TECNICO This Swiss system, which ran from 1933 to the 1950s, has unusual parts, and its extending 'strips' made from one 'U' section part sliding in another have, as far as I know, never been copied. This account is based on 2 early complete sets to hand, plus recent information from Urs Flammer, & earlier from Thomas Keel & Richard Symonds. Thank you to all.

HISTORY A leaflet in German with the Sets was from Joutec A. C., 30 Rue du Stand, Genf (Geneva). It shows Sets 1, 1A, & 2, and speaks of larger sets that will be on sale in 1935. It also advertises a model competition to end in Dec. 1935. So, given a manual 2-34 (manuals have a set number followed by a number which is thought to indicate a year), and the dates of the patents described later, it is likely that TECNICO was introduced in 1934 or possibly 1933. The larger sets mentioned in the Leaflet were the Nr.3, the largest in the range, and the linking set 2A.

All later literature is in French & German. A 1943 price list has a starter Set A with 5 add-on sets B-F in addition to the basic outfits. Sets A-F together were equivalent to Set 2. The A-F sets were probably introduced in 1936: a French brochure (from Tecnico, 65 rue de Courcelles, Paris 8e) lists the contents of Sets A-F and the A includes a manual 0-36. (Why '0' rather than 'A'? Was a Set 0 ever contemplated?) No manual is shown for the other sets but Set A was said to contain a slip which a dealer would exchange for a 2-36 manual.

Another 1943 price list also includes combined Sets A-B, C-D, & E-F, and one headed 1943-44 has in addition Set 21 with 3 add-on Sets 22-24. A 1946 price list has all the above outfits.

None of the literature after the Leaflet shows a maker until the 1946 price list in which it is Tecnico, Emile Beiner, La Neuveville (a town on Lake Biel). The maker would have been on the missing back cover of the 3-41 manual described later.

No end date is known for TECNICO but it is said that it continued until at least 1950 and perhaps until around 1955. A patent from 1952 could indicate that new parts were being considered.

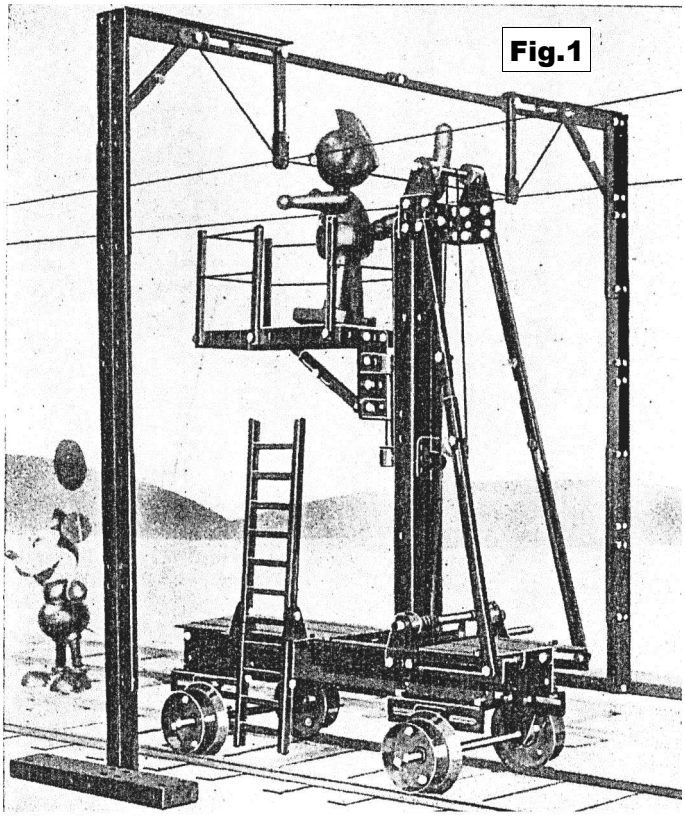


Fig.1

3.6 Gerüstwagen mit aufziehbarer und drehbarer Plattform
Plate-forme élévatrice et pivotante sur truck

2-1 2-3 2-4 2-9 2-11 3-13 1-17 1-18 5-19 6-24 8-25 3-31
2-33 4-34 8-16 2-47 1-48 2-50 2-51 5-66 4-96 4-97 4-98 6-103
115-113 2-120 2-121 1-133

