manual cover in MCS/NZ has just 'Patent Applied For' in its bottom panel. Incidentally in both MCS versions the Pinion is shown with the correct number of teeth (14); the illustrations of pinions in L&G appear to be the 1" and $1\frac{1}{2}$ " Sprockets, #36,37.]

ERECTOR SENIOR and a little more on the GILBERT NEW WHEEL TOY. On the question of whether kids were meant to ride on the NWT models (8/198), there is a comment in Greenberg that the set did not work well in practice because boys who were big enough to build with it were too big to ride on the 'models'. And on the name, which I had noted as somewhat uninspiring, apparently ACG offered a \$100 prize for anyone who could offer an improvement. No one did and the set, which had been launched in 1919, was dropped for 1923, though ERECTOR SENIOR (introduced in 1922) carried on for another year.

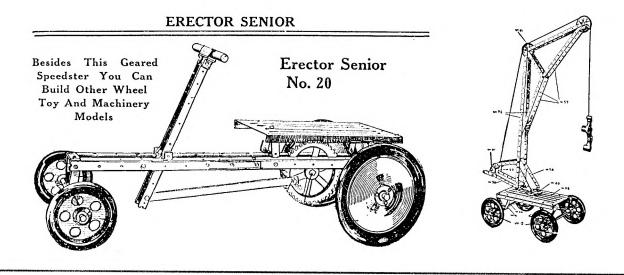
And so to ERECTOR SENIOR, Greenberg says that it was the NWT under another name but in Peter McCall's 1923 Year Book, which it seems actually shows 1922 products, both the NWT and the SENIOR are shown, and it is clear that they are different. Many of the parts, some Brackets and the Gears for example, are probably common but the main stuctural parts are metal instead of wood and in the Year Book it says that the toy is 'built almost entirely of metal'. Two boys are shown riding on a Coaster!

The Year Book shows two sets, and both came with a model fully assembled, the Coaster for Set #15 and the Speedster for #20; the former has four NWT style Wheels but in the larger set two of them are replaced by 8" dia versions. Set 20 also has the large Gears. The models shown have a different flavour, there is no mention of Sleds but 3 Cranes, large and quite respectable looking, are featured. To confuse the historian one of the illustrations is the NWT Coaster. The Strips used in the Coaster/Speedster scale at only about $\frac{1}{2}$ " or a little more. wide but the holes seem to be at 2" pitch, as for the NWT. In the Cranes the hole spacing of the Strips appears to be 1" and 4 sizes can be distinguished with PNs W56 to W59; they have 27, 13, 7 and 3 holes respectively.

The new MCS sheet shows complete the 2 pages on ERECTOR SENIOR in the Year Book.

AMENDMENTS TO MCS PERIOD: 1919 to 1922. COMMENTS: Add 'See also ERECTOR SENIOR.'

AMENDMENTS TO INDEX IN OSN 6: NAME: ERECTOR SENIOR. TYPE: NM. CY: US. SPCE: 25.4x?



TRANC MADERA. José Bernal Moreno sent a few more details of this wood/metal system (see 8/200), from a friend of his who owns a Set. All the metal parts are steel, including #1700 which is a Spanner. The Strips are about 33mm wide, and the pitch and diameter of the holes in them are approximately 36 and 6mm; the Bolts are 6mm dia. The Wheels are fitted with rubber tyres, o/d $6 \cdot 1/16$ ". And the Wheels are the only parts that are painted, light blue.

AMENDMENTS TO MCS: HOLE DIAMETER: 6mm approx. HOLE SPACING: 36mm approx. COLOUR: Unpainted except light blue Wheels. AMENDMENTS TO INDEX IN OSN 6: THREAD: 6x? SPCE: 36. dST: 6.

<u>SMALL AD</u>. FOR SALE. Nuts N-21 for Erector. Steel, plated nickel over copper. \$4.50/100; \$15/500; \$25/1000; 6-10000, \$20/1000; 11000 or more, \$17.50/1000. Shipping extra - Marion Designs, 594 Front Street, Marion, MA 02738. U.S.A. [These Nuts are $\frac{1}{4}$ " square and are slightly thicker than MECCANO ones (.096"); they are very nicely made and finished. The thread is 8-32 but I've just used 350+ with MECCANO Bolts (5/32" BSW) without problem - Ed]

Snippets. The GILBERT WHEEL TOY and ERECTOR SENIOR These

systems had parts to make full-size wheeled toys for small boys. The first sets, called NEW (or sometimes OUTDOOR) WHEEL TOY included many wooden parts, but in the later

ERECTOR SENIOR they were very largely replaced by steel. Some notes on the NEW WHEEL TOY were given in 8/198 (under its French name), and on ERECTOR SENIOR IN 9/219. Since then the parts from a WHEEL TOY set have come to hand as well as numerous Ebay photos of WHEEL TOY outfits, and a few of the SENIOR sets. What follows summarises the earlier notes and adds to them.

