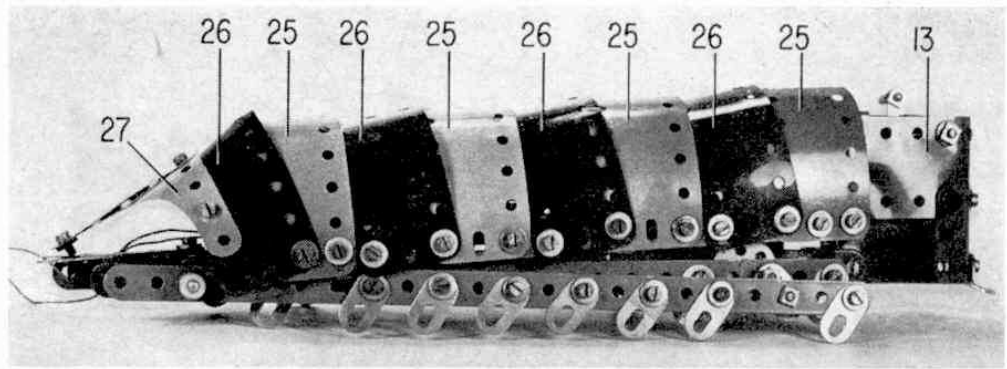


Completely out of the ordinary run of Meccano models is this amazing "Centipede," designed by Mr. Andreas Konkoly of Budapest, Hungary.



Watch out  
for the . .

## . . HUNGARIAN CENTIPEDE says 'Spanner'

MECCANO MODEL-BUILDERS OF DISTINCTION can be found in nearly every country of the world. Some we know about, others we don't. Most work away in quiet anonymity, but a dedicated minority are loud in their praise of Meccano and do all in their power to make the system as widely-known as possible; not for any personal gain, but purely to interest other people in a hobby which offers them endless enjoyment. A gentleman who leads in this latter category is undoubtedly Mr. Andreas Konkoly of Budapest, Hungary.

As long-standing readers of Meccano Magazine will know, Mr. Konkoly has been a keen and highly capable modeller for many years. He has done much to promote Meccano, on a purely personal basis, in Hungary, and has even appeared several times on Hungarian television with models he has built. Among international Meccano circles, he is perhaps best-known for several outstanding Meccanograph designing machines, at least two of which we have featured in these pages in the past. He is, in my opinion, one of the world's leading authorities on this type of model, although I must hastily stress that his model-building capabilities are not limited only to Meccanographs. On the contrary, he has produced a wide variety of different types of models, all clearly designed without being over-complicated, and covering the most unusual subjects. And if you don't believe me, just look at the model featured here—a Meccano Centipede! How's that for an unusual subject?

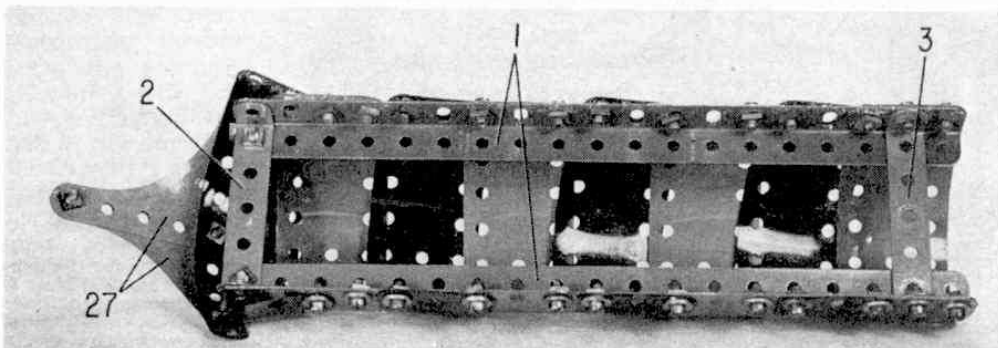
Like all Mr. Konkoly's models the Centipede is fully mobile, trudging along with a fascinating action on its multiple feet. Power can be supplied either by a Magic Clockwork Motor, or by a 3-12 volt Motor with 6-ratio Gearbox and, in fact, the model illustrated

is fitted with both units to show their relative positions. In a "production" model, of course, only the one chosen Motor would be used.