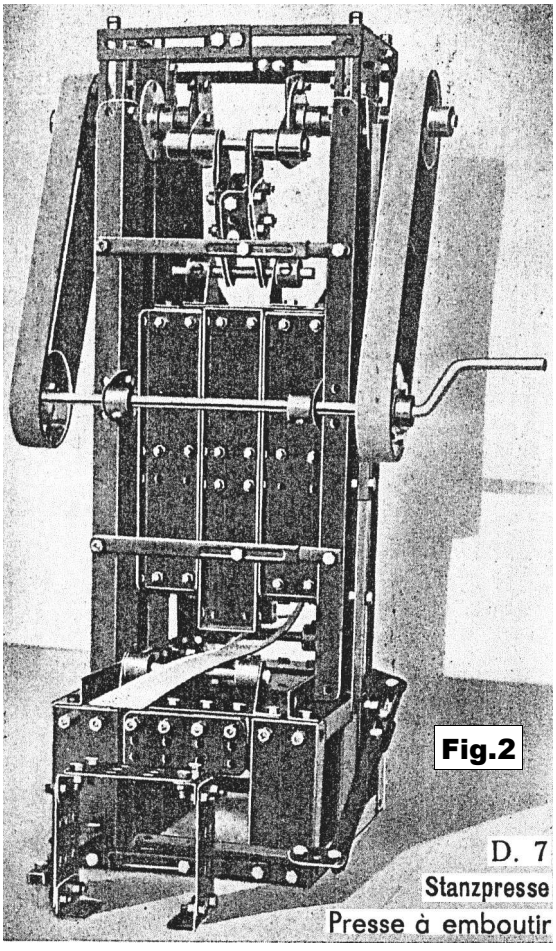


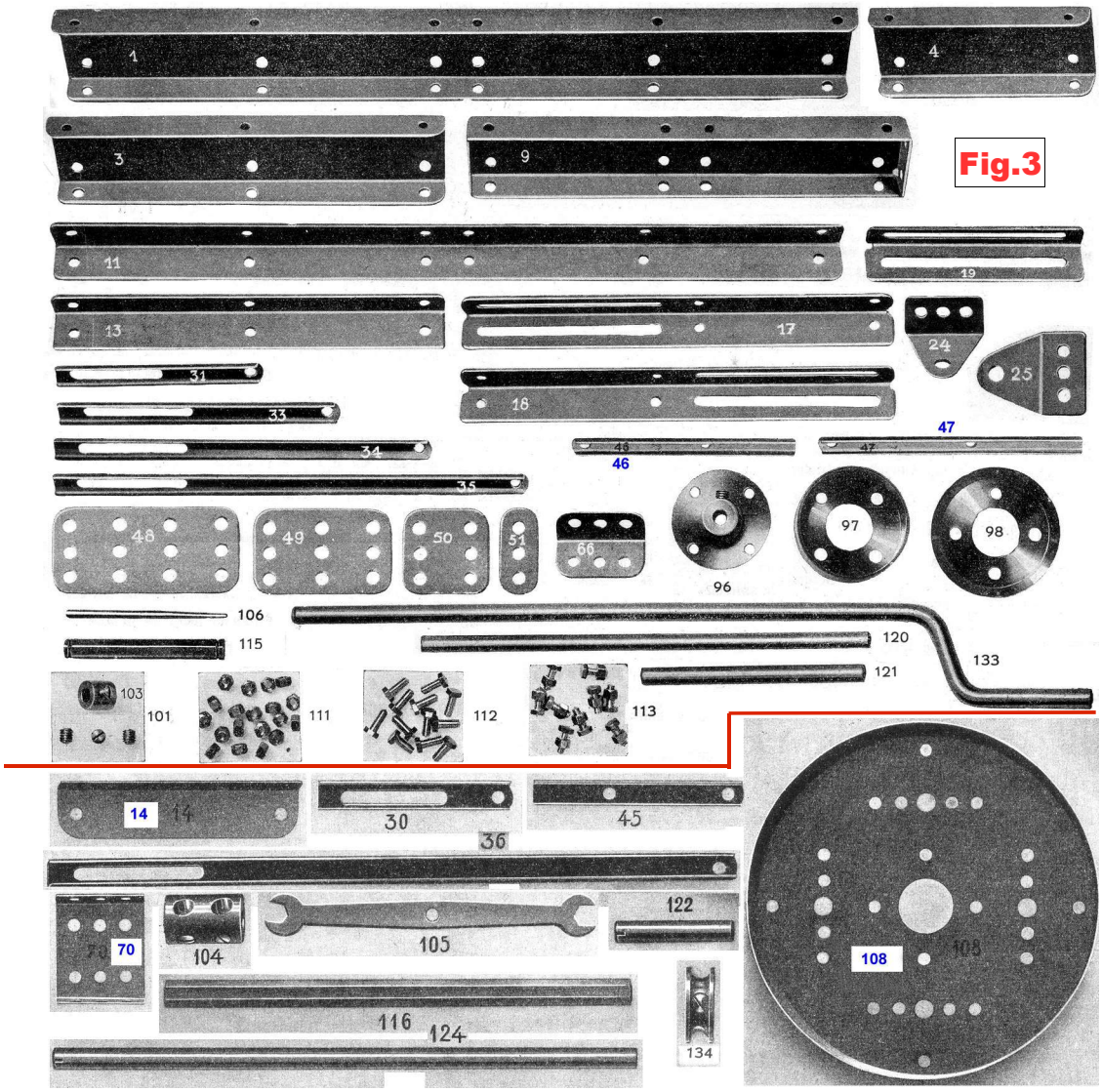
Fig.2

D. 7
Stanzpresse
Presse à emboutir

PARTS Exceptions to what is said in this paragraph will be noted in the list of parts that follows it. **Parts** are chemically blackened steel, about .5mm thick; they are well made & nicely finished. **Holes** are 2.8mm at multiples of 11mm pitch, viz 5.5, 11.0, & 44.0mm. **Slots** are 2.9mm wide. The **N&B** are possibly 3⁄32" BSW but the fit with the TECNICO parts is rather snug, and if it seems an unlikely thread for a 1930s Swiss system then the only possibility I could find is the No.7 Swiss Thury. I don't have examples of it but its dimensions are very similar to 7 BA and that doesn't fit the TECNICO N&B at all. The **Collar &** (only) **boss** are 4.0mm bore, 10.0mm o.d., & are single-tapped M4.

The parts are shown in Fig.3 (most roughly to scale but parts #96-98 in particular are much too small – #98 is actually half the diameter of #108): those above the red line are in Sets 1 & 2; those below only in Set 3. The second column in Fig.4 has the parts' main dimension, the length o/a or the diameter (but the '4' for #96,103-4 is the bore, or for #105 the jaw opening). The parts are listed below with my names and comments as necessary. Details have been taken from my early Sets 1 & 2. None of the No.3 parts, shown in red, have been seen, but Urs has provided some key dimensions.

- **#1,3,4 U-Channel**. 22¼mm wide & 8¾ deep, 9¼ for #1.
- **#9,70, Flanged Plates.** #9 is 19½*110mm, 8¾mm deep. It slides inside the U-Channels.
- **#11,13,14,66 A/Gs**. #11-14 are 9¼*11¼mm; #66 9¼*10. All corners are near fully radiused. Earlier #66 was sometimes listed as #55.
- **#17,18,19 Slotted A/G**, 8¾* 10½mm but #19 is 9¾*9¾. Slots are 46½mm long. Corners are almost square.
- **#24,25 Trunnion & Flat ditto**, the apex hole is 4.0mm Ø for the Axles, at 16½mm pitch from the centre base hole in #25. The Patent explains the use of the joggle in #25.
- **#30,31,33-35,36 U-Girders**, 5¾*3½mm deep. Slots are 29½mm long but 22½ in #31.
- **#45,46,47 Inner U-Girders**, 4½*3mm. They are a snug sliding fit in the U-Girders with virtually no side play, and the tops of the 2 parts are level. The holes in #46,47 are at about 31½, 38½mm pitch.
- **#48-50,51 Plates, Strip**.
- **#96 Bush Wheel**, brass plated. Its disc is 27mm Ø, .8mm thick, with face holes at 11.0mm radius. The base of the boss is enlarged to 12.0mm Ø over a depth of 2mm to enter



