

**NO NUTS - NO BOLTS - NO SCREWS - NO LIMIT
TO WHAT CAN BE BUILT**



9^d

ARKIRECTO

THE LATEST AND GREATEST CONSTRUCTIONAL TOY

All British

METAL CONSTRUCTIONAL SYSTEMS Books I.2.3.4. now available from Frank Beadle, 33 Yoredale Avenue, Darlington, Co. Durham DL3 9AN, England. This massive work compiled by Frank and Don Blakeborough, consists of four volumes, each of 220 double faced A4 pages, with a 5th book of less pages to be published later in 1990, covering nearly 400 systems from all over the world. It is available through the NEMS or the FNZMM. Full details can be obtained directly from Frank above.

"ARKIRECTO" BY MALCOLM HANSON

One of several features that makes Lego such an attractive constructional system to today's children is the way it combines the potential for both architectural and mechanical models. The 'standard' and 'technical' parts may come in separate sets but they are fully compatible with each other and a child can progress from one to the other in the knowledge that old parts can still be used along with the new.

However, in the same way that the principle of interlocking bricks was no Danish invention but a British one (Minibrix, circa 1930) so also the notion of a system with compatible architectural and mechanical elements was first realised in this country, and fifty years before Lego took the same route.

Arkirecto was a metal constructional system from around the 1920's (unfortunately none of the literature in my possession is dated and I must therefore judge the date by the nature of the models and the style of the clothing worn by the children pictured on the box lid). 17 different sets were available, 5 main Mechanical outfits with 3 conversion sets, 4 main Architectural outfits with 3 conversion sets and 2 Combined outfits. Prices ranged from 2/6 to 52/6. The largest sets came in birch and alder ply cabinets with two lift out trays and were very comprehensive.

The elements common to the mechanical and architectural parts of the system were called 'girders', 'stanchions', 'bursts' and 'joiners'. These parts were push fits into each other via a sort of sprung ball and socket joint at their ends and could be used to form frameworks. In the case of mechanical models these frameworks formed the structure of the models and parts called 'spindles' could then be passed through holes in the structure and wheels, pulleys and gears then attached to the spindles. In this manner a range of models similar to those that could be found in Meccano manuals of the period could be made. However, similar frameworks could also be used in the construction of buildings. In this case small tinplate sheets with bricks, doors, windows and roof slates printed on them could be slotted into the framework to produce a large range of buildings similar in style and appearance to Hornby 'O' gauge lineside buildings.

The company that manufactured Arkirecto remains a mystery. However, in common with most constructional toys of the period a club existed for enthusiasts the address for which is given as Charlton House, Regent Str, London, SW1. Does this give us a clue?

Arkirecto was a comprehensive and imaginative system, with over 80 distinct parts, that had a lot going for it. The architectural models were particularly appealing. It is therefore something of a mystery as to why it did not succeed rather better than it did. If anyone has more information on the system I should be pleased to hear from them.

The accompanying illustrations show various of the models that could be built with the larger sets, the complete range of parts and pictures of my M.3 and A.4 sets.

SMALL ADS.

WANTED. Old architectural construction sets e.g. Bayko, Minibrix, Arkirecto, etc - Malcolm Hanson, 11 Willow Close, Long Ashton, Bristol. BS18 9DT. Tel 0272 392321.

WANTED. Trix construction sets/parts, also Scientrix sets/parts, in any condition, also BING TABLE TOP RAILWAY items, everything wanted in good condition, very good prices paid. H Pollard, 62 Ellerbeck Road, DARWEN. Lancashire. BB3 3EX.

MASTERBUILDER - KW Products Ltd - Channels, Strips and Full Parts List Wanted. Page, 418 Tuttle Hill, Nuneaton. CV10 0HR.

