## AECCANO® Magazine

200

QUARTERLY

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July 1973

#### WE PASS!

If it gave me pleasure to sit down and write the Editorial for the first issue of the MMQ last quarter, it gives me infinitely more pleasure to do so this quarter. You have now seen the magazine; studied it — and I am delighted to say that you like it!

Since the first issue appeared, we have been inundated with letters about the mag. and, at the time of writing, not a single one of them has expressed general disappointment with it. Individual readers have, of course, had reservations about particular features, but all your letters, without exception, have offered overall praise and support. Your reaction has been deeply gratifying to all of us on this side of the printing press and, on behalf of my colleagues and myself, I thank you for your interest and support.

#### APOLOGIES

I must apologise at this point for the fact that issue No. 1 appeared some three weeks later than promised in the pre-publication letter we sent to intending subscribers. When the letter was sent out, we had estimated the amount of time we would require to actually produce the magazine and we set the date accordingly. Unfortunately, we miscalculated. There turned out to be a great deal more work involved than we had thought—bearing in mind that we were starting from scratch—and it was quite impossible for us to meet the deadline.

Sorry for the delay and "sorry" also for not answering the many subscribers who wrote asking about the situation. If we had stopped to answer the letters, the magazine would have been even later than it was!

#### H.R.C.A. USES MECCANO

On a totally different subject, many older readers will remember the famous O-gauge "Hornby Trains" which were manufactured by Meccano Limited from the 1920's until 1966. Although "Hornby Railways" are still produced by the Rovex company in Kent, the original Hornby Trains, as made by ourselves, are now highly-prized collectors' items — and there are plenty of collectors collecting them, too! In fact, so great is the interest in Hornby Trains and the smaller-scale Hornby Dublo, that a large and active organisation of enthusiasts exists to



Peter Randall, right, General Secretary of the H.R.C.A., and Ray Riisnaes demonstrate the use of a special Meccano staple-flattening device designed by Ray for helping to bind "The Hornby Railway Collector".

further the enjoyment of the hobby. Known as the Hornby Railway Collectors' Association, this organisation has members throughout the whole of Britain and the world. Meetings are held regularly up and down the country and the Association even produces its own very comprehensive magazine, published monthly.

You may wonder why I mention all this in the Meccano modellers' magazine. Well, the reason is two-fold: (1) because most Meccano modellers have more than a passing interest in all matters associated with Meccano Limited, not only the Meccano system, and (2) particularly because H.R.C.A. members, with an equal general interest in the Company, have produced a machine in "our" medium, Meccano, with which to flatten down the staples binding their magazine, "The Hornby Railway Collector" (see photo). I found this very interesting indeed, and, although I have no constructional details of the machine itself, I felt it well-worth mentioning here.

Talking of Hornby Trains, would any readers be interested in a regular series on the subject in the MMQ? If the general feeling is "yes", we might be able to do something about it, so please let us have your views.

The Editor

#### EDITORIAL DIRECTOR: J.D. McHard

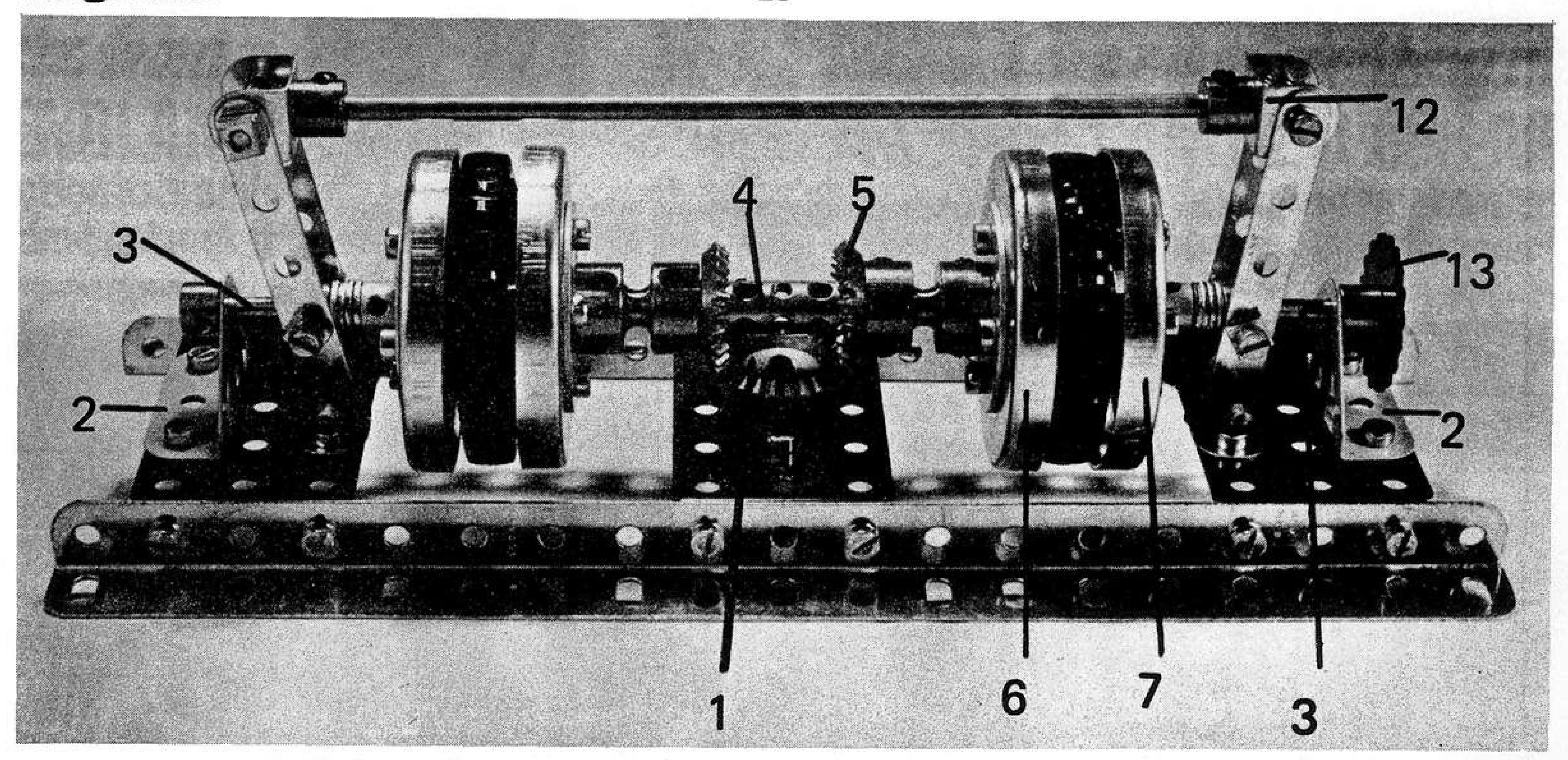
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## AMONG THE MODEL BUILDERS

GETTING model-building matters, this issue, I should like to make a short appeal for MMQ material.

