

1937 – 1938 Blue and Gold Meccano

Preface

As discussed below, these outfits seem quite peculiar. Early in my studies of these relatively unknown outfits, P. A. (Tony) Knowles in England was very helpful, with samples of UK production that he sent to me, and comments on samples of US production that I sent to him. My wife and I had the opportunity to visit Tony in England, where he and his wife were very gracious hosts. Tony was a Meccanoman, and also published the “Other Systems Newsletter”, discussing metal construction systems other than Meccano. Tony passed away in February, 2022. His help was invaluable in my studies of US Blue and Gold Meccano, and so I dedicate this chapter to his memory. Thank you, Tony.

The Outfits

In 1937, a new (to Gilbert) line of Meccano was introduced, but now looking very much like the Meccano that was made in England. In 1934, British Meccano colors (colours?) changed to blue (for plates) and gold (for strips), and outfits were lettered instead of numbered. In 1937, numbered outfits returned with the blue and gold colors, and outfit contents changed significantly. I have a hard time explaining why Gilbert decided to introduce this style of Meccano, and especially that he decided to manufacture so many specialized parts in the USA. H. Hudson Dobson was working for Gilbert seemingly since Gilbert bought the US Meccano Company, or at least shortly thereafter. Mr. Dobson went to England in late January, 1937, returning to New York on 9 March, 1937. He specifically visited the British Industries Fair, where (among many other exhibitors) Meccano would have displayed their Blue and Gold Meccano outfits. One wonders if he brought back an example Meccano outfit, to persuade Gilbert to sell such in the US. The timeline would seem too short, unless plans were already underway.

There are many characteristics of these outfits which, in my mind, make them weird, compared with other Meccano, both British and American, Gilbert and pre-Gilbert. At first glance, these outfits look much like contemporary British production, but careful examination reveals all sorts of oddities. This comment is based on my own experience. I had been looking for a Blue and Gold outfit to complete my collection of examples of all major British Meccano colors. In late 1997, I saw a No.4 outfit at an antique toy show, and was drooling over it. However, I did not have enough money to buy it, though the price was reasonable. The seller and I spoke a little, and I explained my dilemma. He immediately told me to take the outfit, and I could mail him a check. Somewhat stunned, I took the outfit home, and immediately sent the check. On studying the outfit at home, I realized that it was not entirely Binns Road; in fact, it was mostly not Binns Road. It turned out to be a 1938 Gilbert-Meccano outfit.

A dispute about appraisals on import duties on Meccano products was raised in late 1936 or early 1937. Two features of these cases are of interest to the Meccano enthusiast and historian. The first is that Meccano products were apparently being imported by the Meccano Company of America, Inc, the firm owned by Gilbert. The records of the four hearings include a listing of items and prices, including Meccano Outfits B through F; Aeroplane Outfits 00, 0, 1, and 2; Motor Car Outfits No. 1 and 2; and Speed Boats No. 3, 4, 5, and 3 Racer, among Dinky Toys and Hornby Railway parts. I am not aware of any of these items appearing in the US as early as 1936, but a ca. 1937 Motor Car Constructor is known with a label added “Made in England for sale by the Meccano Company of America, Inc, 200 Fifth Avenue, New York, NY”. A 1940 Aeroplane Constructor is also known, with the same label, so Gilbert did, indeed, import British Meccano products.