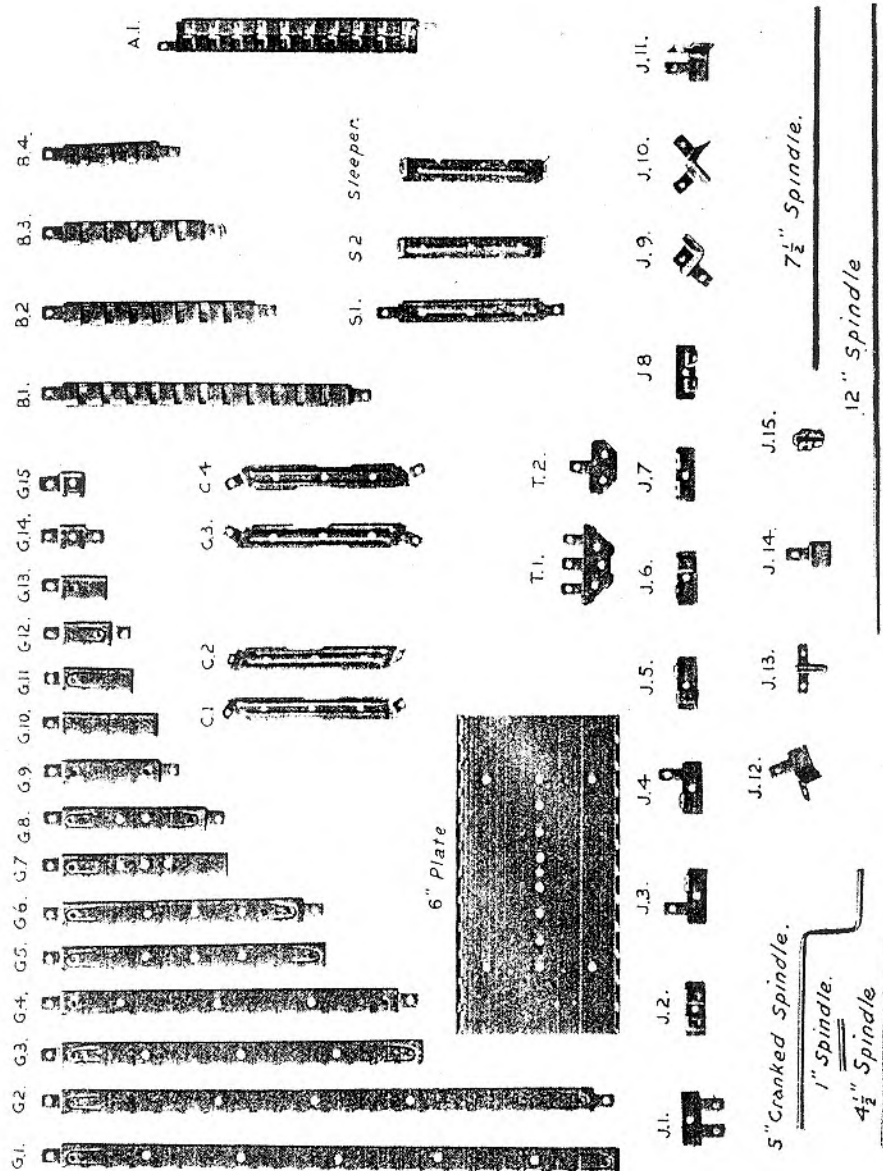
WANTED. Trix chain, any length, even short, up to 6ft total - OSN Editor.

COMPONENT PARTS

PRICE OF ARKIRECTO PARTS.

Part	Price.
G.1	11 1/2" Girder .. 4d. each
G.2	11 1/2" " .. 4d. "
G.3	7 3/4" " .. 2d. "
G.4	7 3/4" " .. 2d. "
G.5	5 1/2" " .. 1 1/4d. "
G.6	5 1/2" " .. 1 1/4d. "
G.7	3 3/4" " .. 1 1/4d. "
G.8	3 3/4" " .. 1 1/4d. "
G.9	2 1/2" " (2 lugs) .. 1d. "
G.10	2 1/2" " (1 lug) .. 1d. "
G.11	1 1/2" " (2 lugs) .. 9d. per doz.
G.12	1 1/2" " (1 lug) .. 9d. "
G.13	1" " (2 lugs) .. 6d. "
G.14	1" " (1 lug) .. 6d. "
G.15	1/2" " (1 lug) .. 6d. "
J.1	Joiner .. 6d. "
J.2-J.9	" .. 7d. "
J.10-J.15	" .. 10d. "
C.1 and C.2	Cross Piece (bent) .. 1d. each
C.3 and C.4	" .. 1d. "
S.1	Stanchion .. 1d. "
S.2	" (bent lug) .. 1d. "
A.1	Angle Burst .. 2d. "
B.1	Burst .. 1d. "
B.2	4" " .. 1d. "
B.3	3" " .. 1d. "
B.4	2" " .. 9d. per doz.
T.1	Three Way Piece .. 1 each
T.2	Two " .. 1 "
Sleeper 3"	" .. 1c "
6" Plate	" .. 1/- "
Sp.1 12"	Spindle .. 1d. "
Sp.2 7 1/2"	" .. 9d. per doz.
Sp.3 4 1/2"	" .. 6d. "
Sp.4 1"	" .. 2d. "
Sp.5 5 1/2"	Cranked Spindle .. 1d. each

KEY



USE THIS MEASURE TO CHECK LENGTH OF PARTS.



