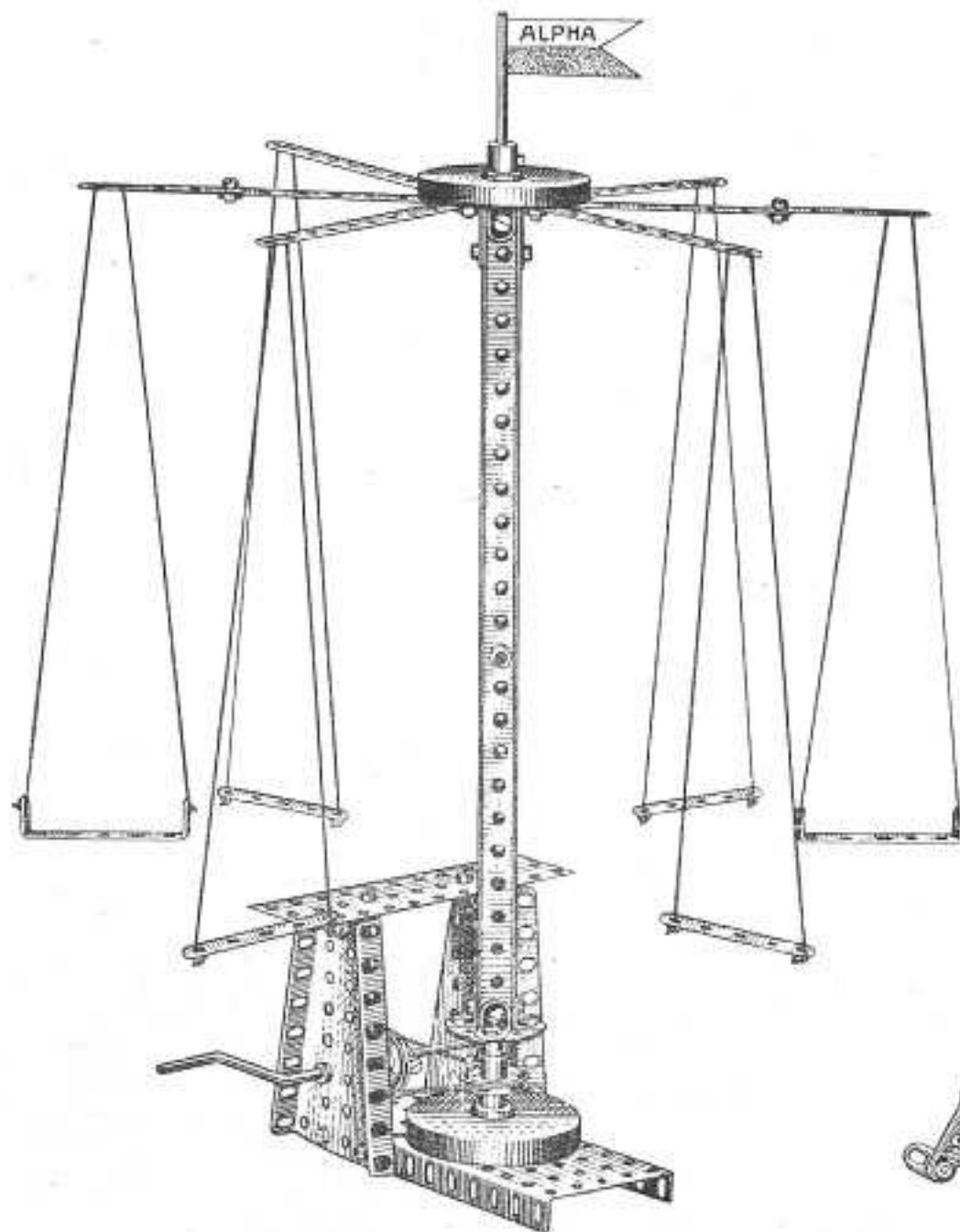
**No 56. Windwheel
with pump**



No. 1—1
" 3—10
" 7—6
" 11—4
" 12—4
" 15—3
" 17—1
" 20—2
" 25—1
" 29—1
" 31—3
" 33—33
" 34—37
" 35—3
" 36—1
" 39—2
" 41—1
" 42—4
" 44—1
" 47—2
" 58—2

