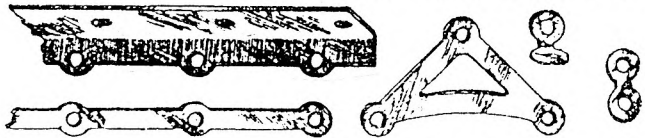


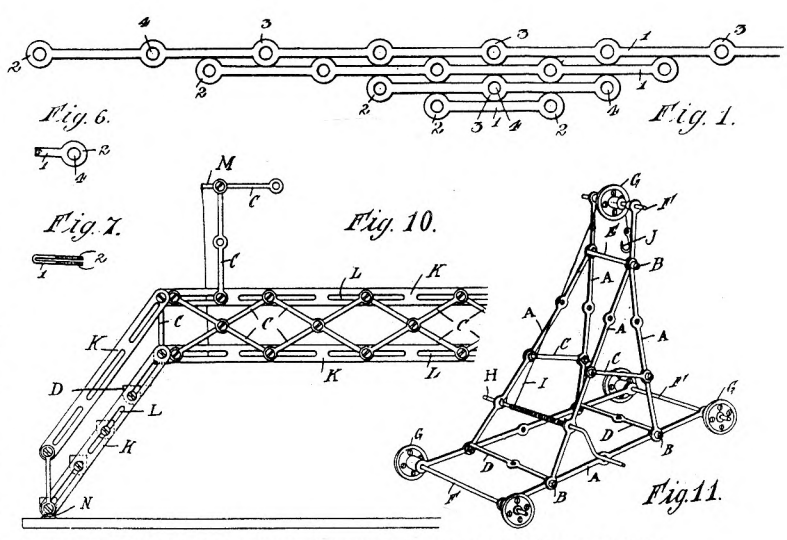
KINCO ENGINEERING and like PATENTS

KINCO structural parts are rather unusual, and their main features can be seen in the illustrations below. Top left is the A/G, and underneath the Strip: it was made in several lengths, and some were formed into DAS; the Flat Bracket was also



formed into an Angle Bracket. No details are given of the size of the parts in MCS and David Hobson has kindly sent particulars of a small selection of Strips and Architraves that he came across recently. The pitch of the holes is nominally 1/4" but in some cases it's a few thou shorter; the hole diameter is rather variable, but is typically 3.8mm (.150"), with a few as small as 3.7mm. MECCANO-size bolts (5/32" BSW) won't go through all the holes and so perhaps 1/8" BSW or 4BA were used. The parts are made of 18swg (.048") steel, nickel plated.

David also sent details of various kindred patents. KINCO Strips and Brackets are described in Patent No. 138824 (Feb. 1920) in the name of James Graham, mechanical model maker and designer, of Edge Hill, Liverpool, with an Application date of Aug. 1919. Before going further an earlier Graham patent (No.125890 of 1918/19) is worth a look. It shows the Derrick Crane below, made of Strips, A/Gs and Flanged Plates, all characterised by their long slotted holes. Despite this the actual claim seems to have been only for the Wheel with curvilinear slots (Fig.11) and the slotted