For sale :

MR. ANDREAS KONKOLY
H-1137 Budapest
Katona J. u. 28, III. 17.
HUNGARY

(Continued on pages 21 and 22)

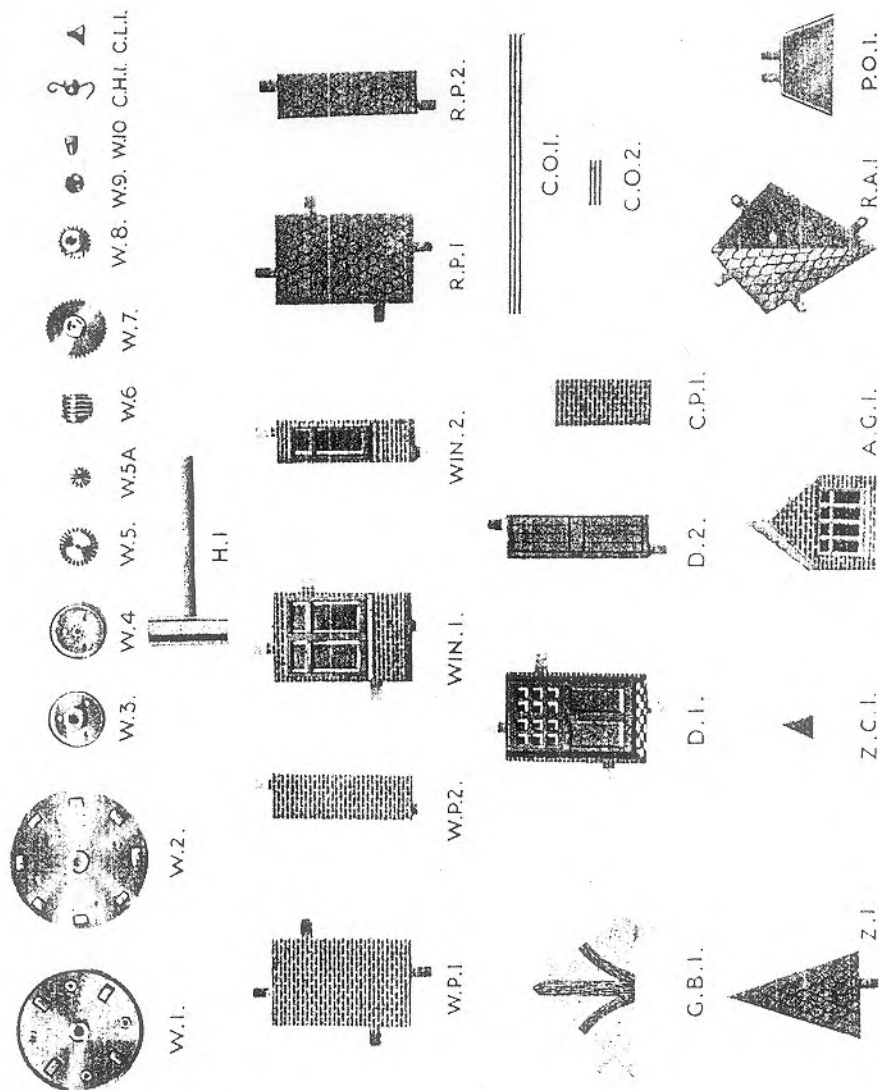
The fantastic Soviet Elektromehaniskais KONSTRUKTOR Set. Weight
cca 3 kg. With 72-page Instr. Book with 45 models.....£ 50

COMPONENT PARTS

PRICE OF ARKIRECTO PARTS.

Part.	Price.
W.1	2 1/2" Burst Wheel .. 5 1/2d. each
W.2	3" Circular Plate .. 6 1/2d. "
W.3	1 1/2" Fixed Wheel .. 4d. "
W.4	1 1/2" Loose .. 3 1/2d. "
W.5	Crown Wheel .. 4d. "
W.5A	Bevel Gear .. 4d. "
W.6	Worm .. 3 1/2d. "
W.7	Gear Wheel .. 4d. "
W.8	Pinion .. 4d. "
W.9	Boss .. 1d. "
W.10	Collet .. 1d. "
W.11	Washer .. 1d. per doz.
C.H.1	Crane Hook .. 1d. each
C.L.1	Clip .. 3d. per doz.
H.1	Hammer .. 1d. each
W.P.1	3" x 2" Wall Piece .. 1 1/2 per doz.
W.P.2	3" x 1" " " " 9d. " "
WIN.1	3" x 2" Window Piece 1/3 " "
WIN.2	3" x 1" " " " 10d. " "
R.P.1	3" x 2" Roof .. 1/2 " "
R.P.2	3" x 1" " " " 9d. " "
G.B.1	Gable .. 1/- " "
D.1	3" x 2" Door .. 1/3 " "
D.2	3" x 1" " " " 9d. " "
C.P.1	Chimney Piece .. 1d. each
C.O.1	6" Cornice .. 1d. "
C.O.2	1" " " " " 1/2d. "
Z.1	Spire Piece .. 10d. per doz.
Z.C.1	" Cap .. 1d. each
A.G.1	Attic Gable .. 2 1/2d. "
R.A.1	Roof Angle .. 1 1/2d. "
P.O.1	Porch .. 1d. "

