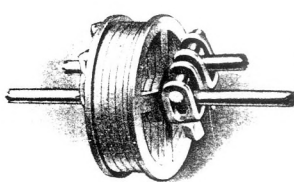
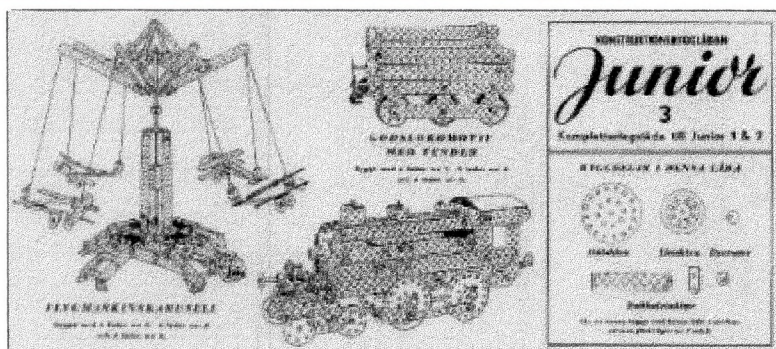


**And More from Sweden** Since this piece was written Staffan has added two more systems to his web site (<http://home1.swipnet.se/~w-14485/meccano/>). The first is about **Konstruktionslådan** (building set) **X**, which is in MCS as KONSTRUKTOR, (but I list it as simply X). It's a small system but includes Rubber Belts for use in Conveyors and the like. No parts are known but an empty tin box has been found, 330\*205\*25mm, with 8 partitions inside and a hinged lid. The latter (below) is mainly blue with the name in red, and you may be able to see a boy (the same one as on the manual cover in MCS) with a Crane, and another boy and a real marine diesel in the smaller windows. X was made in Nybro, in the south of Sweden.

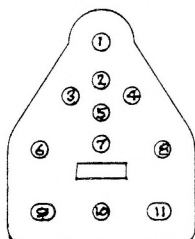
The other is a 'new' system called **JUNIOR**, with parts like TRIX but chrome plated, and with smaller, 3mm, holes

at a slightly greater pitch of 8mm (or conceivably 5/16"). The thread is 1/8" Ø, with a small hex Nut and what looks like a round or mushroom Bolt. There were 3 boxes, Nr 1, 2 & 3, and the range of parts seems to include all those in the UK Units A, B & C. The Nr 3 box lid, mainly red, is shown below, with underneath a photo of the various parts, and part of a Model Leaflet. Among the parts the Spanner has no holes in the handle, and the Hook has an extra hole above the centre five. Also, as well as the expected 25 & 55mm threaded Axles, there are 4 others: 76 & 87mm with the centre 45 & 15mm respectively smooth; and 52 & 95mm, smooth with no thread. I wonder if they are all JUNIOR parts. The models are copies of prewar TRIX manual models, and the Roundabout needs 6 each of Sets 1 & 2, plus 2 of Nr 3. The printing on all the items is in Swedish but it isn't entirely certain that the system was Swedish in origin.



**QUERY 15** About the MOBILO Wheels (8/199), Jacques Pitrat has explained that the 2 sizes are needed to make Pulleys, with 2 or more of the 30mm Ø between a pair of 33mm. The illustration opposite is from the Manual.

**QUERY 25** About ERECTOR bosses, see 19/537, Don Redmond wrote that the 1 1/8" Pulleys in his 1916 No.5 Electrical Set have the domed boss, but the Gear & Crown Wheels have the normal solid type.



**QUERY 26** Don Redmond asks about the MÄRKLIN Trunnion/ Flat Trunnion and why its holes are as they are. He notes that holes 1,3,4 & 1,6,8 form 60° triangles; hole 7 is not in line with 6,8, nor is it 1/2" from 3,4; and holes 2,5,7 are 1/4" apart but are not 1/2" from 1,10. The slot isn't 1/2" wide and isn't in quite the same position in the two parts. So why are the holes as they are, and what is the purpose of the slot? [Don surmised that the non-standard spacing might be to allow meshing of unusual combinations of Gears, but I couldn't find mention of this in the Basic Constructions sections of the manuals to hand.]

**The MÄRKLIN Ferris Wheel** Peter Kessler & Thomas Morzinck have commented on their friends' experience of building the 'super' model described in 19/553. Both had found the main axle inadequate and replaced it by a non-MÄRKLIN 8mm Shaft, & related parts. In one case the bearings were changed to the open-topped type, again using non-standard material, to allow the wheel to be easily removed for transportation.