HISTORY 3 WHEEL TOY sets were introduced in N-28 1919. The 'models' (Carts, Scooters, etc) had 51/2" steel Wheels & frameworks of wooden Beams. The smallest set was #9004, the next, #9006, added the parts needed to make the 'star' Irish Mail model (Figs.2-4) and probably the Plates which formed the sides of load platforms. (Gilbert's name for the Irish Mail was Geared Speedster, and the name used in OSN 8 was Geared Hand Lever N-37 Cart). Extra in the largest #9007 set were parts to add up

to 4 runners to some models to make them into Sledges. All the sets had wooden boxes with only the Wheel Toy logo on the lid (Fig.1). They were usually called NEW WHEEL TOY, as on the inside of the lid (Fig.5), and on the manual (Figs.7 & 8), but OUTDOOR WHEEL TOY in Greenberg, in a 1920 advertisement, and in most of the 1920-21 UK trade ads.

The WHEEL TOY sets were replaced by two ERECTOR SENIOR outfits, Nos. 15 & 20, in 1922, and they were broadly equivalent to the two smaller WHEEL TOY sets. The wooden Beams & Base/Seat were replaced by steel parts and the Sledges were dropped from the manual in favour of some 'machinery models' (a Crane was shown in OSN 9). The sets were packed in corrugated cardboard boxes and it is said that they included the largest model ready-made. The No.20 box was 321/4*121/4*91/8", but I don't think it would that have been large enough to house a fully assembled Irish Mail (Figs.11 & 12). (Built-up models were probably needed because of the difficulty of building some of the models - an extreme example was that in the WHEEL TOY the #21 Stub Axle had to be

hammered into the Large Gear Wheel and its end peened over.) The sets' lids (Fig.6) did not carry the Wheel Toy logo though it was on the Seat (as it had been on the wooden part). OUTDOOR WHEEL TOY was used on the manual

cover (Fig.9). SENIOR sets were not listed after 1923. The French version of the WHEEL TOY manual was called NOUVEAU JOUET à ROUES (New Wheel Toy) but sets in the La Samaritaine catalogue were listed as JOUET DÉMONTABLE GILBERT (Gilbert Constructional Toy). An Ebay WHEEL TOY Set from Belgium has the Fig.1 logo on the lid with the Fig.5 label (in English) inside it, & 2 manuals, one in French as in

OSN 8, & one, the same size and with a





similar cover, but in Dutch and called NIEUW RADER SPEELGOED (New Wheel Toy).

The NEW WHEEL TOY

The illustrated parts were shown in OSN 8 and are listed in Fig.10. The wooden parts are #5 Base/Seat, 71/4*13*7/8", & the 15/16" square Beams, #1-4, used for frame-



GILBERT NEW WHEEL TOY/ERECTOR SENIOR: S1

D 117	0.1		
Part No.		No. Name	Price
N 1	2600	Short Wood Piece	.05 each
N 2	2601	Long Wood Piece (Regular)	.08 "
N 3	2602	Long Wood Piece (Special)	.10 "
N 4	2637	Long Wood Piece (Extra Special)	.15 "
N 5	2614	Wood Seat	.35 "
N 6	2638	Crank Stud	10 "
N 7	2613	Wheels	.50 "
N 8	2624	Wheels FIG.10	.35 "
N 9	2622	Large Gear	.75 "
N 10	2626	Connecting Rod	.15 "
N 11	2616	Angle Bracket	.03 "
N 12	2607	King Pin	.03 "
N 13	2634	Nut 14 x 20	.10 doz.
N 14	1407	Screw 8 x 32 x $\frac{1}{2}$.10 "
N 15	2625	Gear Bearing	
N 16	2621	Runner	.15 ."
N 17	2610	Long Axle	.25 "
N 18	2640	Long Axle (Special)	.25 "
N 19	1622	Screw 14 x 20 x $\frac{3}{4}$	
N 20	2611	Short Axle	
N 21	2623	Gear Axle	
N 22	2617	Pivot Axle	
N 23	2632	Screw $\delta \ge 32 \ge 3\frac{1}{8}$	
N 23	2606	Lower Universal Joint	10 occh
N 25	25-L	Screw 8 x 32 x $1\frac{3}{8}$.10 doz.
N 26	2604	Hinge to Universal Joint	.05 each
N 27	P-2	Erector Angle	
N 28	2603	Universal Bracket	
N 29	2608	Lock Collar	.05
N 30	2609	Bearing Bracket	.05
N 31	2605	Upper Universal Joint	.10
N 32	P-26	Nut 8 x 32	$.02\frac{1}{2}$ doz.
N 33	2631	Cotter Pin (Large)	.10 "
N 34	2615	Loop Bracket	.08 each
N 35	2629	Tie Bar	
N 36	P-29	Washers	
N 37	2630	Cotter Pin (Small)	.05 "
N 38	2633	Screw 8 x 32 x 2	.20 "
N 39	25-S	Screw 8 x 32 x 1/4	.05 "
N 40	2620	Short Metal Side	.10 each
N 41	2612	Splice Strap	.05 "
N 42	2627	.Lift Piece	.10 "
N 43	2636	Headless Set Screw 14 x 20 x 3/8	.25 doz.
N 44	2639	Flat Head Screw 8 x 32 x 1/2	.10 "
N 45	2628	Wheel Lock	
N 46	2619	Corner Piece	.05 "
N 47	2618	Long Metal Side	.15 "
N 48	2642	Gear Pin (Not Illustrated—	
1, 10	2012	Furnished with Special Axle N 18.)	
		Furnished with Special Tixle iv 16.)	-