KEY

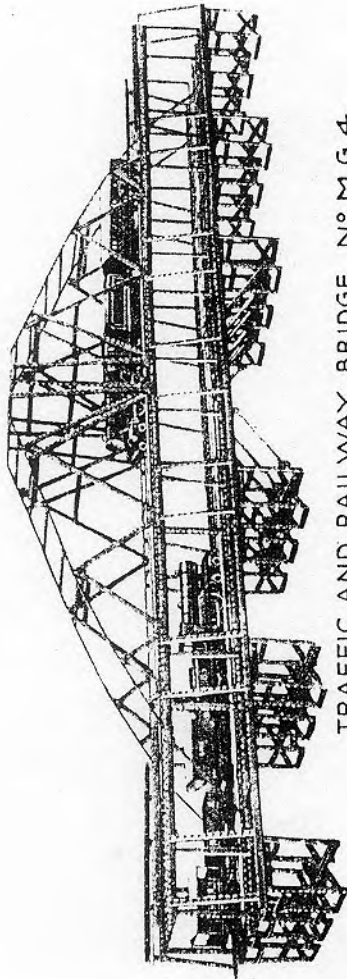


Colour MERKUR Bohemian Set-serial.: No.7,202, M.1. Motorset, No.102 El.Set. Cca 9 kg. With 4 of diff.Instruction color Books....#120

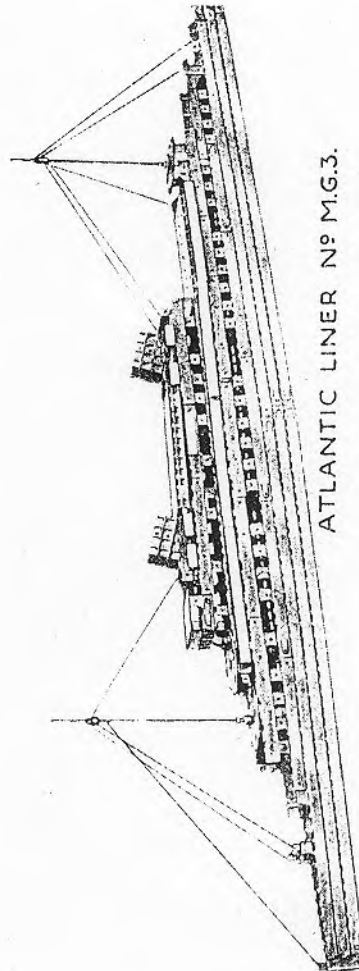
GDR.CONSTRUCTION Set-serial: C03, C02, C06, C07, C08 and C09 Sets. / No.5 dont existed./ Full color Instr.Book.Weight cca 8 kg.#110

Obsolete two different Marklin 1960. Nr.1014 + 1034 giant Sets. In wonderful 6-trays cabinet, staying on 4 of Rubber Legs. With original Nr.14910/20/30 Instr.Books, total 204 page. P l u s a fully new motor. The sets are complete, new.....#700

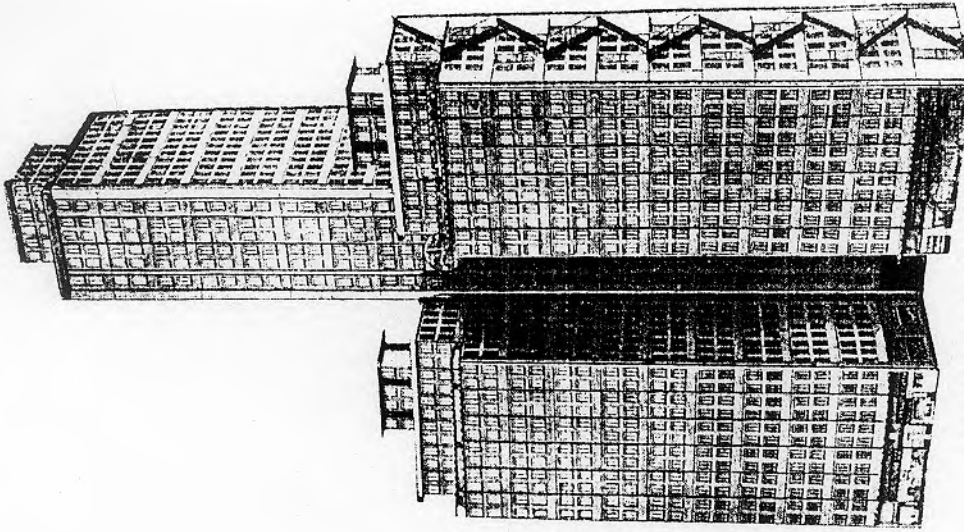
LOOK AT THESE!