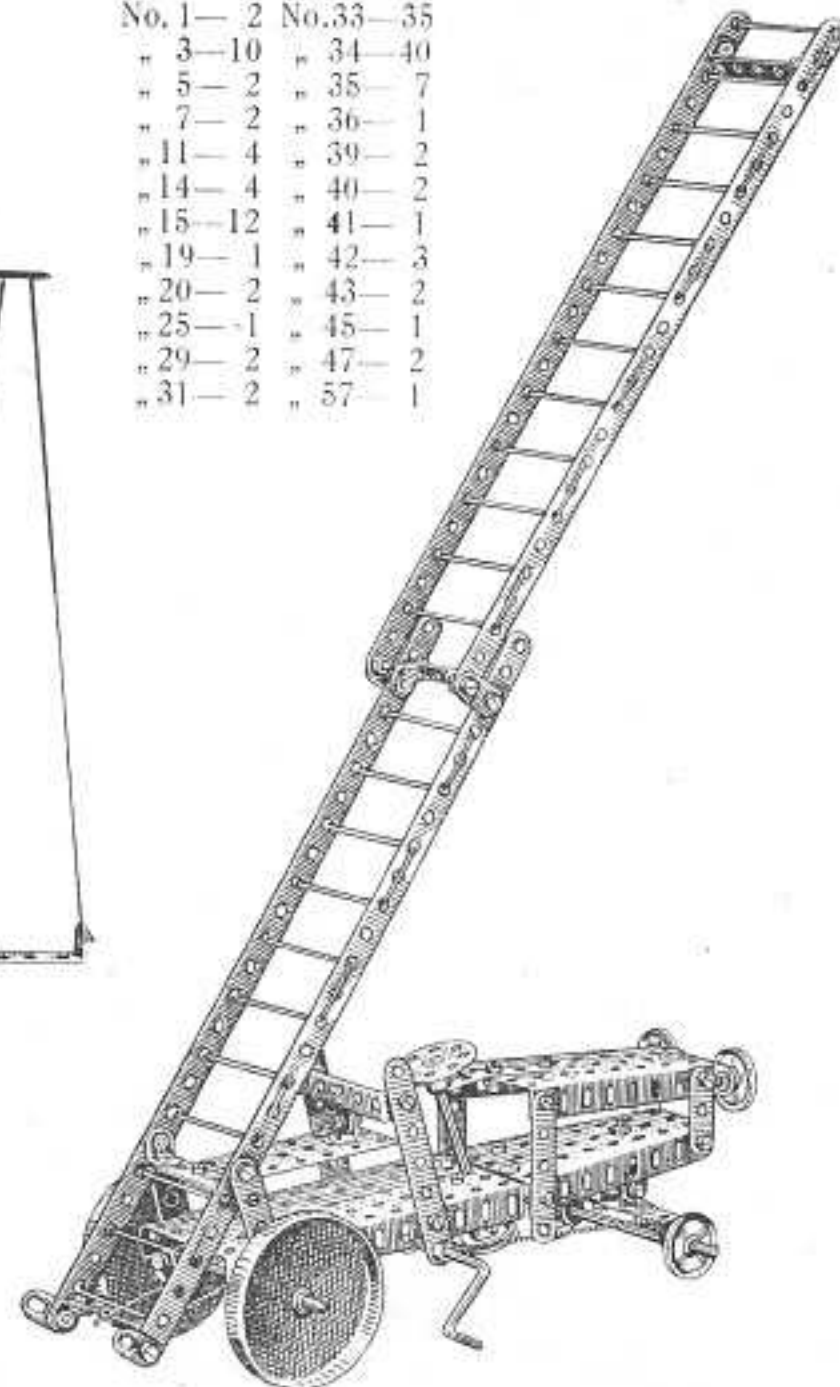
No 57. Chain round-about

No. 3—6	No. 20—2	No. 36—1	No. 45—1
" 5—2	" 25—1	" 39—2	" 47—2
" 7—4	" 29—2	" 40—2	" 54—1
" 11—4	" 33—30	" 41—1	" 57—1
" 15—8	" 34—32	" 42—3	" 60—1



**No 58. Fire Brigade car
with ladder**

No. 1—2	No. 33—35
" 3—10	" 34—40
" 5—2	" 35—7
" 7—2	" 36—1
" 11—4	" 39—2
" 14—4	" 40—2
" 15—12	" 41—1
" 19—1	" 42—3
" 20—2	" 43—2
" 25—1	" 45—1
" 29—2	" 47—2
" 31—2	" 57—1