works. #1 is 8" long, #2-4 are 16", all with holes at 2" pitch. They are joined using steel Strips & Brackets, mostly ½" thick & 7/8" wide, Axles are $\frac{1}{2}$ " Ø (9/16"for the Large Gear). The Wheels are 5½" Ø and do not have the tyres mooted in OSN 8. They run on the Axles between Split Pins and one rear Wheel is driven by a #45 Driving Dog, held to the Axle by a Grub Screw, which engages a face hole in the Wheel. The Gears have 13 & 39 teeth and are 6 DP. The Pinion is held by a

Pin (#48) through the Axle (see Fig.4). The Plates are about $\frac{1}{32}$ " thick and are joined by the 1" wide ERECTOR A/Bs of the time. The Sledge runner assembly (see OSN 8) simply replaces a Wheel on an Axle and is free to pivot on it. Apart from their length the 8-32 N&B are again ERECTOR parts. There is also a #19 14-20 RH Bolt, $\frac{7}{16}$ " Ø, with a #13 square Nut $\frac{7}{16}$ " A/F.

The Beams in all the sets are painted black.

In my parts and in most of the Ebay sets the Seat & Plates are red; the Wheels & Gears are black, and so are most of the Brackets, with a few red. But in several of the Ebay sets the Wheels are red and the Plates black.

2 types of manuals are known. In 7 of the 11 sets seen it is the English version (Fig.8) of the French edition described in OSN 8, with 16 pages, 132*177mm, plus covers. Apart from the language both are the same except for the ad pages C3 & 4, with the French C3 completely blank.

In the other 4 Ebay sets there is a larger landscape format version (Fig.7). It was said to be Copyright 1919 and to have have 8 pages $10\frac{1}{2}*7\frac{1}{2}$ ". The illustrations on the 3 inside pages shown are the same as in the smaller

version. The panel on the cover looks to be the same design as the label inside the lid. This could be the first manual – one set with it was said to have been shipped in Dec. 1919.

ERECTOR SENIOR

No details of the full range of parts that were in the sets is available but some of them can be seen in Figs.11-13. Has anyone the Manual? A major change was to replace the wooden Base/Seat by a sheet steel part flanged on all sides, & the Beams by steel Strips, about 5/8" wide, with 3, 7, 13, & 27 holes at 1" pitch. In the Irish Mail (Fig.11) the main Beams are replaced by pairs of Strips with A/Bs used to form them into angle girders. The only wooden part was a dowel-like Handle Bar (see Fig.11). The 7h Strips in Fig.13 look wider than the longer ones (truncated in the photo) but I've not spotted them in the model. The Gears look as before but their bearings have been improved to provide a proper bearing for the Rear Axle (Fig.12) and to give a fixed distance between the Gears (the previous #15 Bearing for the Large Gear had a slotted tail to allow the mesh to be adjusted (Fig.3)). Another new part is the 8" Rear Wheel (there were 4 of the smaller Wheels in Set 15 but only 2 of each size in Set 20), and as can be seen it has 5 face holes, unlike the Wheel in the ad model in OSN 9. The previous method of using a Dog to lock the Wheel to the Axle was replaced by the method in Fig.12, though what it is exactly isn't clear. No Plates can be seen in any of the Ebay sets and none are shown in the models in the adverts - however the ads do talk of 'High' & 'Low' Trucks. There were some additional standard ERECTOR parts in the sets - the Spoked Wheels in Fig.13 are used in some of the Cranes - but I'm not sure what the black 'Disc' with 6 face holes to their right is.

The Wheels are red and the Strips black in all of the 3 sets seen but the Seat is black in 2 and red in the other.

Nothing is known of the contents of the Manual except that an ad says that for Set 15 it has illustrations of 'windmill, lawn seat, ladder, trolley repairer, stationary crane, wheel derrick, movable hoist and movable crane', as well as a whole range of wheel toys including the 'four-wheel Coaster', the built-up model. As well as the Irish Mail Set 20 offers 'many more

wheel toy & details are suggested that all made by replacing 2 ones as necessary. Mobile Crane that was shows a Set 15 Crane riding on it.

given except that it is the Set 15 models can be

of the 5" Wheels by the larger That would look odd on the shown in OSN 9. The lid in Fig.6 and an Irish Mail with 2 boys

The SENIOR sets offered a much wider range of models & the design of the parts & wheel toys had been greatly im-

FIG.11

proved. But few sets seem to have survived and the packaging, said to be rather flimsy, may have been a factor.



GILBERT NEW WHEEL TOY/ERECTOR SENIOR: S2

OSN 45/1386