TANÉRT Educational Outfits These sets were made by 'Tanért 1 Sz. Mechanikai Gyaregysége' at Debrecen (a city in the east of Hungary). From the internet it seems that TANÉRT was the 'National Company for the Production and Sale of Teaching Aids', and '1 Sz. Mechanikai Gyaregysége' is rendered by Google as: No.1 Mechanical Manufacturing Unit.


Fig.1

This note is about two different sets and thanks are due to Erik Beek for sending details of them. The Sets were developed, probably well before 1960, for use in schools, and were not sold in toy shops. At a glance many of their parts look similar to the East German CONSTRUCTION but in fact the pitch of their holes is 20mm (against 10mm) and the N&B are 6mm diameter.

Erik wrote that in Germany & the Balkan states metal building parts, CONSTRUCTION in many cases, are used in specific primary school lessons, and that at present METALLUS is also used in secondary schools. In the past sets specifically intended for schools were used, and they included more specialised sets, but less is known of them. The first Set is:

TECHNISCHER BAUKASTEN für Hilfsschulen, Klassen 2-6 Two examples, both for German language markets, are known. Erik's was bought in Prague, the other, belonging to Jean-Paul Meulemans, in Germany, and they differ only in the manual that was with them. The one with the Prague set was in Hungarian and, as will appear, was from a different set. The present set was developed for use in Hilfsschulen, that's to say schools for children with moderate learning difficulties or motor disabilities. Each pupil had a set and the teacher followed every step/error/goal, with progress being recorded in a very detailed index system. The Set was used in both East & West Berlin and Erik was told in Prague that it was already in use in 1960, and that in 1995 it was replaced by a more versatile and less expensive system. The only exact date known is 1981 which appears on an Hungarian Quality Certificate slip which was with both Sets.

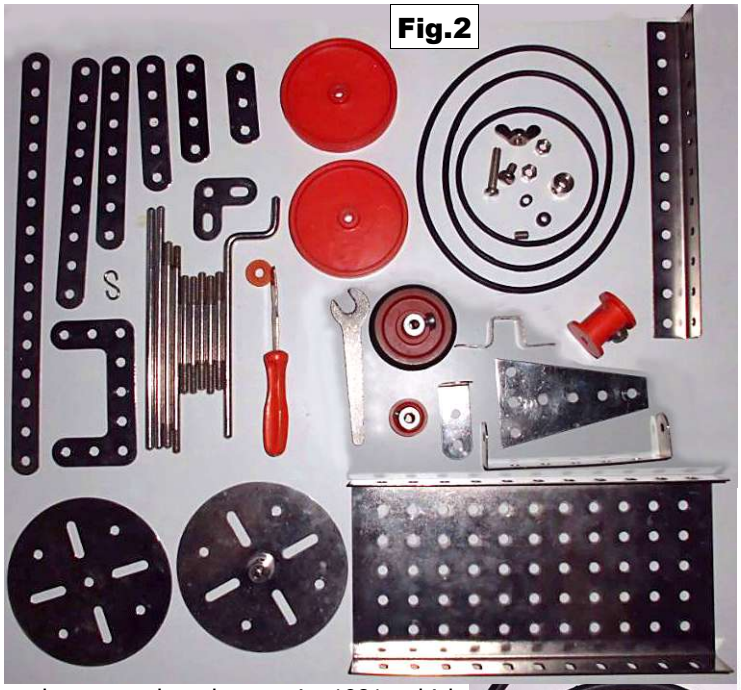
Fig.2


Fig.3

The Set has an orange plastic box (Fig.1), 31.5*23*4.5cm, with the name moulded into the lid in tiny letters. Inside are 3 layers of parts in white moulded plastic trays with recesses for each & every part. The Set weighs 4.60kg.

The Parts are shown in Figs.2 & 3 but the Collar is not in this set and a 5*5h version of the Flanged Plate isn't shown – it was missing from both sets but can be seen in other Ebay sets & is needed for the manual models. Also omitted from Fig.2: an 11h Strip, a Hinge (inset in Fig.3) & a Washer. Holes that can't be seen clearly are round except in the flanges of the Flanged Plate. **Material**/ **Finish**: metal parts, generally 1.4mm thick, are nickelled; the orange parts are plastic. **Holes** are 6.2mm Ø at 20.0mm pitch. **The thread** is M6. **Bosses** are 14mm Ø & 14.5mm long. **The Set Contents** are given in the manual, as follows, with my names, a few notes, and the quantities in curly brackets. **Flanged Plates**, 5*5,11h {1,1}. **Strips**, 20mm wide, 15,11,9, 7,5,4,3h {4,4,4,8,8,4,4}. **A/G**, 11h {4}. **A/B**, 2*1h {4}. **Corner Bracket** {4}. **DAS**, 1*5*1h {6}. **Flat 'U' Strip**, 2*5*2h {2}. **Sector Plate**, 3*5h {2}. **Hinge**, similar in style to M212a {2}. **Double Bent Strip** {4}. **Screw-ended Rods**, 140,60mm {2,6}. **Axle**, 5.85-6.00mm Ø, 165mm {2}. **Crank Handle** {1}. **Circular Plate**, 115mm Ø {1}. **Face Plate**, 115mm Ø, double-tapped boss {1}. **Road Wheel** with a flat rim, 80mm Ø {4}. **Pulley**, **Fast**, 50,25mm Ø, single-,double-tapped (a thin **Rubber Ring** is not listed, but is actually fitted to the 50mm version) {4,1}. **Pulley**, **Loose**, 18mm Ø {2}. **Winding Drum** {2}. **Wire Hook** {2}. **Bolts**, 10,30mm {50,6}. **Nut** {60}. **Wing Nut** {8}. **Washer** {10}. **Axle Stops**, rubber, 5mm long, 7½ & 9¼mm Ø {12 total}. **Cord**, not seen {1}. **Driving Bands**, rubber, 4mm Ø {2,2,2}. **Screwdriver** {1}. **Spanner** {1}.