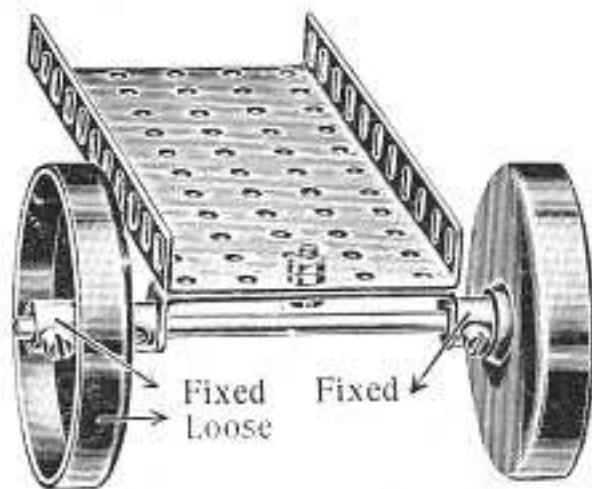
1. Locknut

A second nut No 34 is attached as a locknut to prevent the parts working loose.



5. Overlapping connection.

Two pieces of strip are joined up by being laid over each other and screwing in one or more screws.



7. Loose and fixed wheel



Elements.



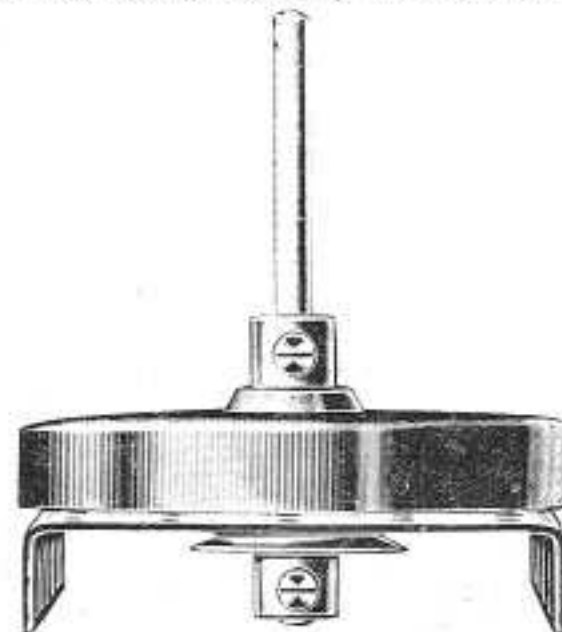
2. Screw as bearing journal

The bearing screw is fixed by the lock screw at the side, and rotates with this and the perforated disc in the base plate or in a perforated strip.



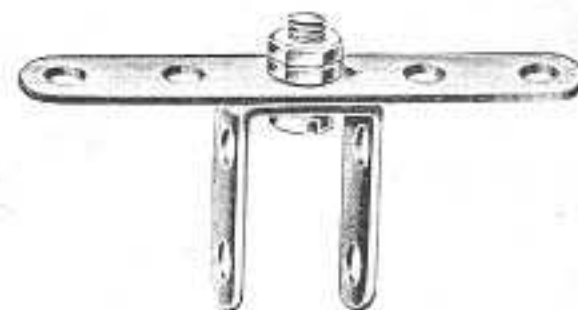
4. Screw as bearing.

The pulley is rotatable and fixed on the screw, which can be held fast on both sides of a perforated strip by means of a nut.



8. Fixed axle

The shaft which is securely screwed to a wheel can be firmly fixed against the base plate by a cord pulley or a locking ring.



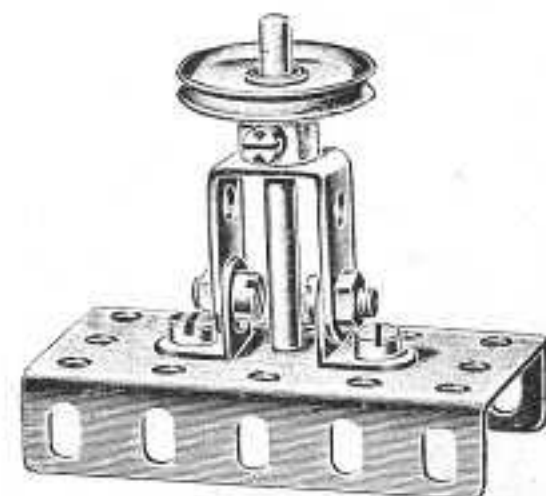
3. Loose Screw connection.

A second nut is screwed up tight against the first, as in No 1.



6. Joint connection

The ends of the parts to be joined are pushed together and bound by flat strips (fish plates).



9. Floor stand

screwed to the base plate, for rotatable shafts.