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The second interesting feature is that some elements of the history of the Meccano Company of America, and of the Meccano Company, Inc., are described in the testimony of three of the four cases. The first hearing resulted in a decision on December 30, 1937. The first case is reported in “Treasury Decisions Under Customs and Other Laws Vol. 73 January–June 1938”. There were two subsequent hearings, decided June 17, 1938 and (in the “United States Customs Court Reports January – June 1939 Volume 2”) on February 8, 1939. (Another hearing, decided November 22, 1938 is reported in Volume 1, July – December 1938, but contains little historical information.) These three hearings include a fair bit of history, including testimony from Henry Hudson Dobson, as an employee (at least) of the Meccano Company of America, Inc. Thus, Mr. Dobson was again involved with Meccano, now as the Meccano Company of America, Inc., at least by 1937, and probably before then. These cases also state that H. Hudson Dobson traveled to England to see the British Industries Fair, held in late February, 1937. Records show that he left the US to arrive in England on 4 February, 1937, and returned leaving England on 3 March, 1937. His contact in England was “c/o Meccano Ltd, Binns Road, Liverpool”. H. Hudson Dobson is listed in the 1940 census as a toy agent, living in Roselle, New Jersey, having lived in Elizabeth, NJ in 1935. After World War II, H. Hudson Dobson, as his own company, was importing Meccano and Dinky Toys for sale in the US. Summaries of the three main cases are included as an appendix to Section 4, 1929 – 1936.

Gilbert sold only outfits No. 1 through 4, 6 and 7, skipping No. 5 and not selling 8, 9 or 10. No ‘Accessory’ (linking) outfits were sold, either. The manuals were printed in England, and so the print codes use the same format as other Meccano manuals. Separate manuals were printed for each outfit 1 through 6, and combined manuals for 7/8 and 9/10. The manuals for outfits 1 through 6 had all of the models for all of the smaller outfits; thus the No. 6 manual included models from manuals

1 through 5, as well as models for the No. 6 outfit. Manual 7/8 had only models for the No 7 and No. 8 outfits; those outfits would include a No. 6 manual as well, so the smaller models could be built. That was certainly the case in England, but no US No. 7 outfit has been seen with the No. 6 manual. These outfits are not common, though, so the No. 6 manual might have been included.

An interesting side point can be estimated from the print quantities included in the print codes for the 1937 and 1938 manuals. In previous years (before Gilbert), one manual would serve for outfits 0 through 3, for example, and that manual would also be included in the larger outfits. Another manual would have models for outfits 4 through 6 only, and would be included only in those outfits. Thus, the print codes could only reveal the total number of outfits planned for that year, not the breakdown of individual outfit quantities. Gilbert’s “print codes” were only a number, usually starting with ‘M’ on the manuals, and apparently a serial number carrying little information other than the order of printing.

Since the print quantities can be inferred for individual outfit manuals, the quantity made of each size outfit can be estimated, or at least an upper bound of the quantity of outfits. As this is written, 1938 US manuals for the Number 2 and 7 (with the unsold 8) outfits have not been seen, but the other ten US manuals have been seen. The table below shows the print quantity, in thousands, for both British (UK) and American (US) manuals. The 1937 UK quantities are the sum of two printings for the No. 1 through No. 5 outfits.

From this, for example, we can surmise that it was expected that no more than three thousand No. 3 outfits would be sold in the US in 1937, and two thousand in 1938. Guessing the actual quantity is just that, a guess. Another view, though, is the ratio of outfit quantities. Since some data is missing from 1938, we can look at 1937. For each No. 7 outfit, there would have

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been roughly two No 6 Outfits, three No. 4, six No. 3, ten No. 2, and twenty No. 1.

Manual	1937		1938	
	UK	US	UK	US
1	64	10	45	5
2	105	5	20	unk
3	59.5	3	29	2
4	53.5	1.5	24	1
5	25	n/s	12	n/s
6	19	1	19.5	.5
7/8	11	.5	7.75	unk
9/10	3	n/s	2	n/s

n/s = not sold

unk = unknown, no manuals
have been seen

These numbers can be used to multiply the quantity of parts in each outfit. Adding these quantities yields an idea of the relative number of parts needed overall. A number of parts have a total relative quantity of one: Worm; Tension Spring; Coupling; Fork Piece, Large; Boiler Complete; Chimney Adapter; 57 Tooth Gear; and Drift. Only one 2-1/2" x 1" Double Angle Strip is needed, but this part is made from a perforated strip, so not particularly notable. These parts are only in the No. 7 outfit, and only one needed. At the other end of the scale (ignoring nuts and bolts) is 362 Angle Brackets.