"Among the Model-builders" has long been a regular feature of Meccano Magazine, its primary aim being to bring news and suggestions from readers, to you, the readership as a whole. To do this, of course, I need your help in the shape of mechanisms, hints, ideas, photographs of models you have built, together with some general notes on them — in short, anything you feel might be of interest to fellow modellers.

As the Editor said in the April

MMQ, we will carefully consider everything received and, while we cannot guarantee publication, we will do our very best to make use of all suitable items when space permits. When you next design something, therefore, I hope you will think of us before you dismantle it. It could well be ideal for these pages. Yes, and why not include a photograph of yourself? It is certainly interesting to see what fellow hobbyists look like!

#### SLEWING CLUTCHES

To move on, now, our first contributed item is a Slewing Clutch Mechanism for use in medium-to-

large cranes and draglines. It incorporates two identical clutch assemblies and full credit for its design goes to Mr. Norman Chapman of Wellhouse, Golcar, Huddersfield, with

with "Spanner"

thanks also going to Mr. Barry Mills, who drew the plans from which we reproduced the actual mechanism illustrated.

The framework consists of two 9½" Angle Girders, joined together at the points shown by three 2½" x 1½" Flanged Plates. Bolted to the centre underside of the centre Plate is a Double Bent Strip, this and the Plate providing the bearings for the output shaft, on the upper end of which a 7/8" Bevel Gear 1 is fixed. Two Trunnions 2 are then bolted, one to each outer Flanged Plate and the apex holes of these provide bearings for two Rods-with-Keyway 3, firmly fixed together in the centre by a Coupling 4. These Rods must be in perfect alignment to remove the danger of "wobble" and a little adjustment of the Coupling's Grub Screws may be necessary to achieve this.

Above and left, two views of a Slewing Clutch Mechanism designed for use in larger cranes by Mr. Norman Chapman of Wellhouse, Golcar, Huddersfield.

Mounted on each Keyway Rod is a 7/8" Bevel Gear 5, spaced from the Coupling by Washers to ensure correct meshing with Bevel Gear 1. Gear 5 is free on the Rod, but is held in one end of a Socket Coupling, in the other end of which an 8-hole Bush Wheel, bolted to a Wheel Flange 6, is held. The Bush Wheel is also free on the Rod. Mounted on the Rod between the Wheel Flange and a second Wheel Flange 7, bolted to a free-running Bush Wheel 8, is a 1½" Pulley carrying a Motor Tyre 9, this Pulley being free to slide on the Rod, but prevented from turning by a Key Bolt in its boss. The three components, which serve as the clutch plates, are held apart by two CUT Compression Springs, one shorter than the other to allow for the Pulley boss.

Each clutch unit is actuated by two 2½" Narrow Strips 10, pivotally attached by a 1½" Rod to the elongated-hole lugs of two Angle Brackets bolted to the nearby Flanged Plate. Bolts held by Nuts in the second holes up of the Strips are screwed into the transverse threaded bores of a Collar 11, free on the Keyway Rod and spaced from Bush Wheel 8 by several Washers. The Bolts must not foul the Rod. Lock-nutted to the upper ends of the Narrow Strips is a Large Fork Piece 12, the Fork Pieces in the two clutch assemblies then being connected by a 6½" Rod, as shown, which serves as the control lever.

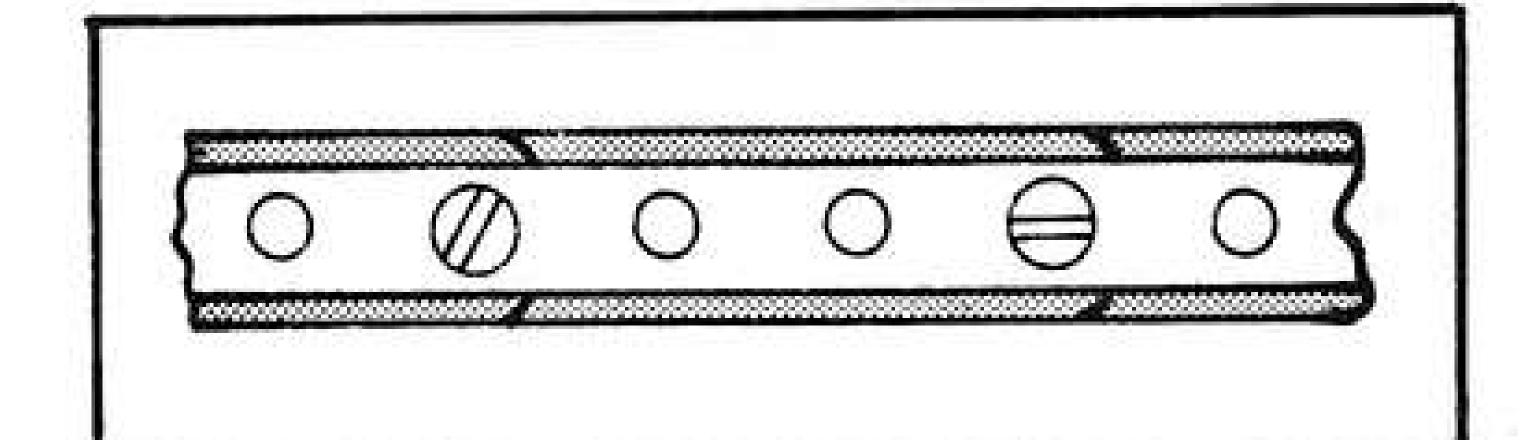
Input drive can be taken to either of the Keyway Rods, Mr. Chapman himself fixing a 1" Sprocket Wheel 13 on the end of one of the Rods to receive a chain drive. Moving the control lever brings one or other of the clutches into operation, this

causing the output shaft to revolve either clockwise or anti-clockwise, as desired.