Component Parts for the „ALPHA“ Metal Construction Box



Flat Strip

No 1	= 3 holes	35 mm	No 6	= 9 holes	106 mm
" 2	= 4 "	46 "	" 7	= 11 "	130 "
" 3	= 5 "	58 "	" 8	= 13 "	155 "
" 4	= 6 "	70 "	" 9	= 15 "	180 "
" 5	= 7 "	82 "	" 10	= 17 "	200 "
" 5a	= 8 "	94 "	" 11	= 25 "	300 "



Angle carrier

No 12	= 11 holes	= 13 cm
" 13	= 25 "	= 30 "



No 14
Flat strip

No 15
Angle strip

No 27
Wire hook

No 16	Shaft	3 cm	No 21	Shaft	13 cm
" 17	"	5 "	" 22	"	15 "
" 18	"	7 "	" 23	"	20 "
" 19	"	9 "	" 24	"	30 "
" 20	"	11 "			



No 25 Hand crank



No 42 Cord pulley with screw
Diameter 25 mm

No 43 Cord pulley without screw
Diameter 25 mm



No 30
Cord pulley
Dia. 12 mm



No 41 Perforated disc
with screw
Dia. 36 mm



No 32 Iron screw
No 33 Brass screw, short
No 34 Brass nut
No 35 Brass screw, long



Threaded pin			
No 60	= 3 cm	No 64	= 11 cm
" 61	= 5 "	" 65	= 15 "
" 62	= 7 "	" 66	= 25 "
" 63	= 9 "		



No 26 Screwdriver
No 68 Screwdriver with wooden handle



No 44
Coupling
with 2 screws



No 31
Locking ring
with screw



No 29
Spring
collar



No 45 Forked bearing, 5 holes
No 45a Forked bearing, 3 holes



No 46	Connecting strip	5 holes
" 47	"	7 "
" 48	"	9 "



No 59
Clamp



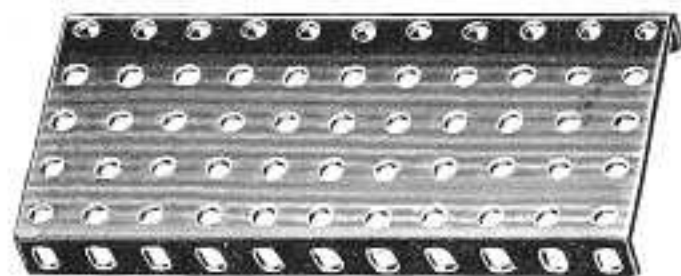
No 58
Washer



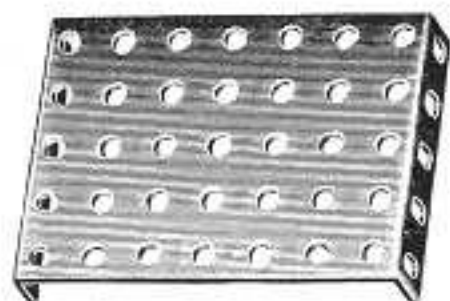
No 28 Cord
about 13 feet long



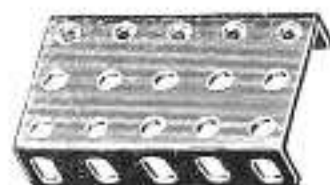
Component Parts for the „ALPHA” Metal Construction Box



No 36. Large flanged perforated plate 13×6 cm



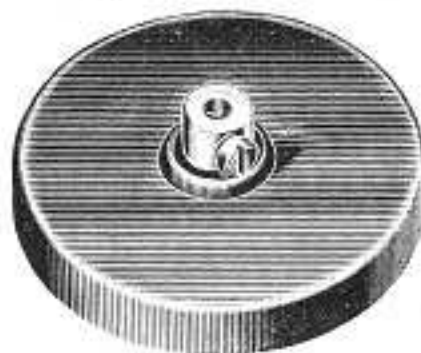
No 37. Medium flanged perforated plate 8×6 cm



No 38. Small flanged perforated plate $6 \times 3\frac{1}{2}$ cm



No 39. Sector plate



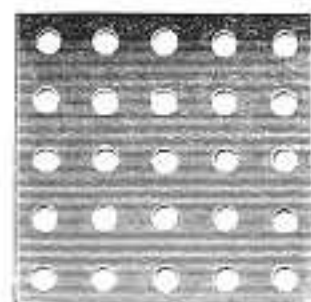
No 40. Wheel disc (pressed material) with screw



No 53. Spiral wire, length 15 cm
 „ 53a „ „ „ 25 „
 „ 53b „ „ „ 35 „
 „ 53c „ „ „ 45 „