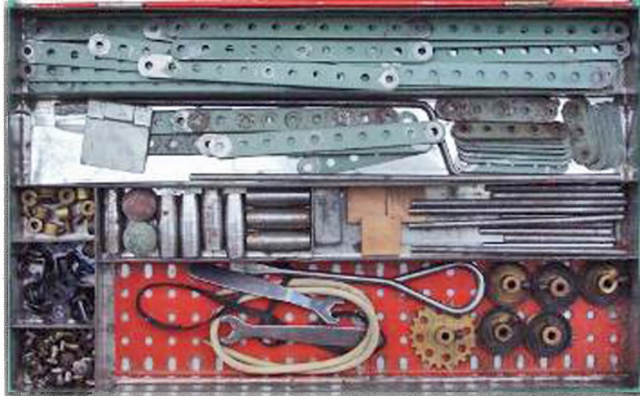
The other problem was in attaching the cords, and tightening them to get the wheel to run true. Thomas said this was a 'REAL problem', and it took weeks to get the model right. Peter mentioned that more than one person was required to do it, and it is thought that even wives may have been needed to help.

Conclusions: 'Altogether a fine and impressive model, taking much time and even more patience to construct', and 'But when finished the model is a winner'.

Other points: the motor is the standard No.1022; the cabin parts are held together by small, 6 BA size, Bolts which screw into pretapped holes. Peter enclosed a hank of Cord, actually from a Güterwagen Set. It's a darkish orange-red colour, closely woven, about 1mm Ø, probably synthetic, and very strong.

Peter also made the interesting point that most of the Märklin super sets contain a large number of parts, a typical set weighs about 25kg, and enthusiasts often buy them just for the parts, which work out at about a quarter of the list price for extra parts. One man bought 2 of the Ferris Wheel Outfits, to ultimately increase his stock of parts, but in the meantime he was able to fit 30 cabins to his Wheel, as per the original before 15 were removed in the 1940s.

**Konstruktionslådan X** An empty box belonging to the only Set in this Swedish system was described in 20/581. Now Staffan Kjellin has found two identical boxes with parts in them, and one, more or less complete, is shown on Staffan's web site at the address given in OSN 10. Thanks to Staffan, I am now the proud owner of the other one, and though it contains only a few parts, they are enough to see the main features. Other details come from the web picture below, reproduced courtesy of Staffan, and from notes he kindly sent.

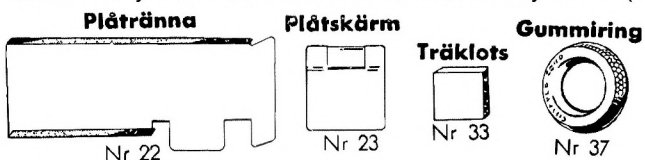


The box is made of tinplate, painted red on the outside apart from the lithographed lid shown in OSN 20. It is a solid job with the partitions that form the 8 compartments spot-welded to the base, to the sides, and to each other.

The 37 parts in the system are clearly shown in MCS so only the details and unusual features need be described. First those in my Set. • **DATA** (in mm) **Strip** (11-hole): •hole pitch/dia, 12.7/4.2 •width, 12.6; •thickness, 1.12; •ends very nearly fully radiused. **Collar**: •o/d, 9.0; •i/d, 4.04; •brass; •single-tapped. **Thread**:  $\frac{5}{32}$ " BSW. **Axle Dia**: 4.01. **DP (Mod)**: NA. **Nut**: hex 8.0 A/F; **Bolt**: tapered CH 6.1 Ø; both brass plated steel.

**Strips**. The 11h above is typical of the 25, 11, 9 & 5h ones seen, but the 25h is wider at 13.1mm, and it, & the 5h, are thicker at 1.3mm. The paint looks a medium grey with a slight greenish tinge. The **Flanged Plate** is painted orange-red, and matches the MÄRKLIN pattern exactly, except that at .85mm, the metal is a little thicker than a 1970s MÄRKLIN example. The **A/B** is also similar to MÄRKLIN except that at 13¼mm the arm with the round hole is some ¾mm longer; it has a chemically blackened finish. **N&B**. The Nuts are pressed and 2.2mm thick. The Set Screw in the Collar is brass, 6mm long under the 5.2mm Ø CH. **Axles** have sheared ends, rounded slightly. **Quality**. Apart from the variation in the width of the Strips all the parts are well made, and were probably well finished originally.

