

MECCANO

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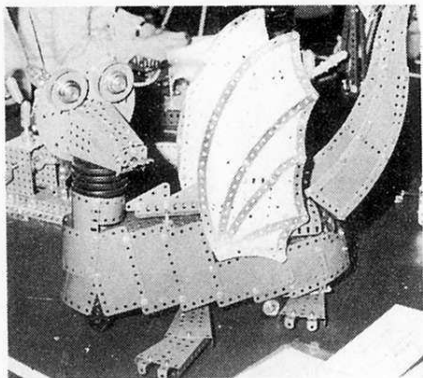
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'DEREK THE DRAGON'
BY GEOFF COLES

Derek the Dragon!

**An appealing, fun-orientated
new model
designed and constructed
by Geoff Coles**



Derek the Dragon on public display at Wigan, May 12th.

MAKING its debut at the May 12th Wigan Meccano Exhibition was one of the most strikingly original Meccano models seen for some time, a 22" long, 20" tall, fiery red and brilliant yellow Dragon! The brainchild of Geoff Coles, Secretary of the North Midlands Meccano Group, 'Derek' proved a great attraction, particularly so when the Meccano Steam Engine incorporated in its frame was fired up, resulting in 'Derek' performing a wide variety of interesting motions accompanied by suitably effective clouds of steam!

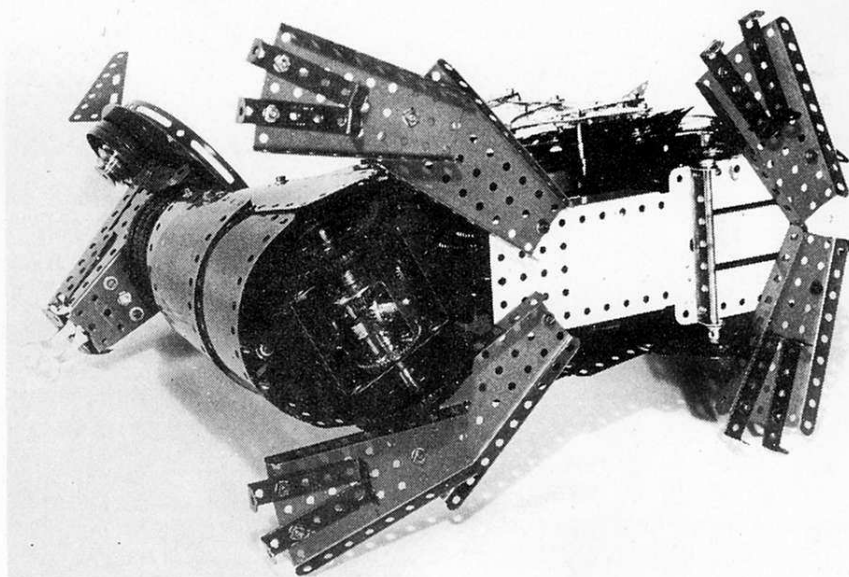
Based on a character portrayed in a children's book by Nancy Catford, the model exhibits anything but a childlike approach to the solution of many problems associated with coupling the Meccano Steam Unit to an internal linkage system actuating the tail, head, and road wheels with powered castor steering.

The sophisticated reader will need no prompting to appreciate the wealth of original thinking necessary to design such an unusual model with so many features. The mechanism is very cleverly designed, making optimum use of the Steam Engine's power reserve, although Mr. Coles himself is at pains to point out that it is, (like all the best mechanisms), essentially quite simple.

A three-stage gear reduction from the Steam Engine crankshaft powers a Single Throw Eccentric linked to the tail, producing a 'wagging' motion. An extension of this gear train takes the drive to the base of the head, causing it to rotate, and the first of a further two power take-offs motivates the front wheels consisting of two 2" Pulleys with Tyres, held in a castor steering arrangement which itself rotates on a 3½" Gear Wheel under power from the second take-off.

The main body of the model comprises effectively laid-out Flexible Plates in a variety of sizes, but rather surprisingly for a model inviting attention from the younger age groups, rare mint-condition red Flexible Plates with round holes rather than the more common elongated holes, are used. The fact that the Plates are in such good condition, and perfectly 'flat', does however lend the Dragon a certain 'scaly' appearance, accentuated by the diagonal overlapping. Cone Pulleys represent the eyes again very effectively, and two Spanners protruding from the 'mouth' simulate the 'forked-tongue' one expects from all Dragons found in ancient mythology. A large Hook forms a Scorpion-like barb at the end of the tail.

For all the model's ferocious looks and prickly appendages, one cannot help but admit that the overall impression given by 'Derek' is one of playful exuberance. Onlookers are most surprised to observe the model move around in an apparently random manner, simultaneously wagging its tail and moving its head, enveloped in steam from the engine providing the motive power. The resulting performance can only be described as extremely effective, and latest reports confirm that 'Derek' is winning new admirers at every public showing!



Underside of model showing castor steering arrangement.

Rear view of Derek the Dragon; note the Meccano Steam Engine concealed inside.