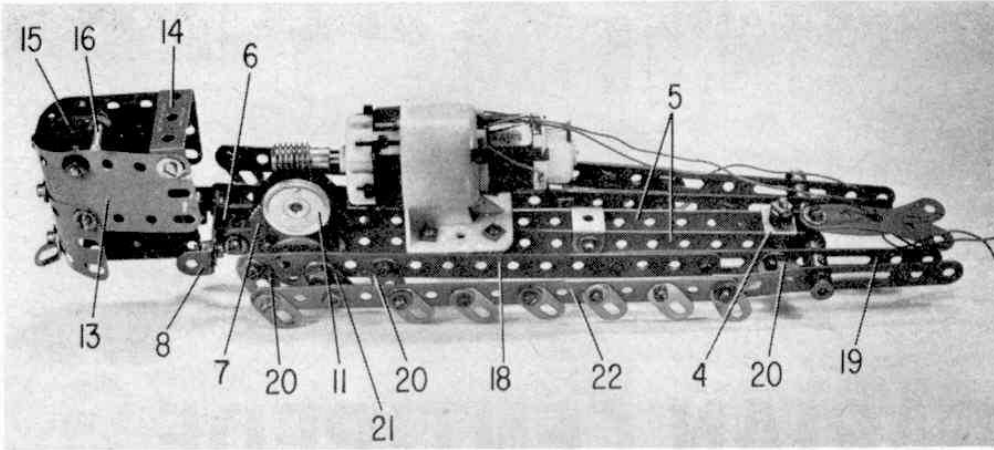
Despite the intricate movements of the model, construction is not difficult. A strong framework is built up from two 9½ in. Angle Girders 1, joined together at one end by a 2½ × ½ in. Double Angle Strip 2 and, through the second holes from the other end, by a similar Double Angle Strip 3. Attached to the centre of Double Angle Strip 2, but spaced from it by a Collar on the shank of the securing ½ in. Bolt, is a Double Bracket 4, to the lugs of which two 9½ in. Strips 5 are bolted, the fixing Bolts passing through the second holes of the Strips. Secured to the other end of each of these Strips is a 1 × ½ in. Angle Bracket 6, the rearmost securing Bolt helping to fix a Flat Trunnion 7 to the Strip, apex pointing upwards. The free lugs of Angle Brackets 6 are connected by a 1 × ½ in. Double Angle Strip 8.

Strips 5 are further connected by another Double Bracket secured through the eighth holes from the rear ends of the Strips, then journaled in the third holes from their front ends is a 1½ in. Rod, on the centre of which a 60-teeth Gear Wheel 9 is mounted. This Gear meshes with a ⅞ in. Pinion 10 on a 1 in. Rod journaled in the apex holes of Flat Trunnions 7 and held in place by a 1 in. Pulley 11.

At this stage, the required Motor can be fitted. If the combined Motor and Gearbox is to be used, this is simply attached by Angle Brackets to Strips 5, with a Worm on the output shaft engaging with Pinion 10. If, on the other hand, the Magic Motor is to be used, this is attached by one corner, as shown, to Double Angle Strip 8, being spaced from it by a Washer and Collar 12 on one securing ½ in. Bolt, and by three



An underside view of the Centipede's body showing the main strengthening Angle Girders.



With the body removed, the comparatively simple construction of the model becomes evident. Note that the two Motors have been included to show their relative positions, but only one of them is required for operation.

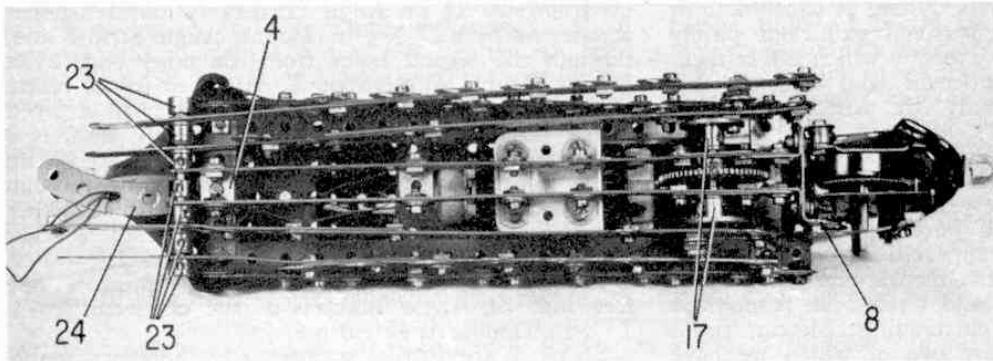
Washers on the other securing  $\frac{1}{2}$  in. Bolt. The output Pulley is connected by a Driving Band to Pulley 11. The Motor brake projects upwards.