Now for the parts in Staffan's Set. The **25mm Pulley** is black with a brass boss that appears larger in diameter than the Collar, perhaps 10mm. The 38mm **Sprocket** looks brass and has a similar boss; with 23 teeth, it may be MÄRKLIN pattern. The **Crank Handle** shaft scales at 6¼", and the handle's offset at 1½". Both the tinplate **Guides** are shown below – only the smaller one can be seen clearly above (to



the left in the 2<sup>nd</sup> compartment down), and it scales at about 1⅜" square. The centre top part is joggled so that it can be pushed over a Strip. The **Rollers** are turned steel, perhaps 1⅜" long - their slightly domed form can be clearly seen. The **Driving Bands** look cream and slightly thicker than the Axles. 3 of the square **Blocks** (Träklots) are between the Rollers & the Axles, and they are plain wood, some .85" square. The 2 **Balls** (Lerkula) to the left of the 4 vertical Rollers are clay marbles which scale at ¾" Ø, one green and one brown. **Tools**. The Screwdriver is about 5½" o/a and the

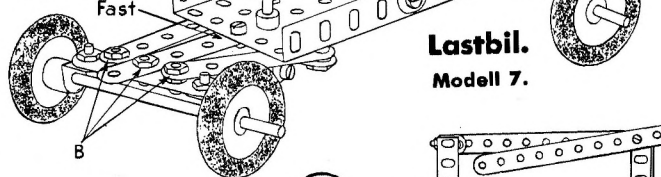
Spanner 3¼". The latter is black; the former polished steel. The Set Contents has only one Spanner but two are in the Set, and would be needed for the specified lock-nutting. No **Tyres** or **Rubber Belts** can be seen in the box.

#### SUMMARY OF MANUAL

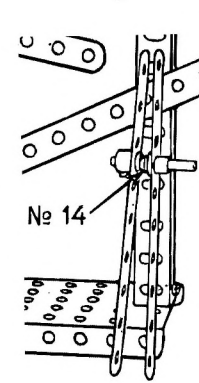
•Name: modellbok för konstruktionslådan X. •Details of maker: Kooperativa Förbundet. •No Dates/Ref Nos: •Page size: 247\*167mm deep. •No. of pages: 32+covers. •Language: Swedish. •Printing: cover as in MCS & p716, white on green ground with some red & black; line drawings of models. •Page No. of Illustrated Parts & highest PN: '2',37. •Page No. of Set Contents & highest PN: C4,37. •Sets covered: one, unnumbered. •No. of models: 28. •Name, Model No., Page No. of first & last model: Snurra, 1,3; Uppfordringsverk, 28,28. •Other notes: •C2,3 blank, Intro on 'p1'. •PR on C4, NILS ANDERSSONS TRYCKERI. •Details from photocopy.

There is a large line drawing for each of the 28 models, with additional views and a few words of explanation in a few cases. Many of the models are rather novel and/or original. At first they are quite simple but some of the later ones include quite complex features, though all within the constraint of the 61 N&B in the Set. Two of the simple models are shown below. The PN 14 of the Stegfall is a 12mm Pulley and the Flanged Plate has all round holes. The Lastbil is the only vehicle (apart from 2 very simple Trolleys) in the Manual, and the only one in which the Tyres are used, though they are not in the Parts List for the model and are shown with tread in the Illustrated Parts.

**Detaljer:**  
 2 st. nr 5  
 9 " " 6  
 2 " " 7  
 5 " " 9  
 24 " " 10  
 1 " " 12  
 4 st. nr 13

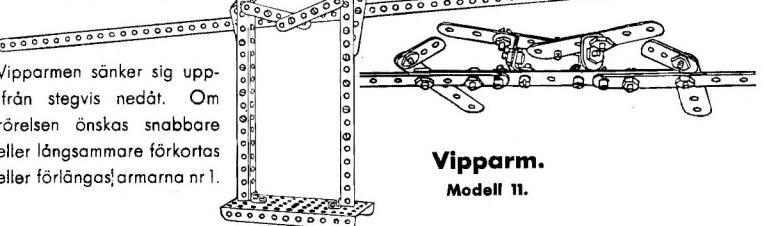


**Lastbil.**  
Modell 7.



**Stegfall.**  
Modell 4.

**Detaljer:**  
 8 st. nr 2  
 2 " " 3  
 2 " " 8  
 4 " " 9  
 15 " " 10  
 1 " " 12  
 1 " " 14  
 1 " " 20  
 2 " " 27



Vipparmen sänker sig uppifrån stegvis nedåt. Om rörelsen önskas snabbare eller långsammare förkortas eller förlängas armarna nr 1.