Nr	Abmessung mm.	A	B	C	D	E	F	1	2	3
1	195	—	—	—	—	1	1	—	2	2
3	96	—	—	—	—	1	1	—	2	4
4	52	1	—	-	—	—	—	1	1	2
9	110	—	—	—	—	1	1	—	2	4
11	195	—	2	—	—	—	—	2	2	4
13	96	2	—	2	—	—	—	4	4	6
14	52	—	—	—	—	—	—	—	—	4
17	110	—	—	1	—	—	—	1	1	2
18	110	—	—	1	—	—	—	1	1	2
19	53	4	—	—	—	—	—	4	4	8
24	4	4	—	—	—	2	—	2	6	8
25	4	—	2	2	—	—	2	2	6	10
30	42	—	—	—	—	—	—	—	—	2
31	54	1	1	—	2	—	—	4	4	6
33	72	—	—	2	—	—	—	2	2	4
34	97	—	—	2	2	—	—	4	4	4
35	122	—	—	—	2	—	—	2	2	2
36	147	—	—	—	—	—	—	—	—	2
45	46	—	—	—	—	—	—	—	—	2
46	57	1	1	2	—	2	—	6	6	10
47	71	—	—	2	2	2	—	6	6	8
48		—	—	—	2	—	—	2	2	4
49		—	2	—	—	—	—	2	2	4
50		2	—	—	—	—	—	2	2	6
51		—	2	—	—	1	1	2	2	6
66		—	2	—	2	—	—	2	2	6
70		—	—	—	—	—	—	—	—	2
96	4	2	2	—	—	—	—	—	4	8
97	30	—	—	—	2	2	—	—	4	8
98	37	—	—	—	—	—	4	—	4	4
103	4	-	—	2	2	-	—	—	4	8
104	4	—	—	—	—	—	—	—	—	2
105	4	—	—	—	—	—	—	—	—	1
106	45	—	—	1	—	—	1	1	2	2
108	75	—	—	—	—	—	—	—	—	4
111		22	16	16	16	15	17	60	101	200
112		22	16	16	16	15	17	60	101	200
113		—	—	—	—	—	—	—	—	—
115	44	1	1	—	1	—	—	2	3	3
116	100	—	—	—	—	—	—	—	—	1
120	100	1	1	—	—	—	—	—	2	2
121	50	—	—	—	1	1	—	—	2	3
122	25	—	—	—	—	—	—	—	—	2
124	125	—	—	—	—	—	—	—	—	2
132	152	—	1	—	—	—	—	—	—	—
133	177	—	—	—	—	—	—	—	1	1
134	11	—	—	—	—	—	—	—	—	2
341		—	—	—	—	—	—	—	1	1
036		1	—	—	—	—	—	—	—	—
		64	49	49	49	43	45	175	294	578

Fig.4

#97,98. Later the single peripheral holes were replaced by pairs which scale at 5.5mm pitch, see Fig.9.

- **#97 Drum**, brass plated, 30.4mm Ø with a very, very slight taper over its 9½mm depth.
- **#98 Pulley Disc**, brass plated.
- **#101 Grub Screw**, steel, M4, 4½mm long with flat end.
- **#103 Collar**, brass, 8mm wide.
- **#104 Coupling,** 16mm long, 10.0mm Ø.
- **#105 Spanner**. In an Ebay set it scales at 72mm long.
- **#106 Drift**, plain steel, tapers from 2.8 to 1.5mm Ø.
- **#108 Flanged Circular Plate**, red. Note the 4 enlarged holes. Some models show fewer face holes, as in Fig.15.
- **#111 Nut**, brass, hexagonal, 4.0mm A/F, 2.6mm deep.
- **#112 Bolt**, brass, hexagonal head, 4.0mm A/F. 1.6-1.8mm deep, 6¼mm u/h.
- **#113 Nut & Bolt**.
- **#115,116 Box Spanners**, brass, hexagonal tube 4.8mm A/F, with the ends belled a little to accept the Nut, but not 'notched' as shown in Fig.3
- **#120,121,122,124 Axles**, nickelled steel, 3.96-4.00mm Ø with deburred square ends.
- **#132,133 Crank Handles**, as Axles. #132 has a 14cm shaft; #133 is not illustrated.
- **#134 Loose Pulley**, 16mm o.d., 6mm wide. The 11mm would be the throat diameter.
- **#341, 036 Manuals**. The 036 not been seen.
- **Screwdriver**. There was a small Screwdriver in the No.2, useful for the Grub Screws, but probably not original. It is 78mm long with a 19mm, 2mm Ø blade, & wooden handle tapering up to 11mm Ø.

PATENTS The known patents are listed below in chronological order. The patentee was Jules Louis Badel of Geneva, together with Adolphe Fernand Wachsmuth for the first Swiss patent. The Leaflet says that TECNICO is patented at home & abroad but the earliest patent may be French because the convention date, for France, is 11/8/33 in the UK patent. No details of the French version are to hand. The UK patent says that Badel was Swiss & his address was 78 Rue de Lausanne, Geneva.

The U.S. patent 2082138 has application/accepted dates of 21/7/34 & 1/6/37. It shows examples of most of the various parts including the inner & outer U-girders, A/Gs, and brackets, but not the circular parts #96-98, and nor are they mentioned. Also shown are some structures including a girder bridge. One illustration, left, explains the joggle in the Flat Trunnion. Another, the arch below, but it isn't clear which parts are