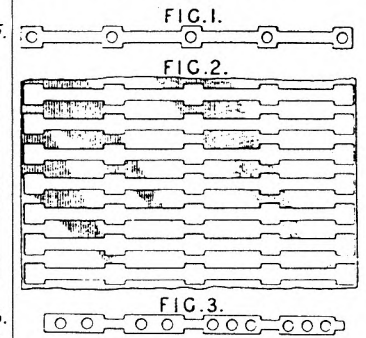
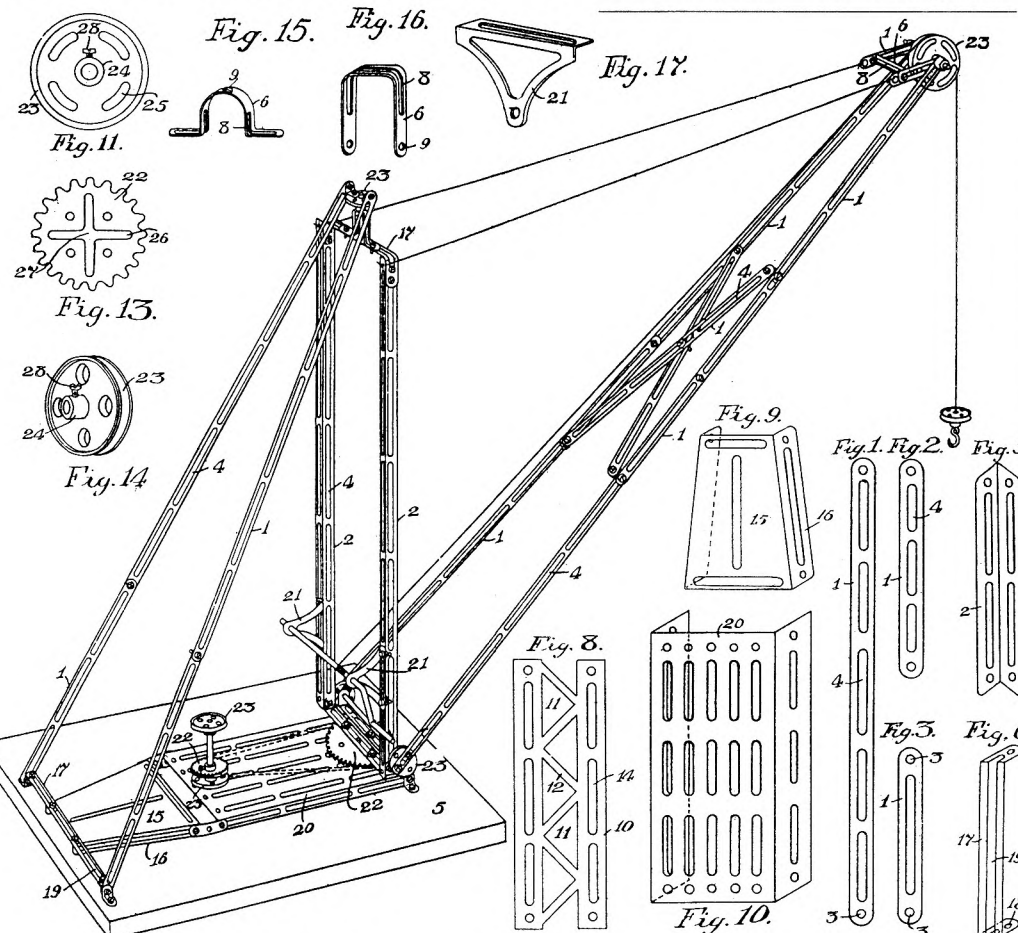


along a Slotted Strip. Not shown is the unusual KINCO A/G and the Architrave. No.138824 is claimed to be an improvement on the original system, mainly because the narrow KINCO type Strips, as shown in Fig.1, used less metal than the slotted ones, 'at the present time when sheet metal is so much more costly than it used to be'.

The 1908 starting date for KINCO given in MCS (1910 in some editions) seems unlikely in view of the date of the Patent. Also in British Tin Toys, p40, the starting date for toy making at British Metal (Kingston) Ltd., who made KINCO, is given as 1919. The 1920 GPO directory lists BM as a toy maker, with two addresses in Kingston-upon-Thames - The Factory, and 64 Basinghall Street. MCS

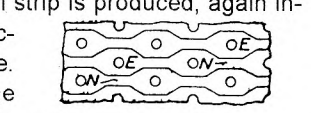
gives an end date of 1920 and, if that is right, and it was launched in 1919/20, it didn't last long. Any references to its existence at later dates would be of interest.

Saving metal when producing strips was also the theme of two 1920 patents to an M. Greenwald. In No.166728 the claim is that 'perforated metal



166,728. Greenwald, M.

strips, Fig.3, for building toy structures are made from the waste metal, Fig.2, left after punching the ordinary strips, Fig.1'.



166,999. Greenwald, M.

Flanged Sector Plate. As far as is known this system was never produced.

Some of the parts in the 1920 Patent are shown at the top of the next column, including KINCO-style Strips, most of the DAS and Brackets, and the Pulley with 4 holes in its face. Also included, but not produced, were Slotted Strips and a Clip (Figs.6 & 7) which could be clamped at any point

In No.166999 only one type of strip is produced, again intended to be used for toy structures, and again with no waste. No examples of any of the Greenwald strips have been reported so far.