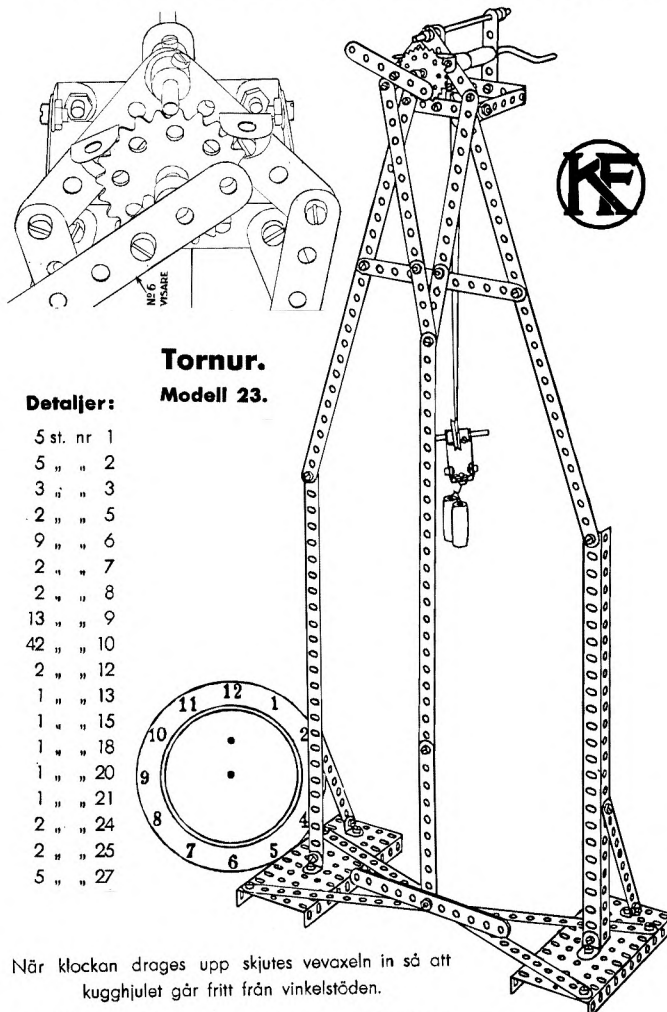
**Vipparm.**  
Modell 11.

Motion in most of the 'intermediate' models is obtained using Pulleys linked by the 2 different length Driving Bands, in a Windmill and a couple of fairground models for example. Exceptions include Laboratory Scales and a more ingenious 'Descending Toy' (above) - this is the other model that

shows a Flanged Plate with no slotted edge holes.

Most of the last 13 models use the Belts and Driving Bands, sometimes in various conveyor belt models, and sometimes the Blocks or Balls are recirculated by being raised between 2 parallel Belts running close to one another. This is the case in the MCS model (full name Transportverk), and it is the only one in which the Guides are used. The Kulslunga (Ball Thrower?), on the back cover of this Issue, is another example and the idea (from the instructions) is that the Ball runs down the top ramp, drops onto the lower one, and, after passing between the Belts, bounces back up onto the top ramp. Presumably it shoots out from between the Belts and bounces off the lower Belt where it is inclined sharply upwards. The Strips '4' are to centre the Ball on the ramp. The remaining models include a Funicular Railway with more or less elaborate brake and docking linkages (I think), the Runner on the back cover, and the Clock below. The latter is the only model in which the teeth of the Sprocket are actually used, and also the only manual model I know of that uses a Sprocket as a scapewheel, with A/Bs as pallets, a very efficient escapement. The pallets are disengaged from the scapewheel when winding up the weight by pulling the Crank Handle backwards. Despite the clock face shown (to be made from card) I calculate that the hand takes about a half minute to make one revolution.

The handful of special parts in 'X' allows some interesting models of a different character to those normally found in small systems. If, as may be the case, I haven't done them justice here, let me quote the MCS comment, 'Sound and ingenious mechanisms'. My only caveat is that some of the frameworks look a little less than perfectly rigid, and important Strips are sometimes held in position by a single N&B. Nothing a few extra parts wouldn't fix though.