PARTS REQUIRED			
2-6a	3-30	7-59	4-137
2-8a	4-35	1-63	2-142d
4-12	44-37a	1-96	2-171
1-14	40-37b	4-111c	2-230
2-18a	22-38	2-116	2-231
1-21	1-45	3-120b	4-235
4-24	3-51	2-126	

#### TRACTION ENGINE DECORATION

On a different subject, I have received a couple of interesting hints from Mr. Bert Halliday of London, S.E.15 — winner of the Meccano Cup at this year's Model Engineer Exhibition with the magnificent Showman's Traction Engine illustrated on page 18



Decorative "gold piping" — an effect suggested by Mr. Bert Halliday of London.

of the last MMQ. His first idea refers to traction engine decoration.

"For those interested in modelling realistic Showman's Road Locomotives", writes Mr. Halliday, "And who endeavour to reproduce the ornate finishes, a good decorative effect giving the illusion of thin gold lining can be obtained by overlaying electrical 2" thin brass Flexible Strips (No. 530), with Narrow Strips. The

belly tank and coal bunker of the cup-winner were edged in this manner and provided an interesting contrast, though a very good supply of Flexible Strips is needed owing to their short length.

"It was thought", added Mr. H., "That this idea would also be effective on the spokes of the rear wheels, which consisted of standard ½"-wide Strips overlaid with Narrow Strips — an effect that helped to optically reduce the width of the spokes. The addition of brass Flexible Strips, however, had the opposite effect and made them appear very much wider than their normal ½" width!"

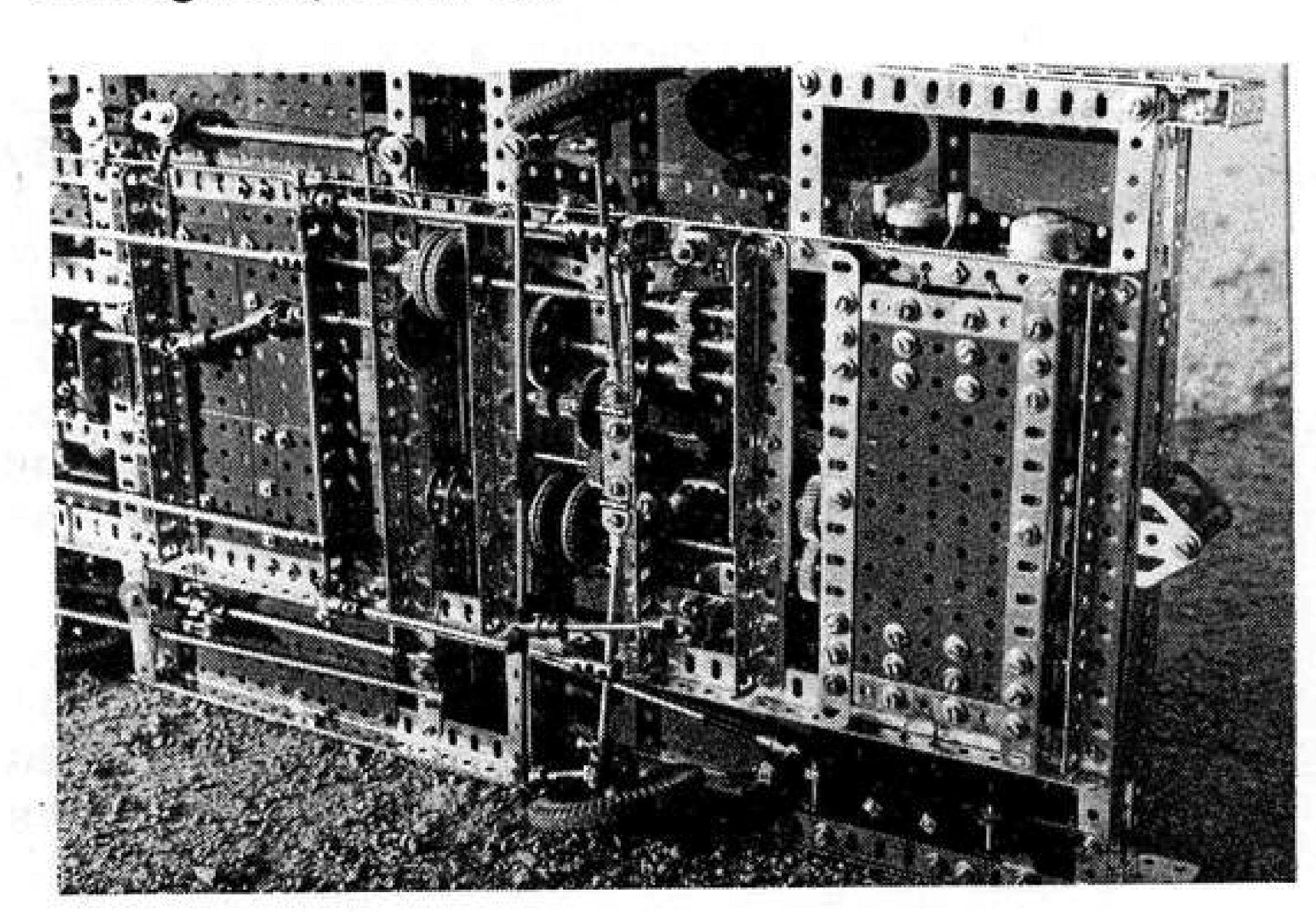
#### SPROCKET CHAIN FIXING

Mr. Halliday's second hint offers a neat and strong method of securing Meccano Sprocket Chain to brass parts such as Couplings, Handrail Supports, and so on. I should mention, however, that the idea relies on a non-Meccano part for its success and, to the dedicated modeller, this is "cheating", as Mr. Halliday himself admits. Nonetheless, the idea is still worthy of mention, although all letters of complaint should be addressed to the designer — not to me!