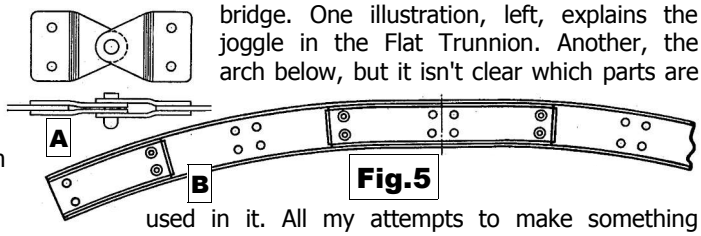
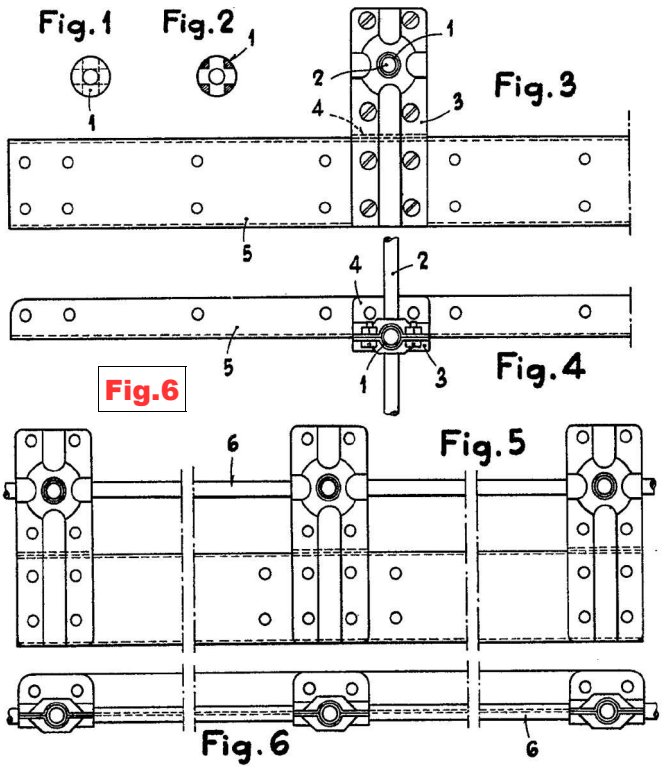


Fig.5

used in it. All my attempts to make something similar ended with a jagged top or bottom curve but the outlines in Figs.11 & 12 look smooth enough. **The Danish patent** 52153 has application/accepted dates of 7/8/34 & 4/9/36. It covers only the U-girders. **The UK patent** 441564 has dates of 9/8/34 & 22/1/36. It covers the same ground as



the U.S. version. **The first Swiss patent** 181566, has dates 31/1/35 & 16/3/36. It shows only the use of the 3 circular parts #96-98 to make a wheel, a pulley or a drum, and mentions the possibility of using a toothed disc. None of these parts are mentioned in any of the other patents. **The Austrian patent** 145216 has dates 15/11/35 & 10/4/36, and shows the U-girders and the girder bridge. **The second Swiss patent** 300054 has dates 9/6/52 & 16/9/54, and is solely about providing self-aligning shaft bearings. Some of the illustrations are shown above: an elevation & cross-section of the spherical bearing itself in Figs.1 & 2, while the other drawings show supporting brackets which are formed with recesses to hold the bearing for a shaft running in either of the 3 main planes. Other figures show brackets for shafts carrying meshing bevels. A final paragraph says that the method is intended for toys and could not be used in industrial applications because it would present 'certains inconvénients'.

SETS Fig.4 shows the Set Contents, excluding Sets 1A & 2A. As far as I can tell from the very limited number of examples seen, there were no changes to the composition of the Sets over the years, nor to the packaging, beyond the position of the label on some lids. The parts are attached individually to backing boards, a few by clips or cord, but mainly by the N&B from the Sets.

Sets 1-3. Backing boards are yellow, printed in red with the shape of each part and its Set No. Also with TECNICO in large letters across an unused space at one end, as below. **The Set 1** box is yellow, 30¾*22* 1¾cm, just big enough to take the manual unfolded. The label covers the lid, as right, and the green round sticker gives the set size. **The Set 2** box is silver, 30¾*44*1¾cm, & the Set 1 label is either central on the lid or in its bottom left corner. **The Set 3** box is also silver, about 62*43cm & with the same label. It has 2 trays side by side & the TECNICO name is split between the boards with TECN on one and ICO 3 on the other.

Fig.7

Fig.8

The Linking 'A' Sets. No examples of these have been seen but from a brochure the 1A box is the same size as the Nr.1, and the 2A as the Nr.2. The labels too are the same size and the backing boards are in the same style.

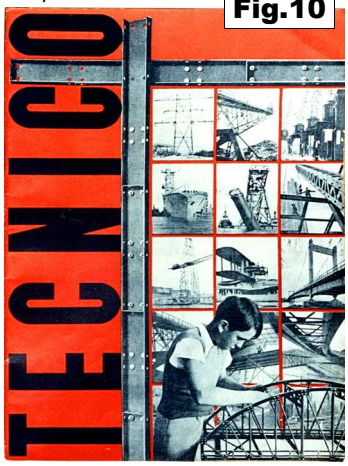
Sets A-F. Boxes are yellow, about 15*21cm, with similar labels to Sets 1-3, and similar backing boards, but in different colours: yellow printed in red for Sets A & D, blue printed in gold for B & E, as right (but white printing has also been seen on Ebay), and red printed in gold for C & F. An A-B set has the same yellow box but deeper to take the separate A & B cards.

Fig.9

Sets 21-24. No actual set has been seen but a B&W photocopy of a Nr.24 lid label is the usual type, as in Fig.8. Another B&W photocopy is of a Nr.24 backing card with the parts attached to it. It is in the style of the A-F sets and the parts on it are 2x#3; 1x#4; 2x#11; 1x#17; 1x#18; 4x#19; 4x#25; 2x#30; 2x#31; 2x#45; 2x#46; 4x#50; 2x#51; 2x#66; 2x#96; 2x#97; 2x #104; 2x#108; 51x#111; 51x#112; 2x#124. Finally a leaflet for the Nr.24 which says it contains 51 parts plus 48 N&B – 3 fewer N&B than on the card (in both my sets there were 1 or 2 extra N&B). Also that over 250 models can be made from Sets 21-24 together (against over 289 claimed for Set 3), and that a 3.41 manual is included in Set 21. Said manual, which would also have been in the Set 1-3 sets, is described later and contains 148 models from Sets 1-3 plus 3 larger 'mystery' 'D' models.

MANUALS Details are to hand of two manuals, one from 1934, all in German, for Set 1 & 2; the other from 1941 in French & German, for Sets 1-3. They are in portrait format and their front cover design, in common with all the manuals seen on Ebay, is shown right, identical to the lid label in Fig.7. However although most have a yellow background colour, it is fawn in a few cases, and the red colour right is even rarer. Usually there is no way of knowing the age and content of Ebay manuals because the ref-

Fig.10



erence number is on the title page, with no indication on the cover.