Two Other Boxes of plain greyish cardboard were with one of the Sets. They were unopened and measure 35½*13* 3¼ & 31*13*3¼cm. They have no label but inside are the same Quality slips as with the other sets. They are packed with parts and it is supposed that they may have been add-on sets. Their contents are as follows. **The larger box**: Flanged Plate, 5*11h {1}. Perforated Plate, 5*9h, square corners {1}. Strips, 17,9,7,6h, the 6h slotted as per Eitech {4,2,3,2}. Pulley with boss, 50mm Ø, & Rubber Ring {2}. Screw-ended Rod, 10cm {4}. Axle, 17cm {1}. Plus, in a paper envelope: Axle, 5cm {1}. Corner Bracket {2}. Hinge (or Rod/Strip Coupling) {2}. Collar, 14mm Ø, 12mm wide, as in Fig.3 {2}. Axle Stop, {10}. Nut & 9mm Bolt {20}. **The smaller box**: Flanged Plate, 5*5h {1}. Strip, 15h {2}. Face Plate {1}. Corner Bracket {2}. Sector Plate, 3*3h {2}. Winding Drum {1}. Screw-ended Rod, 14cm {1}. Crank Handle {1}. Plus, in a paper envelope: Pulley, Loose, 18mm Ø {2}. Axle Stop {8}. Wire Hook {2}. Cord {1 hank}. Plus, in another paper envelope: Bolts, 9,25mm {32,4}. Nut {56}.

The Manual that was with the 'German' set has 26 pages, 20*24½cm, and its cover has just the name of the set & the maker on it. After a lengthy introduction and the Set Contents, the models start with basics such as locknutt-

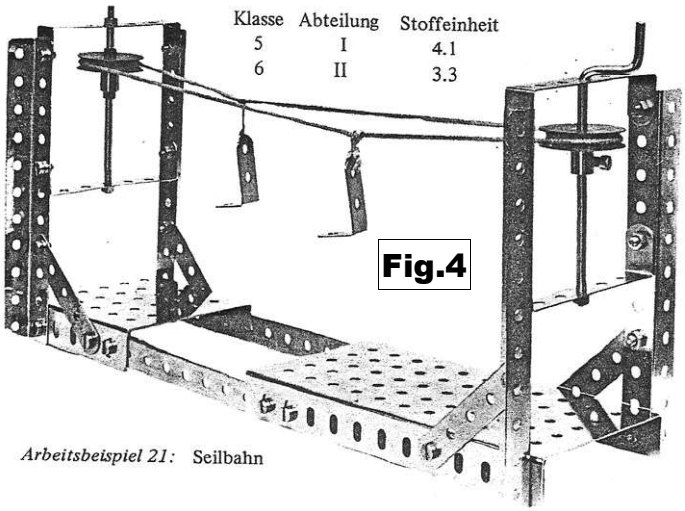

Fig.4

ing and rigidity (of the triangle, and rectangles with & without bracing). Then simple models like a Step Ladder, a simple Girder Bridge, a hinged Gate, a Seesaw, & a Swing. Slightly more advanced models include a Luggage Barrow, a simple Cable Railway (Fig.4), a Scooter (Fig.5), a Hoist (Fig.6), & a swivelling Elevated Jib Crane. There is a halftone & list of parts for each model, and the appropriate Klasse is given for both types of disability. All the models are quite straightforward though the details in the photos of some of the more advanced ones don't look very clear – no doubt the originals were better. Mechanically there are cord drives, and loads on the Crane etc are prevented from running away by sliding a Rod to prevent the winding handle from turning. Erik wrote that the manual follows Fröbel's principles which in my understanding might include a number of exercises of increasing complexity, models in 2 & then 3 dimensions for example, each of which would involve studying an object, creating it from the given materials, and developing it to exploit its potential. And it is all meant to be fun rather than a dreary school lesson.