No 67. Spanner



No. 54 Perforated plate $3\frac{1}{2} \times 13$ cm
 „ 55 „ „ 6×6 „
 „ 56 „ „ $3\frac{1}{2} \times 4\frac{1}{2}$ „
 „ 57 „ „ $3\frac{1}{2} \times 8\frac{1}{2}$ „



No 51. Bearing 5 holes
 „ 51a „ 7 „



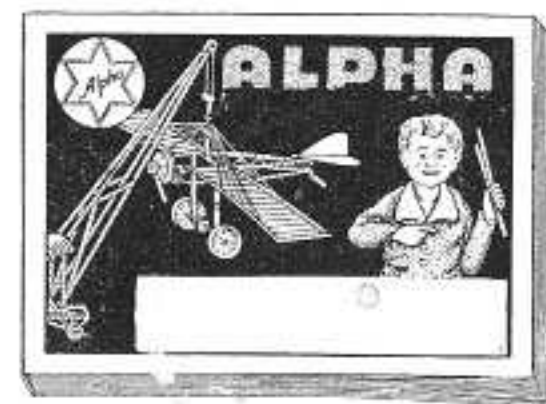
No 49. Double angle strip 3 holes

No 52. Crank arm with screw



No 50. Double angle strip 4 holes

No 50a. Triple angle strip 4 holes



Book of Instructions



Contents of the ALPHA Metal Construction Box



No	Description	Number of pieces in size			No	Description	Number of pieces in size		
		0	0E	1			0	0E	1
1	Flat strip, 3 holes	2	—	2	36	Large flanged perforated plate	1	—	1
2	" " 4 "	—	—	—	37	Medium perforated plate	—	—	—
3	" " 5 "	8	2	10	38	Small perforated plate	—	—	—
4	" " 6 "	—	—	—	39	Sector plate	1	1	2
5	" " 7 "	2	—	2	40	Wheel disc (pressed material)	2	—	2
5a	" " 8 "	—	—	—	41	Perforated disc with screw	1	—	1
6	" " 9 "	—	—	—	42	Cord pulley with screw	4	—	4
7	" " 11 "	6	—	6	43	Cord pulley without screw	—	2	2
8	" " 13 "	—	—	—	44	Coupling with 2 screws	—	1	1
9	" " 15 "	—	—	—	45	Forked bearing, 5 holes	1	—	1
10	" " 17 "	—	—	—	45a	" " 3 "	—	1	1
11	" " 25 "	—	4	4	46	Connecting strip, 5 holes	—	—	—
12	Angle carrier 11 holes	—	6	6	47	" " 7 "	1	1	2
13	" " 25 "	—	—	—	48	" " 9 "	—	—	—
14	Flat strip, 2 holes	4	—	4	49	Double angle strip, 3 holes	—	—	—
15	Angle strip, 2 holes	12	—	12	50	" " 4 "	—	—	—
16	Shaft 3 cm	1	1	2	50a	Triple angle 4 holes	—	—	—
17	" 5 "	1	1	2	51	Bearing, 5 holes	—	—	—
18	" 7 "	—	2	2	51a	" 7 "	—	—	—
19	" 9 "	—	2	2	52	Crank arm with screw	—	—	—
20	" 11 "	2	—	2	53	Spiral spring, 15 cm	—	—	—
21	" 13 "	—	—	—	54	Perforated plate, 3 1/2 x 13 cm	—	2	2
22	" 15 "	—	—	—	55	" " 6 x 6 cm	1	—	1
23	" 20 "	—	—	—	56	" " 3 1/2 x 4 1/2 cm	—	1	1
24	" 30 "	—	—	—	57	" " 3 1/2 x 8 1/2 cm	1	—	1
25	Hand crank	1	—	1	58	Washer	5	5	10
26	Screw driver	1	—	1	59	Clamps	5	—	5
27	Wire hook	1	—	1	60	Threaded pin, 3 cm	—	2	2
28	Cord 13 feet	1	—	1	61	" " 5 "	—	2	2
29	Spring collar	4	—	4	62	" " 7 "	—	2	2
30	Cord pulley 12 mm	1	—	1	63	" " 9 "	—	—	—
31	Lock ring with screw	2	2	4	64	" " 11 "	—	2	2
32	Iron screws	2	—	2	65	" " 15 "	—	—	—
33	Brass screws, short	30	5	35	66	" " 25 "	—	—	—
34	Brass nuts	30	8	38	67	Spanner	1	—	1
35	Brass screws long	5	5	10	68	Screwdriver with handle	—	—	—

Size	0	0E	1	etc.
Total Number of parts	140	60	200	