TRAFFIC AND RAILWAY BRIDGE N° M.G.4.



ATLANTIC LINER N° M.G.3.



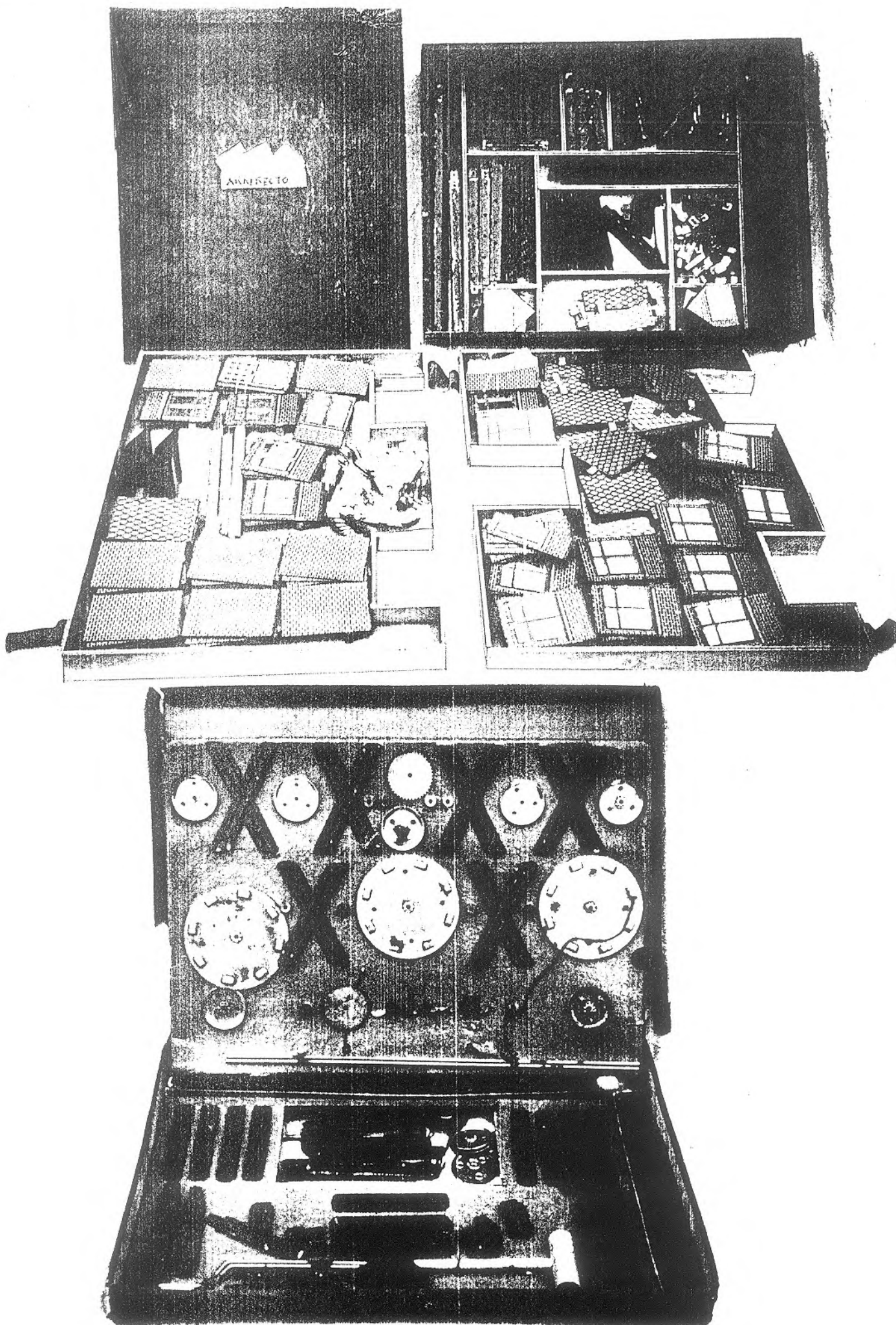
SKYSCRAPER N° A.G.3.

THREE MODELS WHICH GIVE SOME IDEA OF THE LIMITLESS SCOPE OF
ARKIRECTO

Obsolete giant GDR.Burgstädter Set-serial. No.3 Grund-, No.6 Ergänzung und No.7. El.mech.Kasten. Total weight cca 5 kg. 3 of diff. Instruction manual.....£ 60

Bulgarian MUSALA colour No.4.Biggest Set. With 32-page very good Instruction Book. Weight cca 1 kg.£ 20

Sioviet Elektriskais KONSTRUKTOR Set. With 104 of electrical experiments. Weight more, than 1 kg. With a little instruction manual. The set sensational is......£ 30



tainer is 80mm Ø * 205mm high. • There are 110 parts in the Set, of 24 different types, including 14x8mm, 6x18mm, and 2x26mm RH Bolts, and 14 small crossheaded Countersunk Bolts. • The steel parts are nickel plated, the Pulley is aluminium, the Wheels may be Bakelite, and the Cable is white string. • The Handle is 3.00mm Ø; the holes in the Channels, Wheels, and Angles and Corner Plates, are 3.90, 3.50, 4.70mm diameter respectively.