While the quantities of parts required may be interesting, the quantities of some classes of part are much more interesting than others. I have classed the parts into five main categories: US Meccano parts, Erector parts, British Meccano parts, newly made Gilbert parts, and axles / crank handles. No new tooling is required for the first two or the last, so the quantities required for these parts are not included in the discussion below.

One characteristic of these outfits that distinguishes them from all other Meccano and Erector outfits is the screw size. British Meccano used 5/32" BSW (British Standard Whitworth) screws for nearly all purposes: nuts and bolts, set

screws, and grub screws. US Meccano used #7-32 (ASME, now UNC obsolete) in the same fashion after about 1920. Erector used #8-32 nuts and bolts, and #6-32 (both UNC) set screws. These Blue and Gold outfits, though, use #8-32 for all purposes, including set screws. Thus, some British made parts had to be supplied with #8-32 bosses, and these new bosses are single tapped (that is, there is only one hole for the set screw; British production by this time was all double tapped, with two tapped holes for set screws. The two holes are in line, so only one hole was drilled and tapped through). The Gilbert Meccano outfits are all single tapped, except for the coupling.

The parts I find interesting are the ones for which Gilbert had to make new tooling. The first such part I noticed is the #187 Road Wheel. It is distinctive because the design is quite different from the British design, and so obviously required completely new tooling. Gilbert apparently decided to make a number of other parts as well: flanged plates and flexible plates, most notably.

Parts categories:

1. ex-US Meccano parts: strips (and derivatives); #44 cranked bent strip; #10 Flat Bracket; #12 and 12c Angle Brackets; angle girders; #53 (2-1/2" x 3-1/2") Flanged Plate; #90 and 90a Curved Strips; #126 and 126a Trunnions;

1m. ex-US Meccano parts modified with new tapping: #19b 3" pulley; #20b 3/4" Flanged Wheel

2. ex-Erector parts: #11 double bracket (M); #22a 1" Pulley w/o Boss (AM); #23 1/2" Pulley w/o Boss (AQ); #36 Screwdriver (P33); #38 Washer (BL); #40 Hank of Cord (probably P34); #45 Double Bent Strip (P20)

2m. ex-Erector parts modified with new tapping: #24 Bush Wheel (BT); #22 1" pulley (P7); #59 Collar (P53); #217a 1-1/4" Disc (BT disc only?)

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3. British Meccano parts (Made in England), with the 'parts score' in [brackets]: The #34 Spanner [84] is a tight fit on the No. 8 square nuts, which measure about 0.253" across flats. #163 Sleeve Piece [2]; #164 Chimney Adapter [1]; #198 Hinged Flat Plate [6]; #212 Rod and Strip Connector [15]; #213 Rod Connector [15]; #214 Semi Circular Plate [24]; #216 Cylinder 2-1/2" long [3]. Some #162 Boiler [1] are British (they are marked), and others appear to be US Meccano. The Spanner has the highest 'score' of this group, and the rest are much lower.

3a. Assumed to be British Meccano parts made in England, but unmarked, with the 'parts score' in [brackets]. Most of these cannot be marked. #5 Spring Clip [226]; #43 Tension Spring [1]; #176 Anchoring Spring for Cord [22]; #155a Rubber Ring for 1" pulley (white) [168]; #186, #186a, and #186b Driving Bands [24, 4 and 4, respectively]; #217b Disc, 3/4" [24]; #57c Loaded Hook (Small) [42]; #A1083 Drift [1]

3m. British Meccano parts (Made in England), modified with new #8-32 tapping: #26 Pinion, 19t [2]; #32 Worm [1]; #62 Crank [2]; #116 Fork Piece, Large [1]; #20a Pulley, 2" [2]; #23a Pulley, 1/2" with boss [3]; #27a Gear Wheel 57t [1]. These parts have markings suggesting English manufacture.