The Centipede's head is supplied by a  $5\frac{1}{2} \times 1\frac{1}{2}$  in. Flexible Plate 13. Plate 13 is curved round and attached to the upper front corners of the Magic Motor by  $\frac{1}{2}$  in. Bolts, but is spaced from the Motor by a

Pin 16 is fixed to the Motor brake lever to make it more easily accessible.

If the Magic Motor is not to be used, a substitute mounting for the head must be provided and I suggest that two  $2\frac{1}{2}$  in. Strips bolted to the lugs of Double Angle Strip 8 would be perfectly adequate.

Returning to the Rod carrying Gear Wheels 9, two

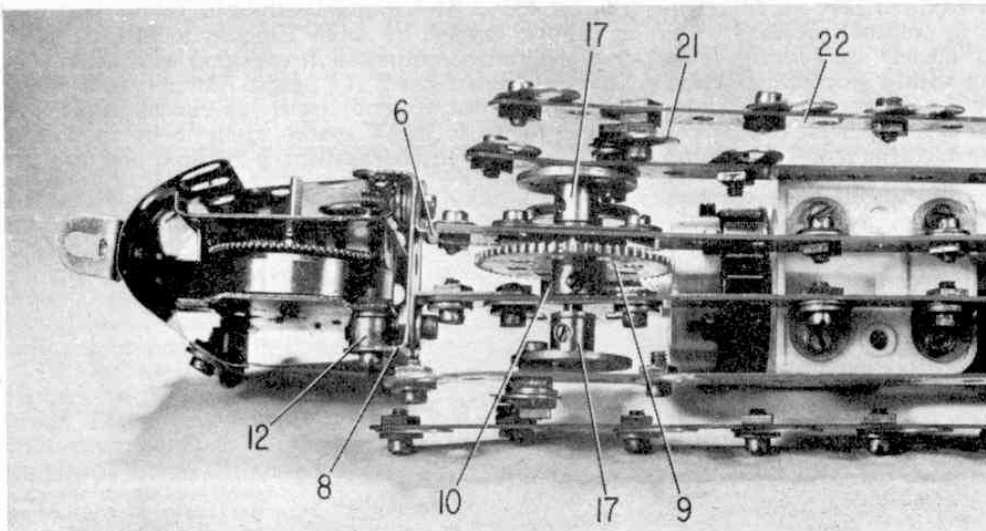


A general underside view of the model showing the layout of the Strips to which the "legs" are attached.

Collar on the shank of each Bolt. The upper rear corners of the Plate are connected by a  $1\frac{1}{2} \times \frac{1}{2}$  in. Double Bracket 14, the right-hand securing Bolt also fixing the Plate to the Motor, with a Collar again acting as a spacer. The top of the Motor is partially covered by a  $1 \times \frac{1}{2}$  in. Angle Bracket 15 bolted to the upper edge of Plate 13, as shown, and a Short Threaded

electrical 1 in. Bush Wheels 17 are mounted one on each end of the Rod. Lock-nutted by  $\frac{1}{2}$  in. Bolts and Nuts to the face of each of these Bush Wheels is a  $7\frac{1}{2}$  in. Strip 18, extended by a  $5\frac{1}{2}$  in. Slotted Strip 19, the two Strips overlapped four holes. Three Fishplates 20 are bolted, in the positions shown, to Strips 18 and 19, then another Fishplate 21 is pivotally-

(please turn to page 190)



A close-up view of the drive system for the legs. Note that Bush Wheels 17 are the special 1 in. items included in the range of Meccano electrical parts.

A mile or two further revealed the culprit—an express freight rightly shunted onto a slip road, and I wondered how any signalman could have accepted it, knowing that the 'flyer' was due. I hope its crew realised the enormity of their impertinence! As I hoped they might forgive the fist I shook at them!

It was not until we were approaching Reading that I realised we might, at least, maintain schedule and arrive at Paddington on time. As we plunged headlong towards the junction, whistling continuously, I glanced at my watch. Thirty six miles to go. Twenty eight minutes left. Could it be done?

Into Sonning cutting and a chance to check the speed. The quarter mile posts alongside the track are ideal for this and my stop watch clicked. Nine seconds to the next post! One hundred miles an hour! I felt sure that I must have miscalculated and re-checked. Again the magic nine seconds showed. Maintain schedule indeed! We could do it in the hour!

Twyford! Just a blur as we hurried through, never slackening the electrifying dash towards our goal.

Maidenhead, Slough, Ealing Broadway, still eating up the miles effortlessly until the first gentle touch on the brakes heralded the end of an unforgettable journey.

Past Old Oak sidings, slowing quickly now, through Westbourne Park, admiring glances from railwaymen along the track as 'Cardiff Castle' threaded her way into the terminus where she came to rest at platform seven.