• LEKSAXSSAMLARMARKNAD

(13/360) is not the name of a set, it means Toy Fair in Swedish. **Two unknown systems** were seen there, as well as the aluminium one mentioned in OSN 13; one resembled MÄRKLIN and the other STABIL.

• On TEKNO (13/360), there is also **TEKNO-ELECTRO**, and its Manual is almost identical to the equivalent TRIX one.

• **MAKKO** (13/360) should have been **MAYCO**. [Sorry]

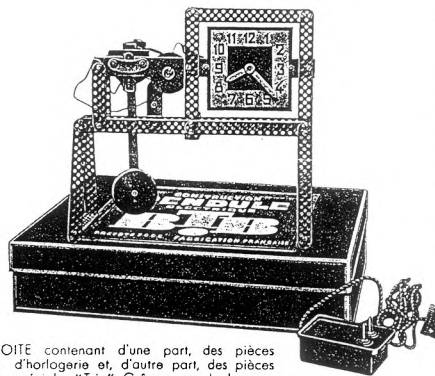
• **AIMANTO** (13/361) is not a constructional toy, it's the brand name of various games in which magnetised pieces are moved about (aimant = magnet).

• For **AJUSTO** in 12/315, the wooden parts in a known Set are red in colour. The 'UNIS FRANCE' isn't the sign of the manufacturer but was a mark of distinction awarded by a toy maker's trade association or the like, in the period 1916 to perhaps 1940. The criteria for such awards aren't known. Also the Brevet No. mentioned was probably not a Patent No. but more likely the Registration No. with a trade body.

• A French system **MÉTALLU** is shown in MCS, the name coming from an advert which is reproduced there. In fact it is a misprint and the real name is MÉTALU - CO' have several Sets with Manuals. Similarly an **ÉRECTOR** Manual is known, another error.

• On **TRIX A/Gs** (13/361), both aluminium and brass plated steel ones were included in French sets.

• And while on TRIX, Jeannot sent a copy of a leaflet for



B OITE contenant d'une part, des pièces d'horlogerie et, d'autre part, des pièces spéciales "Trix". Grâce au mode de mon-

the French **BTB PENDULE ÉLECTRIQUE** (Electric Pendulum Clock). It was a kit made up of standard TRIX pieces and special precision clock parts, and the finished clock 'worked very well and could be regulated'. The address given is 35 Boulevard Richard-Lenoir, Paris XI^{me}, and the price, fr.59, included the necessary battery, or for another fr.15.50 a transformer was available.

7. John Wapshott wrote that he has 2 **ARKIRECTO** Pulleys (W3), see 2/21, with Collets that tighten onto a 2.6mm Rod that was with them, and that a 3.25mm drill goes through their bore (without the Collet fitted). The 3 that I measured for my Database will not tighten onto a Rod of that size, but do tighten on the 3.05mm Rods that came with them (although they were all in a mixed lot), and their bores are typically about 3.07mm. The bore of the solid end of John's Collets is 3.0mm, while mine are 3.1. All the Pulley are stamped ARKIRECTO. Were there two standards or have some of the parts been 'got at'?

TRUNNIONS GALORE Trunnions are often a good way of identifying an unknown lot of parts, or at least narrowing down the possibilities. But it's one thing to have a Trunnion in your hand and another to know which system it comes from. Don Blakeborough and Don Redmond have been working on this and Don B. recently sent me the answer for all known Trunnions and similar Triangular Plates. There's a drawing of each different design - in fact to save space only the left hand side is shown - and a list of all the systems that use each type. In all there are over 130, of some 70 different designs, with notes on material and colour where possible

I find it a great help and with Don's agreement I've arranged it all on a double sided A3 sheet, and I can supply copies at £0.40 each plus postage.

EXTRA MCS SHEETS The Sheets listed opposite are available at 15p per Sheet plus postage. That makes £1.20 + post for all 8 Sheets. There aren't many MCS Amendments this time so they will be included in List No.4 to be issued next April.