Manual 2-34. 16 A4 pages plus covers, with a fawn front. C2 extols the system & the title page 1 has an Intro under the manual number atop the page. p2 has the Illustrated Parts & p3 the Set Contents. pp4-5 show numerous different sections that can be made with A/Gs, followed by the use of the circular parts #96-98 to make wheels, pulleys, drums, etc. p6 shows braced frames & trusses.

Nr.1 models. 25 on pp7-12 from 1-1 Bleistiftzirkel (Pencil Compass) to 1-25 Schneepflug (Snowplough). Models 1-11 are not all in order.

Nr.2 models. 7 on pp13-15 from 2-1 Stosspuffer für Eisenbahnen (Railway Buffers) to 2-7 Flug Karussel (Flyboats), which needs 3 additional parts (see Fig.13).

p14 has an offer of free advice on queries about manual & original models. pp16-C3 have photos of 8 much larger models, mostly Bridges but including the Crane below (Figs.11). Also below, Fig.12, one span from one of the Bridges, with the arch presumably made as in the Patent. C4 has the company's name & address.

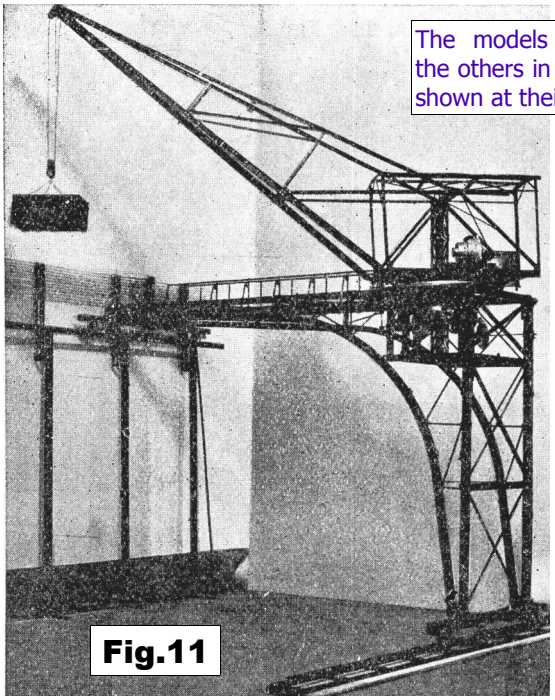
There is a B&W photo & parts list for each model plus extra views in some cases. The photos are often too dark and it is hard to see the details of some of the more complicated models. The Nr.1 models are mostly simple with drawing instruments, frameworks, railway items, and among the better models, a 2-Pan Scales & a Drop Hammer. The Nr.2 models are quite small but much more interesting with 2 Railway Wagons (which need card infill), a Railway Handcar, a Fan that could be a Windmill, & the Fig.13 Roundabout, both the latter belt driven. The Roundabout needs 3 parts not in the Set.

Manual 3-41. This description is taken from two manuals, both B&W photocopies. One lacks the title page, the other a model page, and both lack the back cover, but they are very probably the same edition. There are 36 pages plus covers, and C1-p1 are as 2-34, apart from different layouts to accommodate the two languages. p2 has the Set Contents, and the Illustrated Parts are on pp3-4. The use of parts 96-98 is also on p4, and p5 has braced frames, both as 2-34.

Nr.1 models. 44 on pp6-11 from 1.50 Scheepflug/Chasse-neige (Snowplough) to 1.5 Staffelei/Chevalet (Easel). Another model, 1.66 Aufnahmegabel für Schlagbaum/Guide de barrière mobile (?Moveable Road Sign) is on p29.

Nr.2 models. 85 on pp12-29 from 2.54 Anhänger/ Remorques (Trailer) to 2.6 Handkurbel-Ventilator/Ventilateur à manivelle (Crank Handle driven Fan). Two other models are on p35: 2.98 Drehbare Wagenleiter/Echelle roulante et pivotante (Slewing Ladder on Wheels) & 2.90 Vorrichtung zum Auf+ wickeln von Kabeln/Machine à enrouler les câbles (Cable Winder).

Nr.3 models. 16 on pp29-36 from 3.1 Drehbank/Tour de mècanicien (Lathe) to 3.22 Maschine zum Gewinnen und Aufbereiten von Kies/Machine à extraire et trier le Gravier (Gravel Extraction & Sorting Machine) see Fig.17.



The models here, and all the others in this article, are shown at their original size.

Fig.11

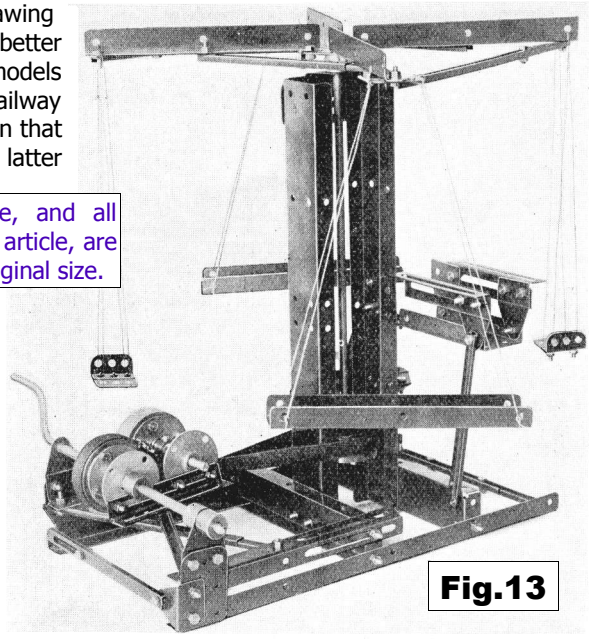
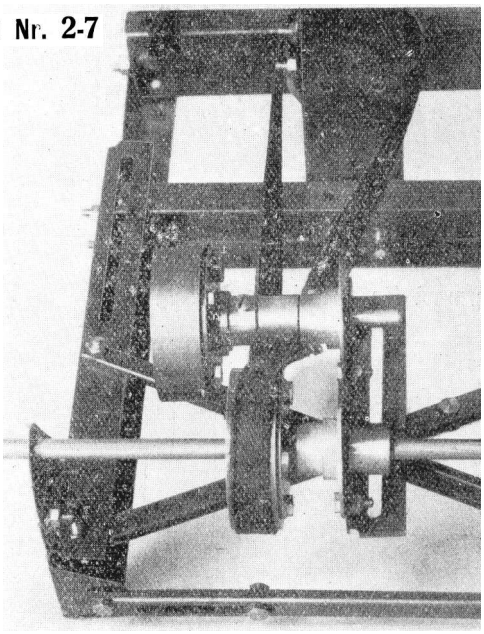