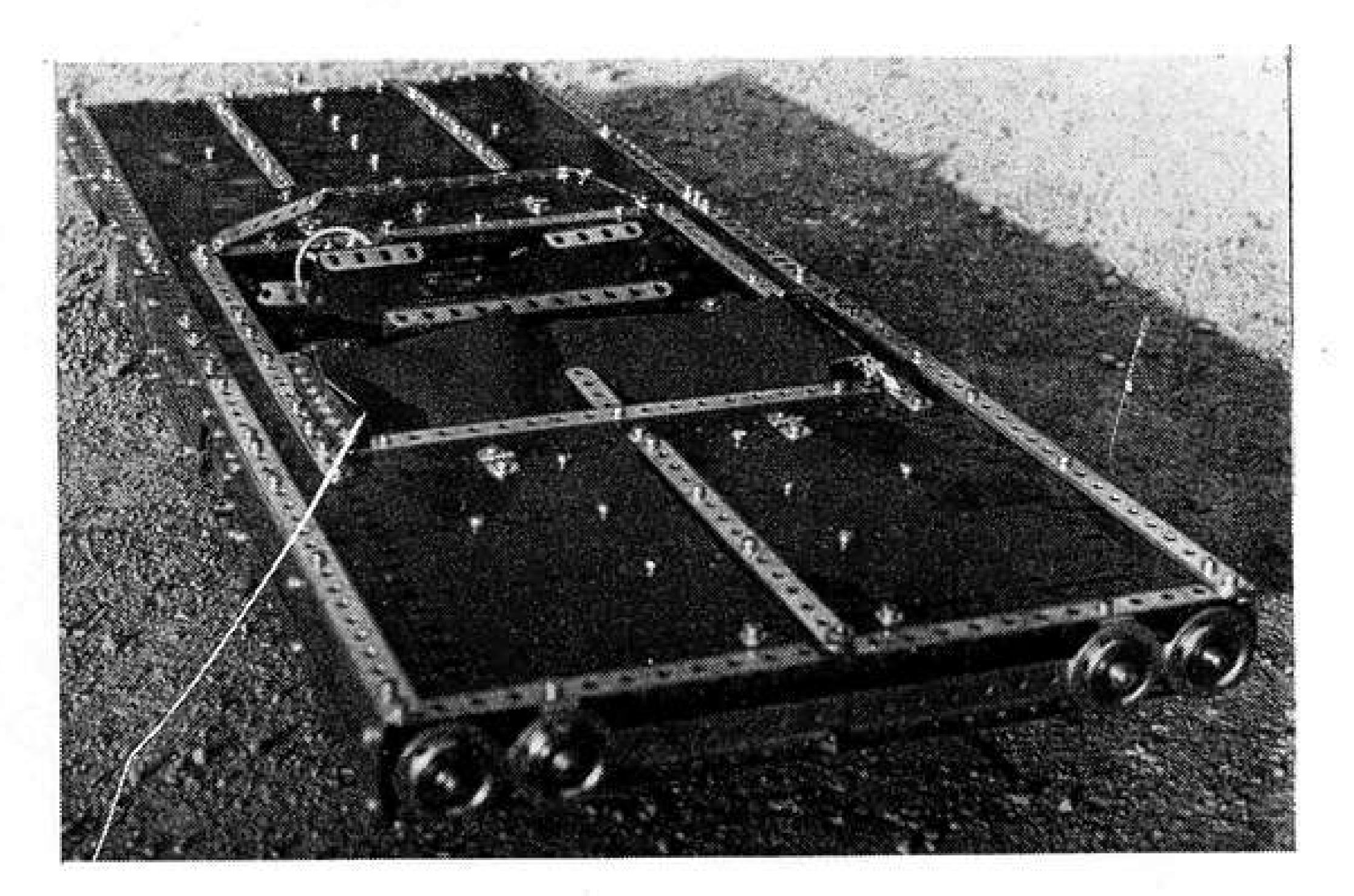
Says Mr. Halliday: "At times, advanced model-builders use Sprocket Chain as steering chain for traction engines and other purposes and are faced with the problem of securing a link to a part such as a Coupling. Though it involves the use of a non-Meccano part, a compact and sturdy method of doing this is with the aid of a 1/8" outside diameter split pin. The shanks of the pin should be opened parallel to each other, sufficient to allow a Sprocket Chain link to

 $over \longrightarrow$ 

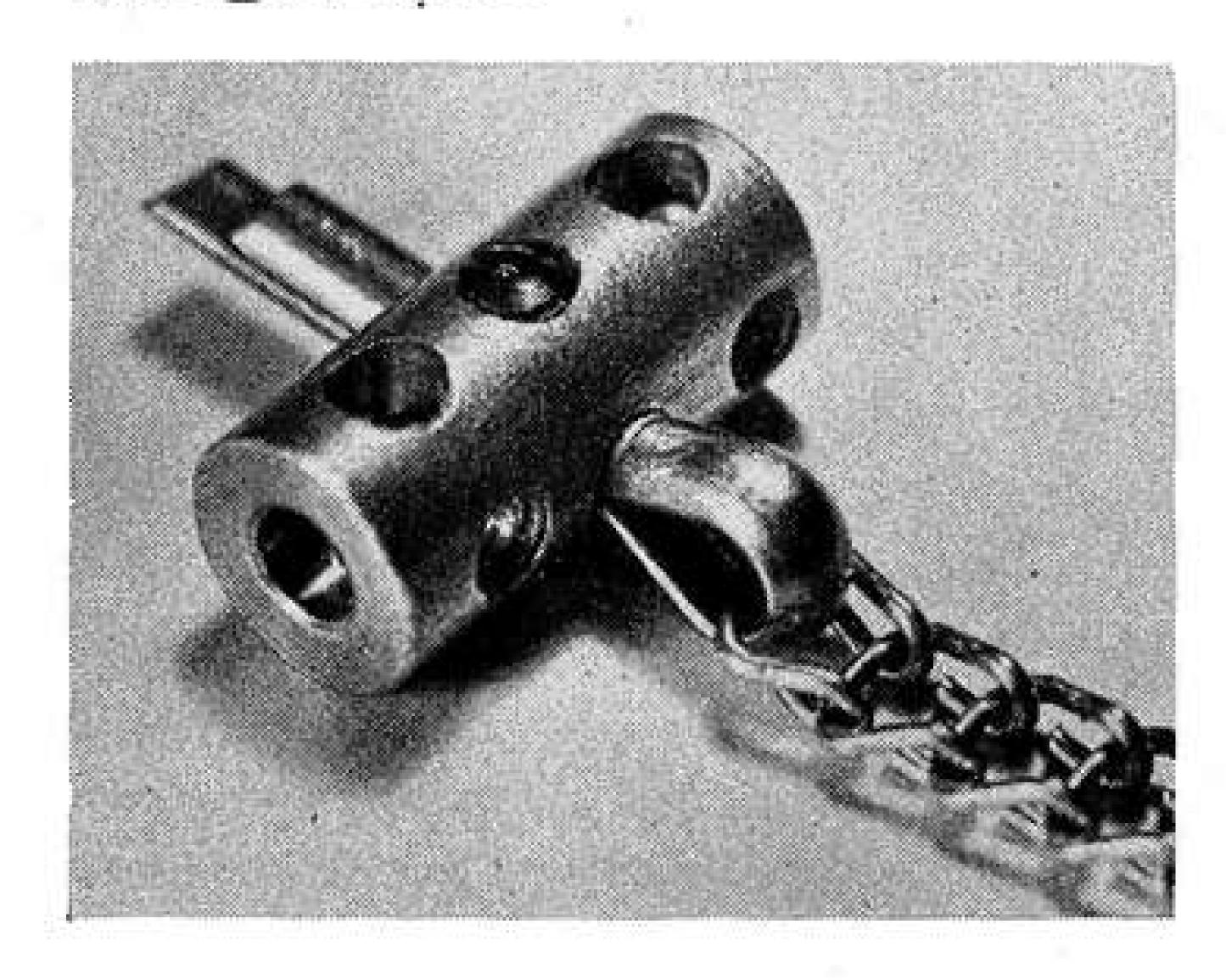
An underside view of Mr. Walker's car model showing the front axle and part of the transmission system. Considerable use has been made of Meccano gears, although only a few appear here.