4. Custom unique Gilbert parts: #52 2-1/2" x 5-1/2" Flanged Plate (1937 and 1938 flanged plates had four flanges; previous Gilbert and US Meccano outfits only had two flanges) [43]; #54a 4-1/2" Flanged Sector Plate (previous Gilbert and US Meccano outfits had 4" sector plates) [12]; #187 Road Wheel [46]; #188 through #200 Flexible and Strip Plates (199 and 200 curved versions of 190) [30 to 140; 2, 2 and 6 for Strip Plates]. The 'parts score' on these parts varies considerably, but most are in the 30 to 140 range. There are few Strip Plates, but these are thicker versions of the Flexible Plates except for #197, the 12-1/2" long Strip Plate. Flexible Plates are around 0.008" thick (at least in British

production), while Strip Plates are 0.015" thick in England. US strip plates have been measured at 0.022" thick. It appears that US flexible plates are not quite the same size as British production. For example, the plates which are supposed to be 2-1/2" square are actually 2-1/2" x 2-5/8".

5. Axles and crank handles: these seem to be thinner at 0.154", and no crank handles with grips. These are in their own category, as they are not US Meccano, nor are they Erector, nor English Meccano. I suspect that they are Gilbert production (they seem to be even thinner than Erector, which I would expect to be 0.156" (5/32")). The cranks seem to have a gentler slope, and a smaller offset than the Meccano versions, but there are no grips on the crank handles.

Parts I'm not sure about:

#51, 2-1/2" x 1-1/2" Flanged Plate [6] – not many required, so I suspect that these were probably made in England.

#63 Coupling [1] – very few required, but tapped #8-32. Since Gilbert had to make various bosses anyway, I suspect he made the couplings as well. #162 Boiler Complete [1] – very few required, but Gilbert made boilers for the 1930-1936 Gilbert Meccano outfits. The boiler ends of Gilbert production are easily identified because they had two holes in the flange (sometimes two pairs) one inch apart for the guns in the ship models. My Blue and Gold outfits have a mix of G-M and British (marked) boilers and ends, sometimes mixed in the same outfit. These parts may have been inserted to 'complete' the outfit, without understanding what part is correct. #197 12-1/2" Strip Plate [6] – only a few required, but a 1938 outfit has one unmarked with square corners, and one marked MMIE with round corners. I suspect the latter may be an addition to fill out the outfit (two are required), without careful examination.

British Meccano outfits in 1937 and 1938 were in red finished card boxes up through No. 8 outfits. 1937 US outfits were also packed in red card

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boxes, though not as substantial as the larger (No. 6 and 7) British boxes. In 1938, Gilbert changed the packaging to blue boxes, apparently card through No. 4, and metal Erector style boxes for No. 6 and 7 outfits (the No.5 was not sold in the US).

Another change in US outfits in 1938 was the addition of motors in outfits No. 4, 6 and 7. The larger outfits also added a few other parts as well. The No. 4 outfit had an Erector A48 mechanical (clockwork) motor added, and the manual had a slip inserted explaining the addition. The A48 motor was introduced in 1938, and looks a lot like the Meccano Magic Motor, but is 1/2" larger in length and width (though about the same thickness). The Magic Motor was introduced in 1932 for the "X" series outfits, but had been sold for use with 'regular' Meccano as early as 1935. The manuals included in US Blue and Gold outfits illustrated a number of models using the Magic Motor.

The 1938 No. 6 and 7 outfits had the A48 motor, as well as a 110 volt electric motor based on the Erector A52 motor, but equipped with side plates where a gearbox could be built. In addition, Erector gears were supplied, but with #8-32 set screws instead of the usual Erector #6-32 set screws. Two each CJ 36 tooth gears and one each of P49 18 tooth pinion and P13 12 tooth pinion were also included, along with two P37 formed collars (yes, tapped #8-32) and two 3.5" axles. These gears are Erector gears, and are not compatible with Meccano gears.

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