Fig.13

Flug Karussel mit Handkurbel und Riemenantrieb. Spannung des Riemens durch Lœnix (Riemenspanner)

Modell Nr. 2-7



Bestandteile :

2	St.	Nr.	1
2	»	»	3
1	»	»	4
2	»	»	9
2	»	»	11
4	St.	Nr.	13
1	»	»	17
1	»	»	18
3	»	»	19
6	»	»	24
6	St.	Nr.	25
3	»	»	31
2	»	»	33
4	»	»	34
2	»	»	35
6	St.	Nr.	46
4	»	»	47
2	»	»	48
2	»	»	49
2	»	»	50
2	St.	Nr.	51
2	»	»	66
4	»	»	96
3	»	»	97
4	»	»	103
77	St.	Nr.	113
1	»	»	121
1	»	»	133

Ergänzungsteile

2	St.	Nr.	96
1	»	»	103

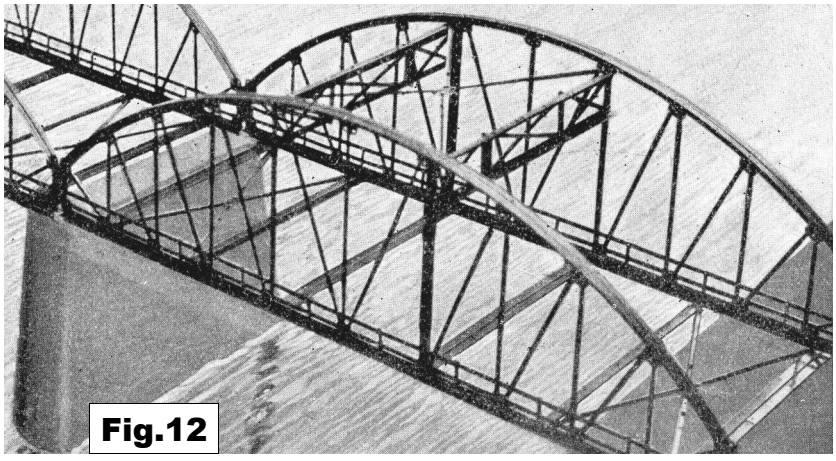


Fig.12

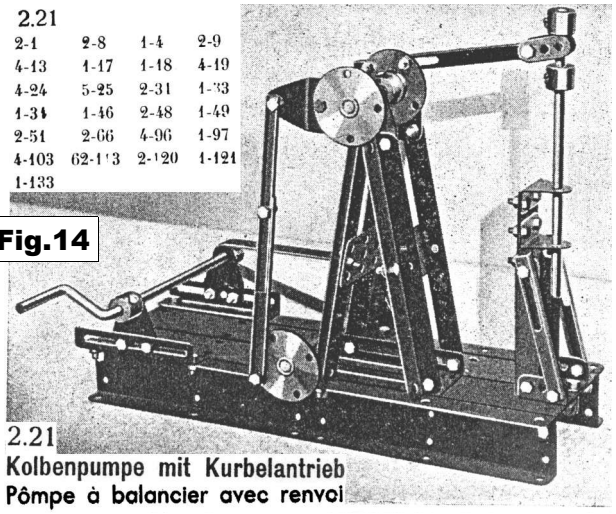
'D' models. Finally on (probably) C3, 3 models: D.7 Stanz+ presse/Presse à emboutir (Stamping Press); D.11 Vertikal-Bohrmaschine/Perceuse (Drilling Machine); & D.3 Funkmast/ Pylône de T.S.F. (Radio Mast). Fig.2 is one of the 2 views provided of the Press. All the models are impressive but they are a puzzle because although no parts list is shown, they certainly couldn't be made with the parts in the A-D sets – the Mast for example is 16 bays tall, each braced on all 4 sides.

The presentation of the models is as in the 2-34 edition and the free advice for model builders is again offered, also yearly & 3-monthly model building competitions, as on the original Leaflet.

The models offer a much greater variety than before. The Nr.1's now include more domestic items as well as a Footbridge, a Roman Balance, & a Telegraph Pole. Many of the new Nr.2 models are machine tools, or other machinery including a number of Cranes & Weighing Machines, and the Pump right. Mechanical features are belt drives, and a band brake on some of the Cranes, as in Fig,16. A Ship's Steering Mechanism, & Level Crossing Barriers caught my eye, also various vehicles, a Tramcar, a Racing Car, a Monoplane, & a Delivery Van, though these are all rather skeletal. A ?cat called Felix, as in Fig.1, is shown operating some of the models. The Nr.3 models are mostly more and better machinery, though they disappoint a little because none feature structures with extensive bracing. The most impressive looking is the Gravel Extraction Plant in Fig.17 but its finer points can't be seen in the poor copy to hand (and the quantities in the first column of the parts list are missing). Other good models are a small Railway Breakdown Crane & a Cable Twisting Machine. The 3" Flanged Disc allows the more realistic Lorry right but a slightly larger version of the Racing Car still runs on the Drum wheels.

USING THE PARTS To start with I made the Fig.13 Roundabout. The PL (parts list) was almost accurate and the model was quite straightforward to make. It worked well, including, to my slight surprise, the drive, using a wide, flat rubber band as a belt. In appearance I thought it looked not unattractive though it must be said that I may have been swayed by my liking for black parts. The tiny N&B were of course tiresome to use and would I think have been just as difficult for youngsters (remembering the extra difficulty I had as a boy with the 6BA N&B in the small MECCANO Aero sets). The problem was eased a little by the opening on one side of the Nut being deeply chamfered which made it easier to engage the Bolt. And the Box Spanner allowed a Nut to be carried to the model in its end. But when all else failed a pair of locking forceps came to the rescue.