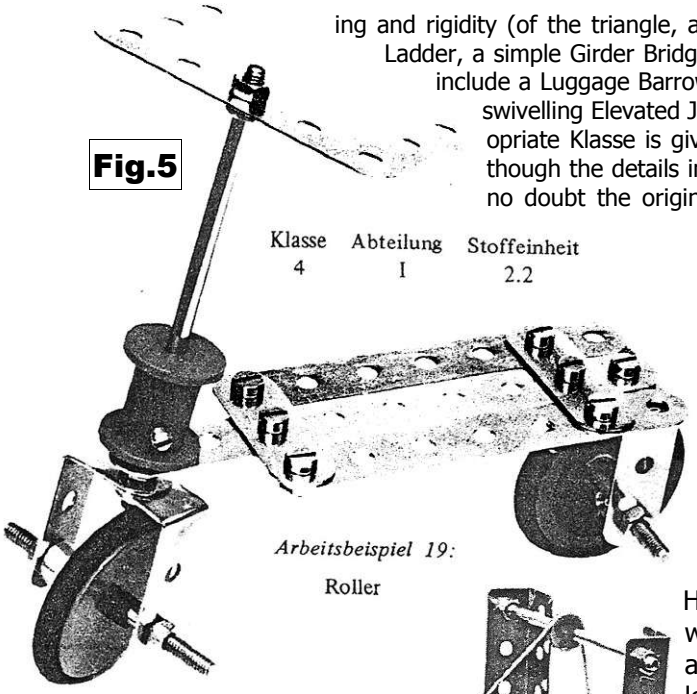

Fig.5

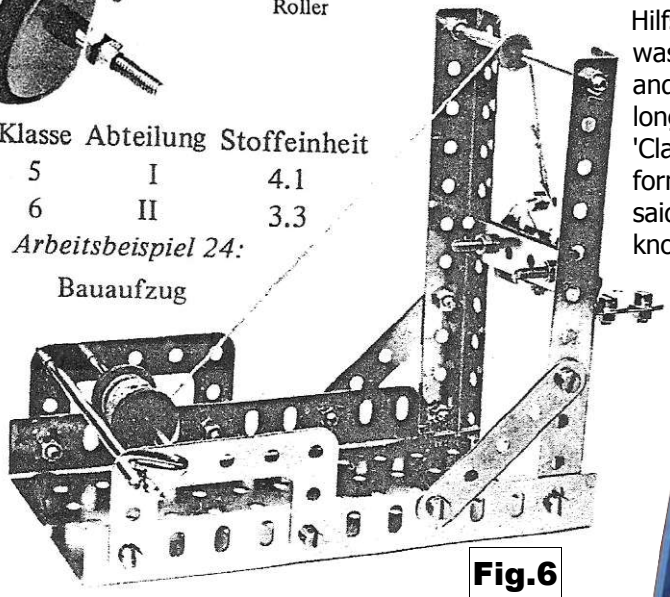

Fig.6

The CLASS 1 'HUNGARIAN' OUTFIT

The manual with the Prague Hilfsschulen set was in Hungarian and actually belongs to this 'Class 1' set. The formal name of said set isn't known, it isn't on the manual cover shown in Fig.7 ('Elrendezési rajz' means 'Layout plan'), and the lids of the 2 (identical) sets known, which may well have carried it, were missing (instead the open box, right, was closed by a light card which fitted within the top edges). The box is the same size in plan as the Hilfsschulen box but only 38mm deep, the parts common to the Hilfsschulen set match them, and the contents are complete except for the Scissors. The manual has 10 pages and the model pages are headed simply 1-osztály (Class 1). The models are the simpler sort with a line drawing of each, often against a coloured background, and extra views plus a parts list for some but not all. The manual pages 1/8 & 1/9, right, show some of the more advanced models. There is no mention anywhere of disabilities and so it's likely that this set was intended for use in normal primary schools.

Fig.7

Fig.8

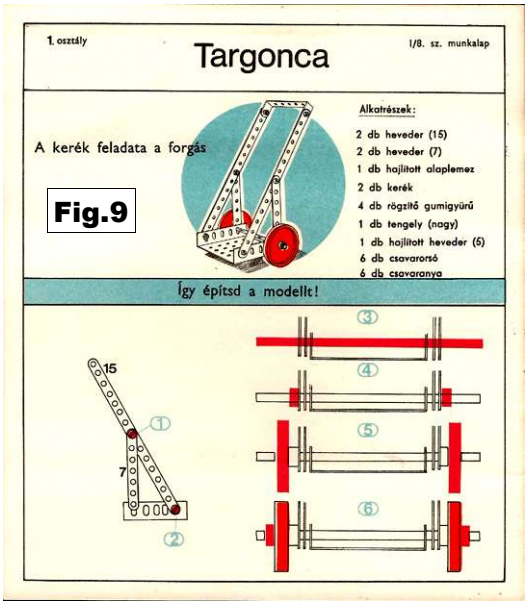

Fig.9

Fig.10