Despite a dead stop she had covered the 77½ miles in precisely 57 minutes. Incredible, but true.

There are, alas, no such journeys nowadays. Semi-automatic ugly monsters, seemingly without character, haul our expresses and warrant hardly a second glance. I try to work up some enthusiasm for them but they remain colourless monsters.

For those, like me, who live in peaceful Devon, all is not entirely lost. On any summer day I can proceed to Buckfastleigh, headquarters of the Dart Valley Light Railway, and board a train for Staverton and Totnes. And savour again the sight, the sound and the smell of steam. Long may it be so!

**CENTIPEDE** (continued from page 188)

mounted on the protruding shank of the Bolt lock-nutted in the face of the Bush Wheel. Lock-nutted, in turn, to the end of this Fishplate is another 7½ in. Strip/5½ in. Slotted Strip arrangement 22, another seven Fishplates being bolted to this to serve as the Centipede's legs.

Now mounted in the end holes in Strips 5 and in the rear slots of the Slotted Strips is a 2½ in. Rod, each Strip being spaced from its neighbour by a Collar 23, a Washer also being provided at each side of the Slotted Strips. A ⅜ in. Bolt, carrying two 2½ in. Curved Strips 24 to serve as the tail, is screwed into one transverse bore of the centre Collar.

This brings us to the body and, here again, no great difficulty is involved. Four 5½ × 1½ in. Flexible Plates 25 and five 5½ × 1½ in. Plastic Plates 26 are simply curved over and bolted to the vertical flanges of Angle Girders 1, the Plastic Plates being angled slightly by means of their elongated holes to give the "ridged" appearance of the typical centipede. Bolted to the rearmost Plastic Plate are two Flexible Gusset Plates 27, overlapped as shown, to cover the tail and round off the body nicely.

Having seen Mr. Konkoly's Hungarian Centipede

in motion, I can confirm its operational success. Indeed, everyone in the office, watching it whirring and clanking along, found it nothing short of hilarious and the fact that its gait can be altered by changing the positions of Bush Wheels 17 in circular relation to each other, makes it all the more interesting. It qualifies as one of the best totally unusual models we have seen for a long time.

PARTS REQUIRED			
2-1a	1-22	4-55	5-189
4-1b	1-26	8-59	4-194d
2-8a	1-27a	2-90	2-201
22-10	90-37a	4-111a	2-518
2-11	70-37b	2-111c	1 Magic Motor
3-12b	62-38	1-115	or 1, 3-12v. d.c.
1-12c	1-48	2-126a	Motor with
1-18b	2-48a	1-188	Gearbox
ADDITIONAL PARTS, IF MAGIC MOTOR USED			
2-37a	4-38	4-59	5-111a
			1-186a
ADDITIONAL PARTS, IF MOTOR WITH GEARBOX USED			
4-12	1-32	8-37a	8-37b
			4-38

**MODELS AT THE M.E. EXHIBITION**

The Model Engineer Exhibition is staged by Model & Allied Publications, publishers of ten model/hobby magazines, which of course include Meccano Magazine.

This year's show was the 40th, and there were some wonderful models there, of which the pictures opposite give only a glimpse. The top one shows part of a hand-carved chess set, based on Tenniel's drawings for "Alice Through the Looking Glass," and you will be able to pick out such characters as the Walrus and the Carpenter, Tweedle-dum and Tweedle-dee, and all the others. They won a silver medal for Mr. S. F. Snedker.

The Aveling & Porter steamroller won the premier award, the Duke of Edinburgh Trophy, for its builder, Miss Cherry Hinds, seen in the picture. It is a working model of incredible accuracy and workmanship; many men model engineers said they'd better take up knitting! Opposite it is the champion

working ship model, the paddle-steamer "Duchess of Fife", built by D. A. Ford.

"Virginia" is an American-type 4-4-0 locomotive in 3½ in. gauge, built by D. C. Piddington and K. A. Hughes, and again a working model of course. The artillery piece and limber was by K. Rains, and the ploughing engine by C. Tyler and J. Haining, one of those which gave demonstrations of steam ploughing during the exhibition. A shipwreck is seen next, the barque "Herzogen Cecilie" aground off Devon; the model is only about 6 in. long and won the miniature ship championship for D. Hunnisett.

At the bottom we have an unusual monorail steam locomotive, 16 mm. scale, by D. A. Boreham, and a very detailed non-flying Spitfire by W. A. Nicholls. These and hundreds more models attracted record crowds to the Exhibition.