A rear view of a "freelance" American-type car designed and built by Mr. Michael Walker of Hoddlesden, Darwen, Lancs. It is a large, feature-packed model which took much developing.



#### MECCANO



Another idea from Mr. Halliday – fixing Sprocket Chain to a Coupling.

be slipped over, and the shanks of the pin inserted into the smooth bore of the chosen brass component where it is held by Grub Screws. These should preferably bear against the opened slot of the pin.

"With a split pin of sufficient length, of course, the ends can be bent over as usual and thus a free-swivelling movement is obtained — very useful on such things as crane jibs."

"The idea ensures that any such handing component is truly centrally supported and other advantages include no distortion of any of the Chain links and a free movement for the Sprocket Chain in the loop of the split pin".

Thanks for the ideas, Mr. Halliday — but I'm still a bit wary of that non-Meccano part!

#### FREELANCE U.S. CAR

Turning, now, from constructional hints to a general interest subject, I would like to draw attention to the sleek-looking vehicle appearing in the accompanying illustrations. Although not based on any specific original, this model is easily identifiable — to European eyes, at least — as a typical American-type car and I am indebted to its builder, Mr. Michael Walker, of Hoddlesden, Darwen, Lancashire, not only for the photographs, but also for the following outline description of his very interesting "freelance" design.

"As is well known", writes Mr. Walker, "American automobiles are usually larger, more powerful and more expensive than their English counterparts. Therefore, when making a model of a large American car, it is important that this, too, should be larger, more powerful and more expensive to build then the average Meccano model.

"This particular model is my latest development along these lines. It is 34" long, 12½" wide and 5¼" high, and boasts a number of special features, one of which is the rather rarely-found convertible soft-top. I could never make up my mind whether I preferred a model with a roof or without; so, to get the best of both worlds, as it were, I designed and installed a top which is capable of being used in the "up" or "down" position at will. The material used has a "Vinyl" look and feel which lends itself ideally to the job.

"Another very acceptable "extra" is the smooth, sensitive automatic transmission which is a heavily modified version of one described in the "M.M." over forty years ago. It can be overriden at will by a lever on the steering column.

"All the controls for the model are situated around the drivers seat. In addition to the steering wheel and

transmission override, there is a forward-stop-reverse control, a lever to operate the rear axle differential lock and a foot-pedal for the power brakes. The power to the motors is automatically disconnected when this pedal is depressed. A rather startling amount of power flows from four Motorswith-Gearbox carried under the bonnet. The complex mechanism takes its toll in friction, but the "nett" power at the wheels is more than adequate to meet all needs.

"Yet another feature of the model concerns the steering mechanism. It is commonly found on many Meccano cars that the front wheels tend to "splay-out" from the vertical, i.e. the brackets holding the jack pins give way a little under the weight of the model. This weakness is removed by a hinged/adjustable angle for the front wheel supports, using Rods instead of the more bend-prone Strips.

"The protruding "rams" at the front and the rather exaggerated overhang are copied from the fashionable overhangs and wing-leading edges of actual late American cars. This facilitates the inclusion of a long bonnet or "hood" — also very fashionable. To give the model a "balanced" look a long boot or "trunk" is provided, sporting the tail-lights.

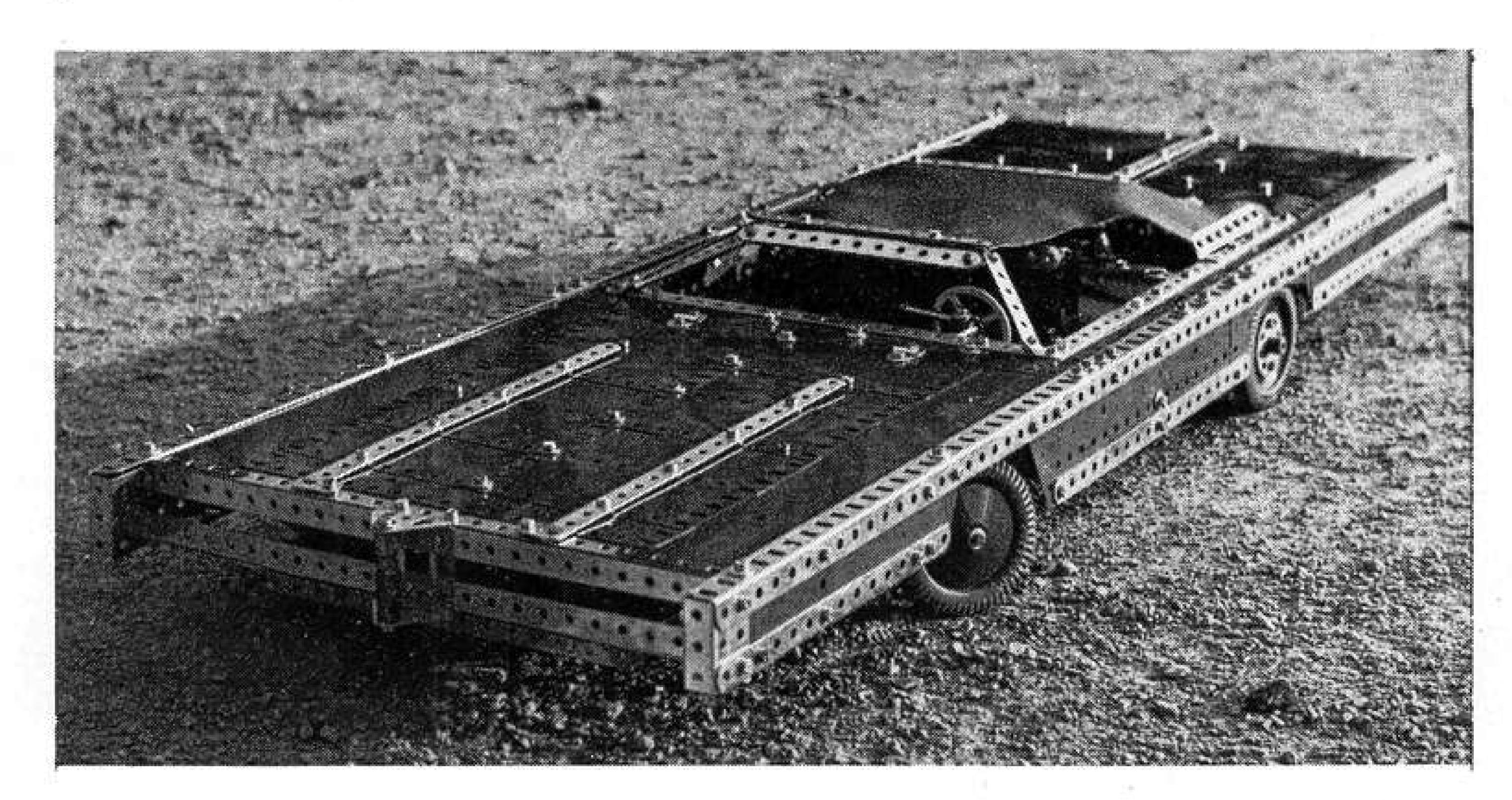
"Tumblehome" roof styling has been incorporated. This means that the roof pillars tend to lean-in over the passenger area. The curious "beak" on the front of the model is a borrowed idea from a 1968 Pontiac.