**Tornur.  
Modell 23.**

**Detaljer:**

- 5 st. nr 1
- 5 " " 2
- 3 " " 3
- 2 " " 5
- 9 " " 6
- 2 " " 7
- 2 " " 8
- 13 " " 9
- 42 " " 10
- 2 " " 12
- 1 " " 13
- 1 " " 15
- 1 " " 18
- 1 " " 20
- 1 " " 21
- 2 " " 24
- 2 " " 25
- 5 " " 27

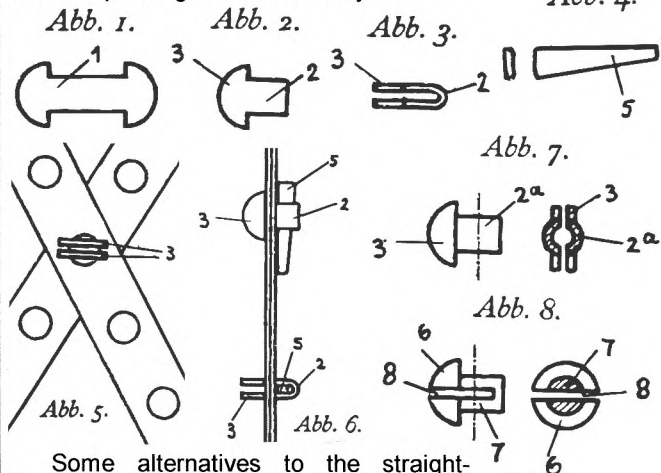
När klockan drages upp skjutes vevaxeln in så att kugghjulet går fritt från vinkelstöden.

Förhållandet mellan visaren och vevarmen justeras. Urtavlan göres av kartong. Som lodlina användes stark sytråd som fastklämmas mellan rullarna.

Vinkelstöden justeras så att de växelvis gripa in i kuggarna å kugghjulet. Vevaxeln bör luta något nedåt bakåt.

**The PHANTASIE Patent** Werner Sticht kindly sent a copy of this German patent, Nr.389220, which was granted to Josef Sponseil of Nürnberg on 21 Dec. 1922. (Joseph Sponseil & Co. of Nürnberg was the original maker of PHANTASIE.) The patent relates to holding parts together with wedged clips, and the actual PHANTASIE parts were illustrated in 15/417. Similar EZY-BILT Clips were shown in 22/637.

Abb.1-9 below are from the Patent. The wedge has a quite sharp taper and this would allow one length of Clip to be used when joining 2 or more Strips together. In practice though a much shallower taper is needed to keep the Wedge in place and Washers, not shown in the Patent, are used as packing when necessary.

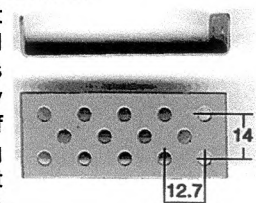


Some alternatives to the straight-forward 'T' Clip (of Abb.1-6) are offered. The sides in Abb.7 are formed to fill the holes in the Strips, & in Abb.8 a solid rivet with a slit in it is used. Finally Abb.9 shows a one-piece Clip with a wedge which is rotated by 90° to pass through the Strips to be joined, and then turned back and slid along the pin to secure it. Rather neat.

Werner wrote, 'I wonder why Sponseil got a patent, as Lilienthal used a similar method to fasten his Strips together (see 22/623).'

**METALLUS Parts** A German firm called Rekersdigitaltechnik sell a wide range of parts with 12.7mm hole pitch. Many are similar to MÄRKLIN but there are also 'standard' parts in other sizes, some 'specials', and various Motors. All are shown at [www.metallus.de](http://www.metallus.de), and the site has an English version option. One of the parts I noticed was the Gear Plate shown in 23/659. None of the large MÄRKLIN circular parts are currently available, nor any Gears. Sprockets are listed though, in steel, brass, aluminium or plastic, and Ladder & Roller Chain for them. Sizes up to 250 teeth can be had, but the minimum order for these parts is DM150.

The 'mystery' part right was sent to David Lawrence with a Motor and when he asked its purpose he was told that it is not compatible with any MÄRKLIN part but was the result of bad programming of a punching machine. Instead of scrapping it, it was hoped that it might be of use in David's future models.