The hex Bolt heads looked attractive on the outside of the model but in tight corners the Nut had to be on the outside



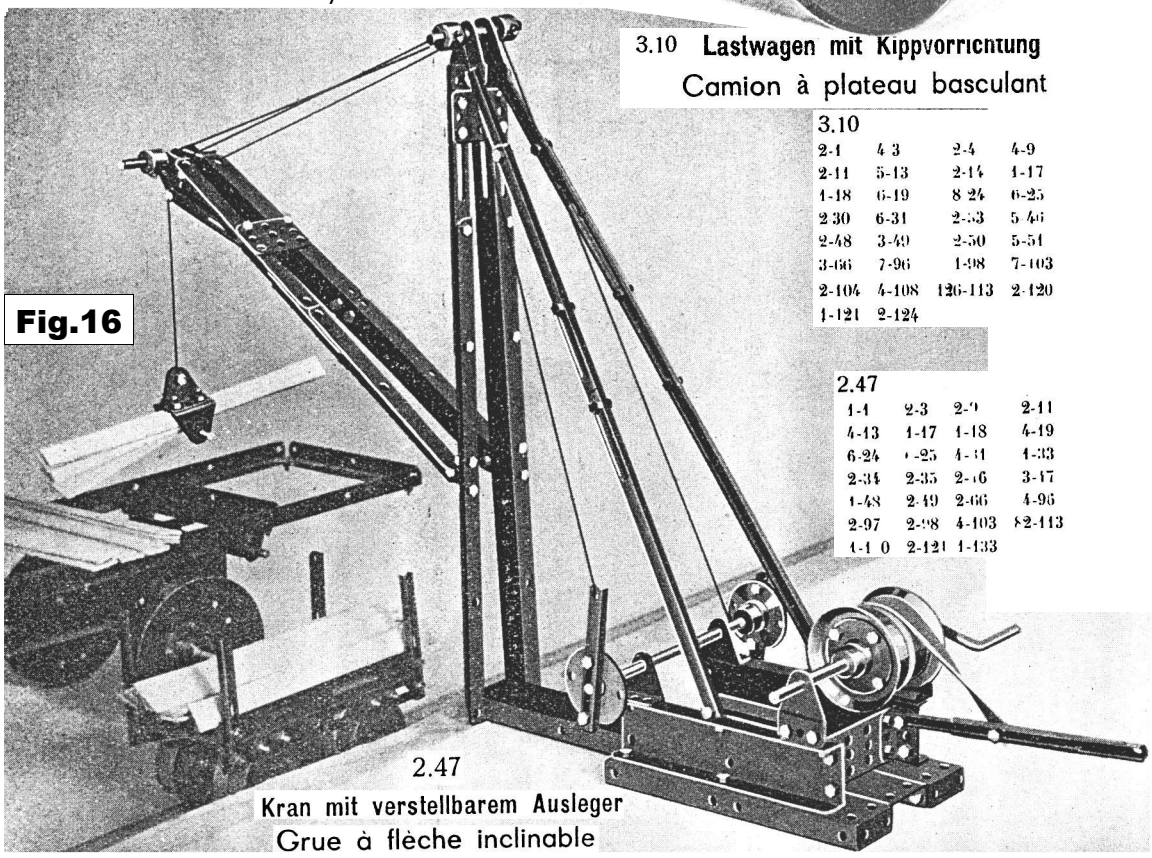
2.21

2-1	2-8	1-4	2-9
4-13	1-17	1-18	4-19
4-24	5-25	2-31	1-33
1-34	1-46	2-48	1-49
2-51	2-66	4-96	1-97
4-103	62-113	2-120	1-121
1-133			

Fig.14

2.21
Kolbenpumpe mit Kurbelantrieb
Pômpe à balancier avec renvoi

Fig.15



3.10 **Lastwagen mit Kippvorrichtung**
Camion à plateau basculant

3.10

2-1	4 3	2-4	4-9
2-11	5-13	2-14	1-17
1-18	6-19	8 24	6-25
2 30	6-31	2-53	5 46
2-48	3-49	2-50	5-51
3-66	7-96	1-98	7-103
2-104	4-108	136-113	2-120
1-121	2-124		

2.47

1-1	2-3	2-9	2-11
4-13	1-17	1-18	4-19
6-24	1-25	4-31	1-33
2-34	2-35	2-46	3-47
1-48	2-49	2-66	4-96
2-97	2-98	4-103	82-113
1-1 0	2-121	1-133	

Fig.16

2.47
Kran mit verstellbarem Ausleger
Grue à flèche inclinable

and often then the Bolt shank looked over long. Two lengths of Bolt would have been a nice refinement.

The Box Spanner allowed the Nuts to be tightened sufficiently in most cases, but when there was insufficient room for it to be used, or a Nut had to be really tight, an open-ended spanner was needed.

Next, I combined both sets to make a Beam Pumping Engine of my own design. The result is shown in Fig.18. One aim in deciding on the subject was to be able to use some cross-bracing. The main 'foreign' parts used were plastic sheet for the cylinder casing, extra Collars, longer Bolts, & Bolts with slotted heads.