"The car is massively constructed, very rigid and very heavy: fifteen pounds! Despite the extremely low appearance it boasts good ground clearance. If care is taken in construction it is also very reliable, despite the complex mechanism. I usually have the Motor gearboxes set to give a low speed/high power drive as speed is an impractical proposition within the confines of a house".

Mr. Walker also points out that, for the same "indoors" reason, the built-up transmission gearing also employs the low speed/high power principle. "However", he adds, "A high-speed version can be easily made by substituting gears of lower ratio in the transmission". In use, the model draws its power from an external transformer via a long length of trailing flex.

Finally I sign off with another reminder to think of "Among the Model-builders" whenever you have anything of possible publication value. We'll always be pleased to see it.

The freelance American car of Mr. Walker, viewed from the front. It certainly captures the atmosphere of the subject, as is evident from this picture.



#### SET 3 MODEL ..... SET 3 MODEL ..... SET 3 MODEL

EVERY DAY, millions of people the world over crunch down gravel paths to and from school or work. Millions of motorists travel daily along roads surfaced with small granite chippings and, on building sites everywhere, countless tons of concrete are prepared with stone chippings as one of the ingredients of the "mix".

Stone chippings, in fact, are very much part of everyday life and are used in vast quantities for all sorts of different jobs. They are so common we probably take them for granted, but, if you stop to think, you might wonder how they are produced; how, for instance, all the chippings for a particular job are more or less the same size.

In reality, it is an interesting and quite simple process using a machine known as a "Stone-crusher". In basic terms, this consists of a very strong container in which a revolving shaft is mounted, with banks of special heavy hammers being pivotally attached to this shaft. Stone — usually granite — is fed into the machine and, as the shaft revolves, driven by a powerful motor, the hammers batter the stone and break it down to the required size. The weight, size and design of the hammers determines the size of the chippings produced.

The Meccano model featured here has been inspired by a Stone-crusher



by "Spanner

though I hasten to stress that it is only a very basic representation. It does, however, show the broad idea and thus makes a worthwhile project. It is built with a No. 3 Meccano Set.