The colours of most of the parts seem to match MÄRKLIN but David was also told that the green colour is to be changed to the [slightly darker] original [prewar] MÄRKLIN shade.

The only METALLUS part I've seen is the one above and it's well made and finished (the left bend isn't as far from 90° as it looks in the illustration).

The Rekersdigitaltechnik address is Hauptstraße 39, 48480 Spelle, Germany; email: [rdt@redig.de](mailto:rdt@redig.de).

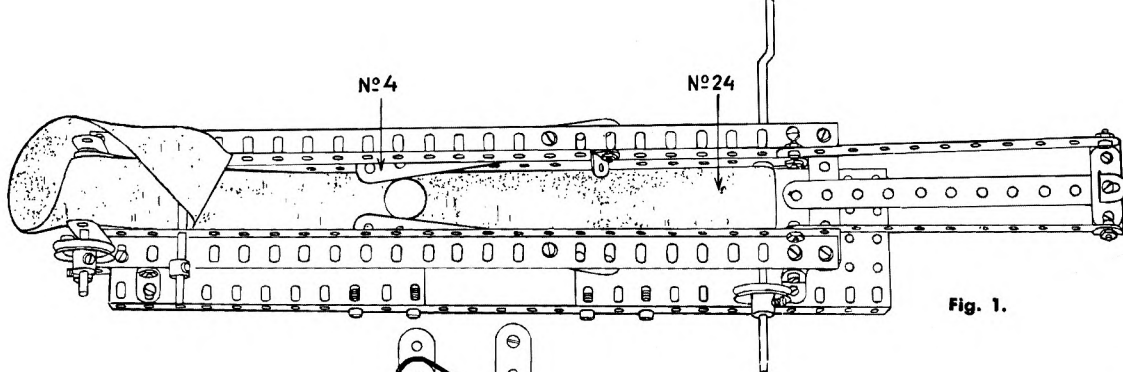


Fig. 1.

Turn to pp 708-709  
for details of  
konstruktionslådan  
**X**

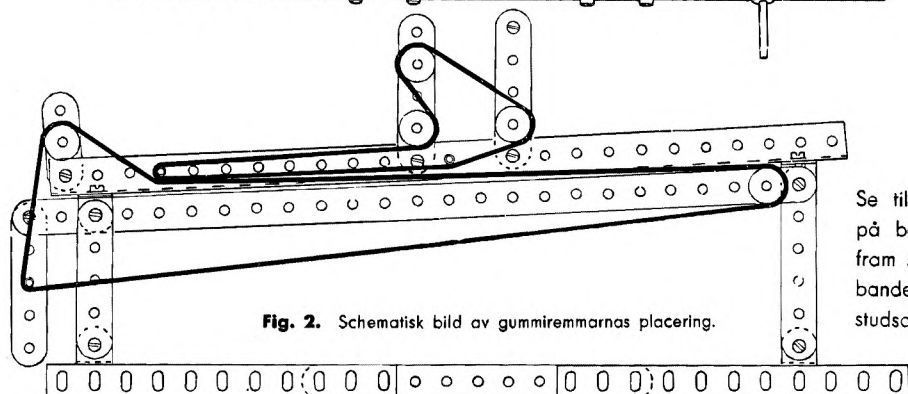


Fig. 2. Schematisk bild av gummiremmarnas placering.

Se till att styrjärnen nr 4 styra kulan mitt på bandet, som framgår av fig. 1. När kulan kommer fram studsar den upp i rännan och rullar ner och in under bandet för att sedan på nytt studsa upp. Om kulan skulle studsa åt sidan kan detta hindras med en pappskiva.