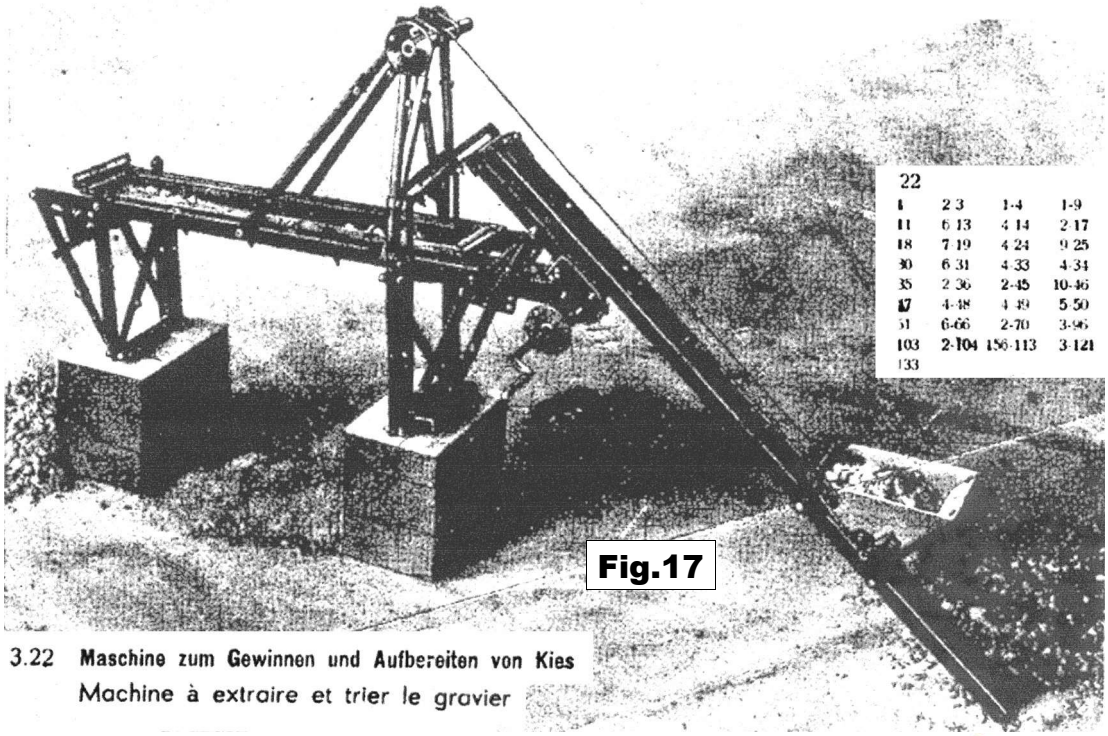


Fig.17

The mechanism is a horizontal arm in the base which as it rotates causes a cord from its end to draw down the piston rod, which then rises under the weight of the pump rod as the arm moves through the second half of its rotation. The arm is a Strip bolted to a built-up pulley & the latter is normally driven by a band riding on a (substitute) Coupling (2 Collars could have been used) on the Crank Handle at the model's lefthand end. For display purposes the drive is from the small commercial geared motor which can be seen poking through the top of the base to the right of the pump rod.

The notional valve gear is 'operated' by a spring-loaded lever (a Strip & a rubber band) on the valve chest. This was to have been controlled by a rod from the beam but lack of parts prevented this & even if the parts had been available it would have been difficult to find a way of attaching the rod to the beam (so an 'engine-boy' would have to operate the lever!).

Compared with normally perforated parts it was, as might be expected, generally more difficult to use the TECNICO pieces effectively in designing the model, and some compromises were needed. In many cases a few extra holes would have a great help without I think significantly negating the designer's presumed aim of making models look as realistic as possible. For instance, replacing the single holes in the A/Gs by pairs, as in the centre of the longest #11, would have made cross-bracing much easier, and a hole, or better still a short slot, at the plain end of the Inner U-Girders would have allowed their use generally instead of simply extending the length of the U-Girders. I could go on. The lack of holes led in several cases to parts being clamped rather than bolted in place, the Bush Wheel for the pump rod for example, and this led to the need for longer Bolts.

The cross-bracing was tricky to fit and I think that with cross members only single-bracing would be possible. Two difficulties are worth a mention. First, when two U-Girders are bolted back to back both the Nut & the Bolt head disappear inside the U-section. They are small enough to rotate but the clearance isn't sufficient to allow the Box Spanner to fit over them. An open-ended spanner can't turn them either but held downwards over the Nut can stop it turning, and then a substitute slotted bolt can be tightened in the usual way. Secondly, how, as in the pump rod, can a Rod be connected to a Strip? The only way found was to bolt a pair of U-Girders back to back and clamp the Rod between a pair of Inner U-Girders with their tops bolted to the U-Girders.

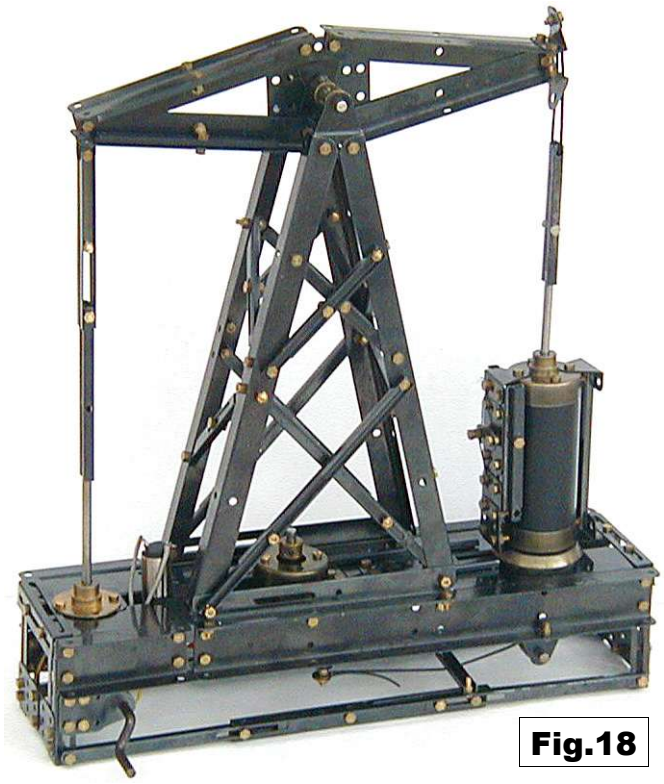


Fig.18

REMARKS I wondered how TECNICO compared with, say, MECCANO in price, in Switzerland of course. In 1934 Sets 1 & 2 cost very slightly less than the MECCANO Nos.0 & 1. So, for a slightly lower price TECNICO sets had the advantage of a higher set number. But what of the contents? The parts have a very different character but perhaps again TECNICO seemed to have an edge with many more N&B and a few more of the other parts. The complicated frameworks in some of the TECNICO models account for the high N&B count in their sets.

The other prices to hand are from Oct. 1946 for TECNICO and June 1948 for MECCANO. Now the 3 main TECNICO sets cost slightly more than Meccano's Nos.2, 4, & 6, and though they still had a narrow lead in N&B, they had appreciably fewer other parts. And the MECCANO sets had Flexible Plates. And the No.6 had Gears in it. And MECCANO accessories included C/W & Electric Motors. And by that time STOKYS was no doubt well established and adding to its range of parts. And TECNICO continued in its mid-1930s funereal way.