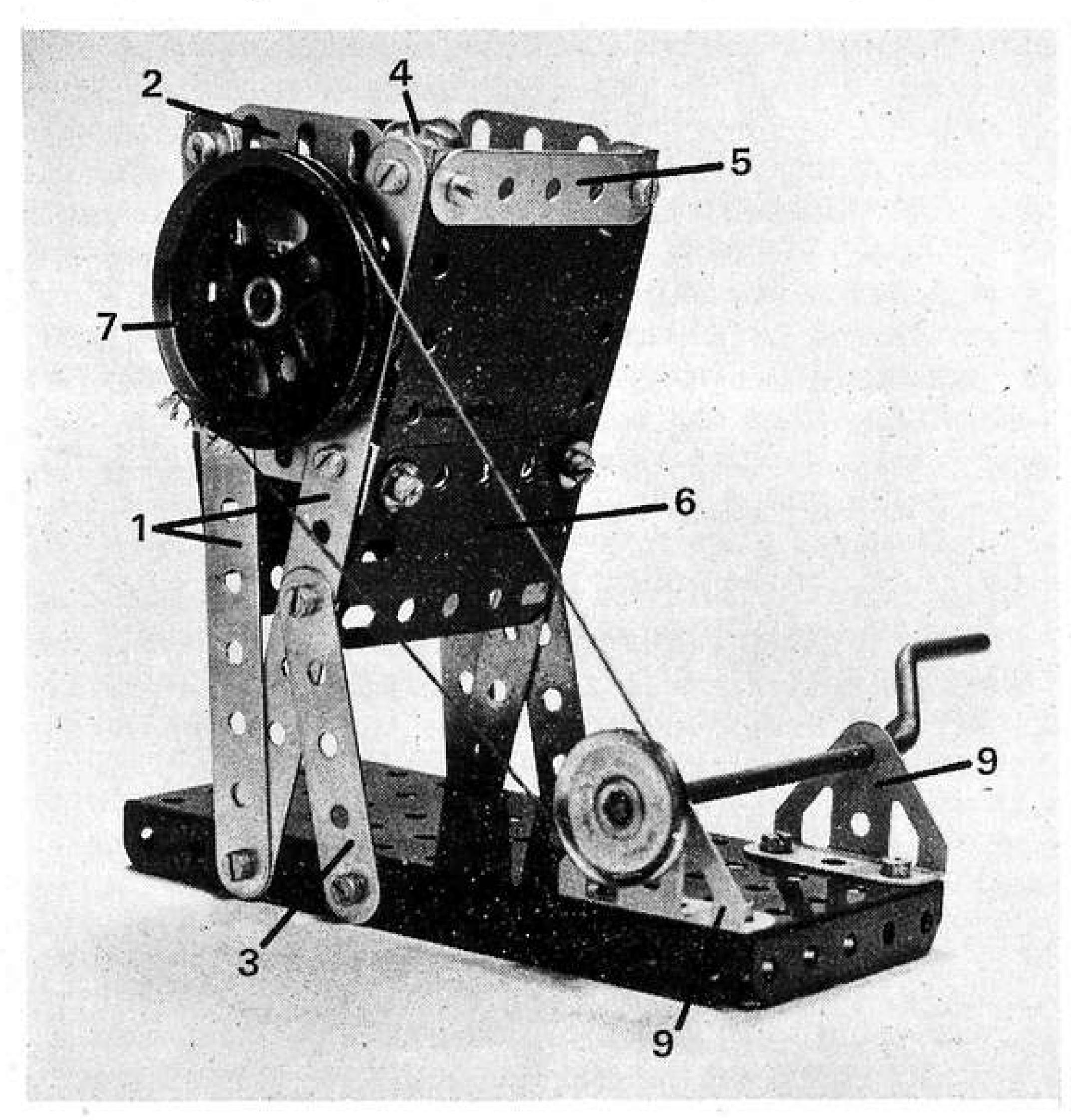
#### CONSTRUCTION

The base is supplied by a 5½" x 2½" Flanged Plate, to each side flange of which two 5½" Strips 1 are fixed by the same Bolt, this passing through the third hole of the flange. The Strips are arranged in a "V" shape and are connected together through their fifth holes from the top by a 2½" x 1½" Flexible Plate 2. Note that the fixing Bolts also secure two 2½" x ½" Double Angle Strips between Strips 1 at each side of the model. Innermost Strip 1 is also braced by a 2½" Strip 3 bolted between the seventh hole of the Strip and the fifth hole in the flange of the Flanged Plate.

Angle Brackets 4 are bolted to the upper end of Strips 1 and secured to these at front and back is a 2½" x 2½" Plastic Plate overlayed by a 2½" Strip 5. The lower edge of the Plate is bolted to the earlier-mentioned Double Angle Strip, the securing Bolts also fixing a 2½" x 1½" Plastic Plate 6 in place. Note that Washers are carried under the heads of the securing Bolts to protect the Plate.

The crushing head is supplied by a 3½" Rod, journalled in the holes in the centre of Flexible Plates 2, where it is held by a 2" Pulley 7 and a Spring Clip spaced from the Plate by a Washer to prevent scratching. Mounted on the Rod, inside the machine, are two 1" Pulleys and, between them, an 8-hole Bush Wheel 8, to which four Fishplates are bolted. The Bush Wheel and Fishplates represent the crushing hammers, although in a real machine, there would be several banks of pivoted hammers.

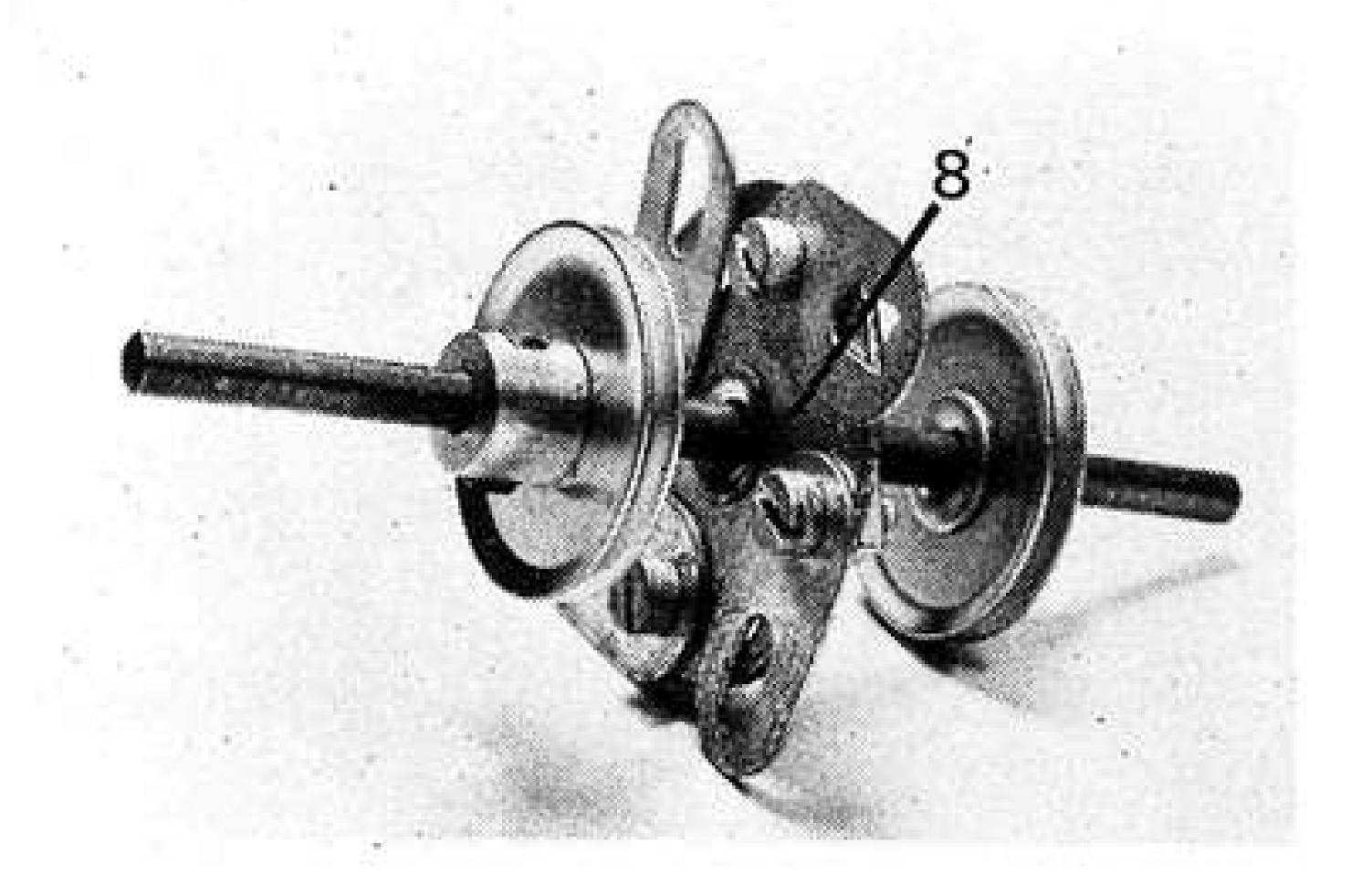
Finally, the model is driven by a 3½" Crank Handle journalled in the apex holes of two Trunnions 9 bolted to one end of the base Flanged Plate. The Handle is held in place by a Spring Clip and Washer at one end, and by a 1" Pulley at the other, this Pulley being connected to Pulley 7 by a driving belt supplied by Meccano Cord. The belt should be neither too tight, nor too loose.