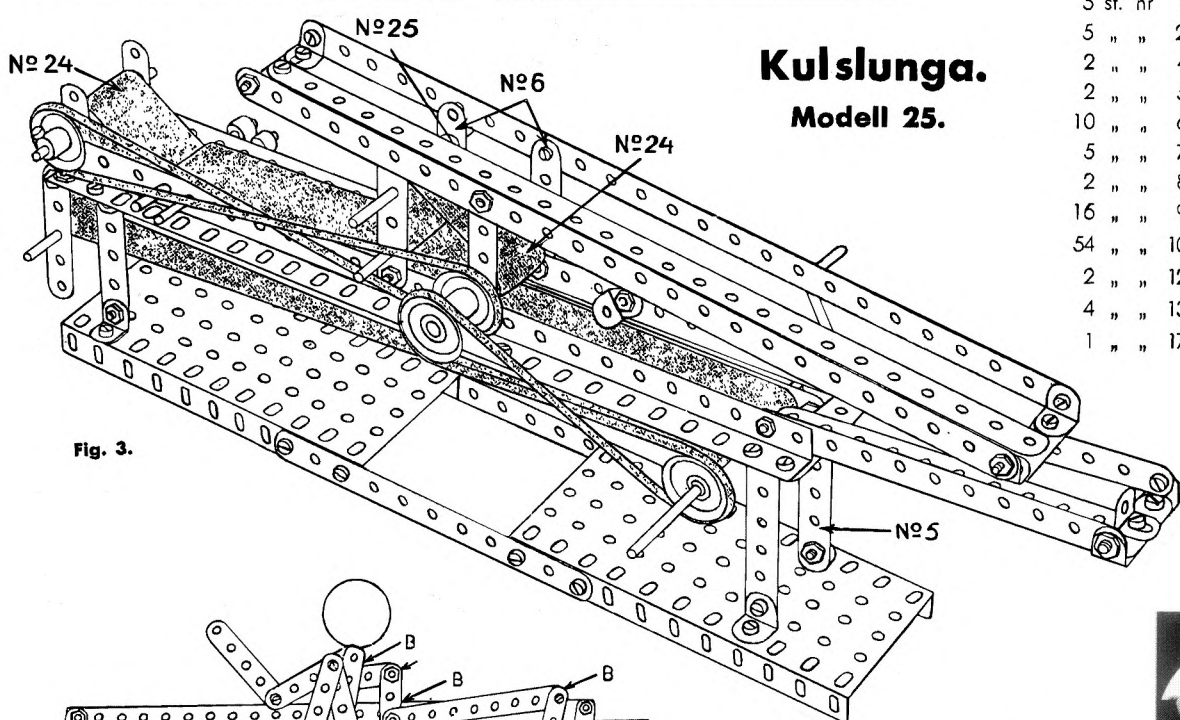
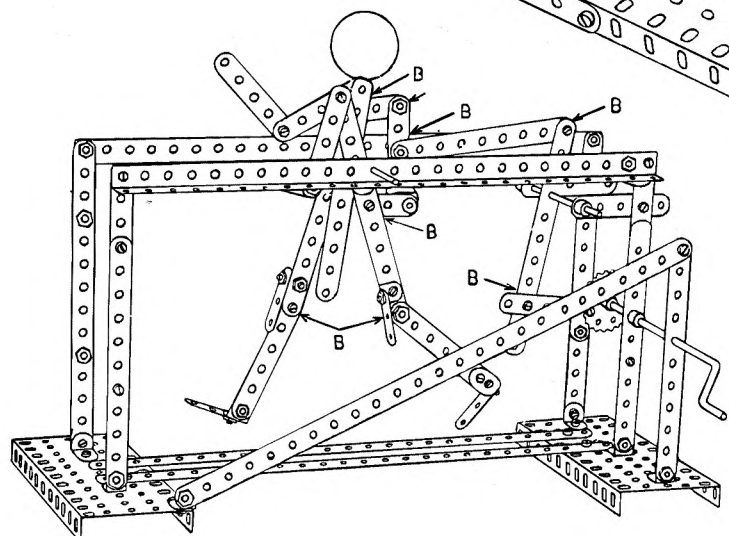


Fig. 3.

**Kulslunga.  
Modell 25.**

**Detaljer:**

5 st. nr 1	1 st. nr 18
5 " " 2	5 " " 19
2 " " 4	1 " " 21
2 " " 5	3 " " 24
10 " " 6	2 " " 25
5 " " 7	8 " " 27
2 " " 8	1 " " 28
16 " " 9	1 " " 30
54 " " 10	1 " " 31
2 " " 12	1 " " 32
4 " " 13	2 " " 34
1 " " 17	



**Detaljer:**

3 st. nr 1	18 st. nr 9
8 " " 2	59 " " 10
4 " " 3	2 " " 12
2 " " 4	1 " " 15
2 " " 5	2 " " 17
8 " " 6	1 " " 21
6 " " 7	8 " " 27
2 " " 8	7 " extra muttrar.

**Löparnisse.  
Modell 24.**

Huvudet ritas på kartong och klipptes ur.