BILDO: X1.7 [1 Sheet]
KINCO ENGINEER: X1.7 [1 Sheet]
MECHANIX [1]: X1.3a/5a/6,4 [1 Sheet]
MECHANIX [2]: X1.1,4/6,4a/6a,5 [2 Sheets]
STRUKTIRON: X1.3/6,3a/6a,7 [2 Sheets]
TANSAD: X1.1,7 [1 Sheet]

ACCOUNTS Dear Subscriber,

Your remittance of _____ received with thanks.

Your credit balance after deduction for this Issue and

is _____ Please renew your subscription if you wish to receive the next Issue.

SUBSCRIPTION RATES For 1997 (OSN 16 and 17), including postage, at Printed Paper Rate where appropriate: UK £6; airmail to Europe and surface mail anywhere, £7; airmail outside Europe, £8. **BACK NUMBERS** For the zones above: OSN 1: £1/£1.30/£1.50; OSN 2,3: £2.30/£2.70/£2.90 each; OSN 4-15: £3.60/£4.10/£4.50 each.

SMALL ADS Up to about 150 words free for each subscriber in each Issue; above that by arrangement. Insertion guaranteed in OSN 16 if ads reach the Editor by the end of January 1997.

PAYMENT Please make cheques etc payable to P.A.Knowles. Remittances in other than Pounds Sterling will be cashed locally and the resulting Sterling credited, but bank charges are often prohibitive.

• Overseas subscribers can pay by VISA, ACCESS or MASTER cards: please send Card No, Expiry Date and Name and Address of Card Holder. Debits appear under the name 'SIMPLY COMPUTERS'.

• Overseas subscribers need not send sums of less than £5 for Back Numbers, purchases from the Editor, etc, until it is time for subscription renewal.

ITEMS FROM LETTERS

1. From Richard Symonds. • An ad for a 6" dial calliper gauge that he bought recently for \$19. Made in China, but well made, he recommends such an instrument as being ideal for OS/handyman purposes.

• A photo of a **LYNNCRAFT** Set that's similar but not identical to the one described in 12/309. The outside of the lid looks identical, though I can't quite read if the Model No. is '146'. It's probably an earlier Set because there are no Tyres in it; otherwise the contents look the same, with a generally similar layout, except that all 5 Pulleys are between the Trunnions, there are 2 extra Pulleys (with hidden, or no, bosses), each holding down 3 of the Triangular Plates, no Span'drivers are visible, and in dark areas of the photo on either side of the Large Flanged Plate, there looks to be an extra Bush Wheel on the left, and another part, perhaps a Pulley or a third Bush Wheel on the right. There's no centre hole in any of the Strips.

2. From Don Redmond. • On the **ERECTOR No.100 Set** (from 11/298 & 15/ 411), the bore of the Wheel is just over 3.25mm, & the Axle is 2.90mm Ø. See *Greenberg* 2, p139, for a photo of the Set; it's said there that it was marketed only in 1957, & that the parts were shrink wrapped onto a yellow backing board.

• **JE-IL/JEP** (see 13/344) were still going strong last summer. Their address is Jeil Science Material Enterprises, Kuroku, Kurodong 546-2, Seoul (Buyoung Building, 3rd floor), and the phone numbers are the 858 ones in OSN 13. The firm does not market its products outside South Korea. The sets 1-3 and 5 & 6 continue but there's doubt about the Army outfit (see 6/111). The current manuals are for Sets 1; 2 including 1; 3 including 1 & 2; 5; & 6). The #3 is the same as the one described in OSN 13 with very minor changes to the text, and the models in #5 & 6 are probably the same.

• On **TEMSI** hole spacing, see 9/225, Charles Shrubsole has found that the it is erratic rather than being uniformly a little over ½". Don checked four 25h Strips from one set for himself and found some pairs of holes at exactly ½" while others were up to 1.5mm out. But the erratic spacing was identical between all the Strips, and the end holes were all 3mm over 12" apart. [The 6 in a set from the 1950s or 1960s are all no more than 1½mm out over the 25 holes and the holes seem to be very nearly uniformly spaced; the 4 A/Gs in the set are very similar.]

• **STRUCTOMODE** A/Gs are black, like **MÄRKLIN** used to be, but are easy to recognise because they are copper plated under the chemical blackening.

• The **MASTER BUILDER** Motor shown in 18/495 looks just like the 1914 **ERECTOR** P-51 Motor on p52 of *Greenberg* 1. It was only listed for the one year, and was fitted with strip brushes. Are they identical? And who made them? In 1915 Gilbert changed to the P-58 which had carbon brushes, slightly different frames with 4 terminals, & bracket feet. Said feet had a round hole in each, later slotted right out to the edge of the foot.

• The word in the **KONSTRUKTOR [10]** 'flying goose' logo (18/498) is Moskva (Moscow) in script.

• **Buffing** dull dark grey (tin plated) **STRUCTO** parts using a cloth buffing wheel impregnated with tripoli (rottenstone) gave a bright, smooth shine. Tin oxide is tough.

• Some 5h Strips with very large end radii, of about 2", cut close to the end holes, have been identified, thanks to Kendrick Bisset, as **MASTER BUILDER**. [As far as I know most M B Strips have well rounded ends, see 16/450.]

• **MESO** in the **SONNEBERGER** logo (see 18/502), no doubt comes (in similar fashion to other German abbreviations) from **MEtallwarenfabrik SOnneberg**.

3. From David Hobson. • An unused **MECANIKIT No.0**, still strung in its box, is exactly the same as the one described in 10/250, and MCS, except that all the Strips bar 3x 3h are aluminium, and there are 12 N&B. 8 of the Nuts

are square and 4 hexagonal, both the same across flats. The Axle is aluminium, and the Balloon Wheels have a gold sheen, and appear to have been lacquered. No Screwdriver was found in the Set.

• From the Nov. 1930 *The Toy Trader*. **Sonneberg** (see 18/502) has been known for toys for the last 200 years and has 'the unique **German Toy Museum**'.

• Something on the history of **VOGUE** (ref. 17/464) appeared in the Sept. 1951 *The Toy Trader & Exporter*. The Vogue Manufacturing Co. of Egerton Road, Melton Mowbray was established some 40 years before and produced metal trimmings for shoes. It was bought by A.N.Pallett in 1947 and new machinery for making toys and fancy goods was gradually installed, including plastic moulding equipment. A subsidiary, Vogue Playthings Ltd. was formed in 1947 to market the toys, and in 1949 Thermold Ltd., who made toilet goods and advertising novelties, was acquired. During 1948/49 the original factory was enlarged and another factory at Oakham, 10 miles away, was taken to make the constructional sets. In 1950 A.E.Pallett, father of A.N., and managing director of Casceloid Ltd. from 1919 to 1943, joined the firm and became responsible for admin and sales. In that year additional premises were obtained in Melton for packing and dispatch, and the original factory was modernised. The **VOGUE** pressings were then made there and taken to Oakham for finishing and packing. A blurry photo in an earlier (Feb. 1951) issue showed 3 sets which look like those shown in the Manuals, and behind them is a largish model that might be a Big Wheel.

• An ad from the manufacturers' agent Val Green, in the Jan. 1952 *The Toy Trader & Exporter*, mentions 'The latest & greatest' **KONSTRUKTA** Steel Constructional Sets'. The parts in this system, and their similarity to **BEAVER**, were discussed in 6/129, & this is the first definite date for either. Incidentally **BEAVER** was made by a firm, Rutland Plastics Ltd., in Oakham, where **VOGUE** sets were produced.

• **DAN DARE** Sets 1 & 2 (see 14/366) were announced in an ad by Bartram, the manufacturer, in *The Toy Trader & Exporter* for July 1953, and a similar ad with illustrations of the Sets appeared in the August issue.

• An article on **CONSTRUMENTS** in the Dec. 1932 *Toy Trader* says that the sets have only been on the market for a week or two. So that confirms the date inferred in 5/79. The 20, Plus, & 100 Sets are mentioned and the 20 is said allow instruments worth £20 to be made, or at least £100 for the No.100 Outfit. It is also stated that the interchangeable metal parts were made by The British Thomson Houston Co. Ltd.

• The 1937 **JUNEERO** box lid illustrated in 9/216 was also shown in *The Toy Trader* for Feb 1936, in an ad for cartons, and in a later 1936 Waddy ad.

• **ARKIRECTO** (2/19) was patented in 1933. Mentioned was made of it in the Feb 1934 *Games & Toys*, and in March an ad from the manufacturers, Arkirecto Ltd., Carlton House, Regent Street, London, S.W.1, offered sets from 2/6 to £2-2-0. In October the price range was 2/6 to 52/6 and ads continued until Feb 1935. The next ad, with the same prices, was in June from Waddy Productions, Astor House, Aldwych, London, and they had another ad in September. Finally in June, July & August 1936, E.M.Napier Ltd., Exmouth House, 3 Pine Street, Farringdon Road, London announced 'We have procured the entire stock of **ARKIRECTO** and can offer complete outfits or parts at greatly reduced prices'. (From a Nov 1937 Napier ad: 'Turn that dead stock into £-s-d - London's Largest Job Stock Buyer - pays spot cash for surplus stock.')

• The **MEX** No.2 Set (see 16/452) was advertised by W.H.Cornelius in the Nov 1933 *The Toy Trader*, price 1/-. So unless it had a very short life it's strange that it wasn't mentioned in the later *Games & Toys* ads.

• In 18/523 Don Redmond asked about a yellow plastic Wheel with Tyre marked **BILDIT**. It probably came from the simple plastic **BILDIT** system which was based on a special