Meccano Set No. 3 contains all the parts needed to build this simple model, left, based on a Stone-crushing machine, Right, the crushing "hammers" removed from the machine.

#### PARTS REQUIRED

4- 2	1-19s	30-37a	2-126
4- 5	1-20a	30-37b	2-188
4-10	3-22	6-38	2-194
4-12	1-24	2-48a	2-194a
1-16	2-35	1-52	



# COLLECTORS' COLLECTORS

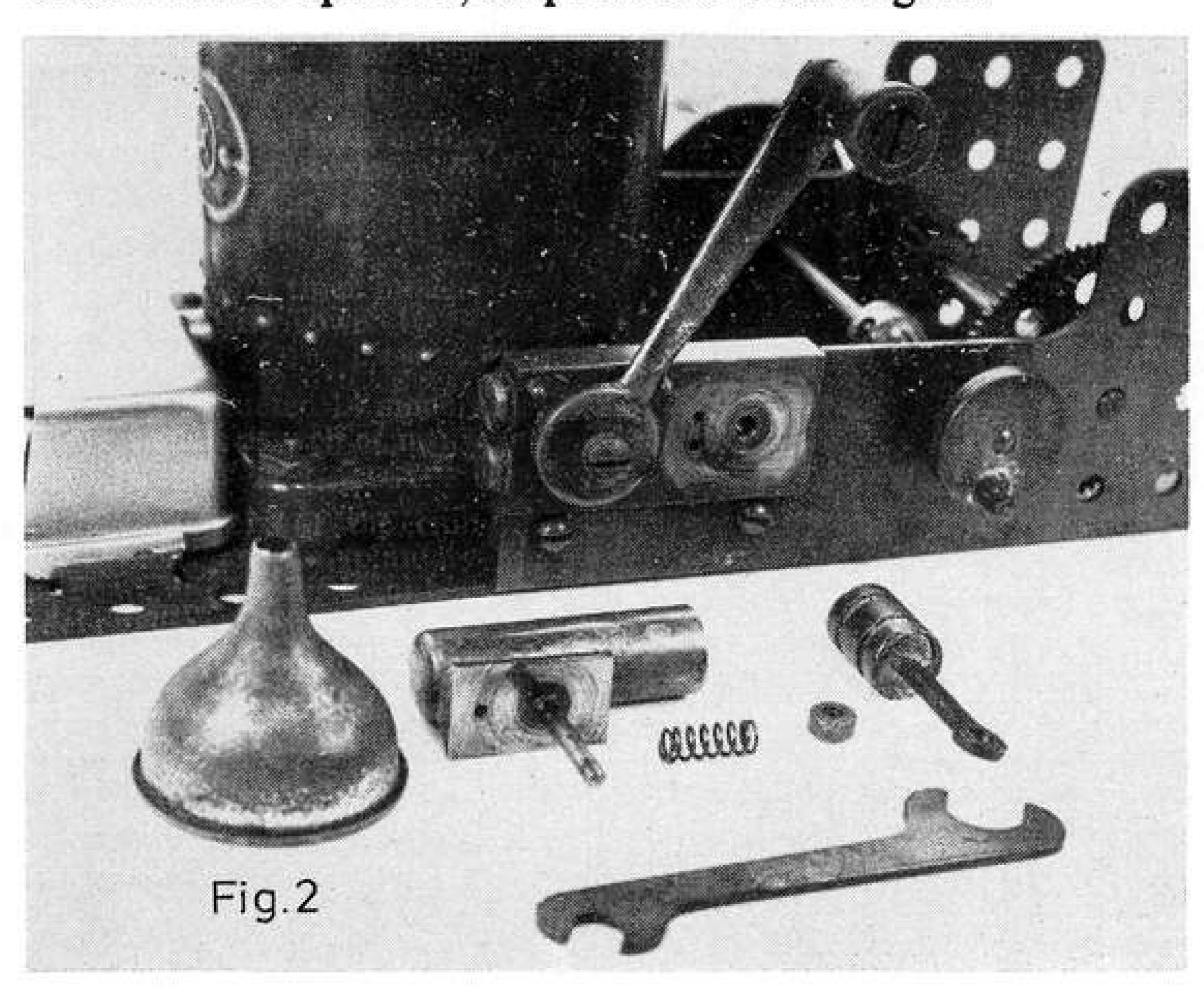
#### by B.N. Love

STEAM POWER has had an unprecedented following in the past decade judging by the number of enthusiasts who flock to steam rallies held at showgrounds all over the country. It was not surprising, then, that Meccano Limited introduced the current Meccano Steam Engine during this period, but, as Meccano collectors well know, the excellent current unit was not the first Meccano Steam Engine ever to be marketed. In this feature, we are going to have a look at the original steam engine, namely the "1929 Steamer" as it is affectionately known among the older fraternity who are fortunate enough to own one, or to have handled one in the past.

Fig. 1 is a photograph of the inside cover of the January 1930 steam engine manual titled "How to use the MECCANO Steam Engine". This old engine had an appealing design with its vertical boiler which was typical of steam cranes of the late Victorian period. In fact, this particular design of model steam engine was somewhat out of date because the "popular" style of engine bought by youngsters of the late 30's tended to be of the horizontal type, similar to the current Meccano Steam Engine. It was true that vertical steam engines were also readily available on the toy market in 1930 for a few shillings, but the Binns Road production was a very different kettle of fish.

Although the 1929 Steamer was advertised in a full page of the M.M. for September, 1929 (p.720) the publication of the Patent Specification did not occur until November, 13th 1929. Specifications were lodged with the patents office on January 4th, 1929 and were accepted on September 19th, 1929. The Meccano Steam

Piston section of author's Engine stripped to show steam chest. Note reversing ports, brass filler funnel and special double-ended spanner, all provided with Engine.



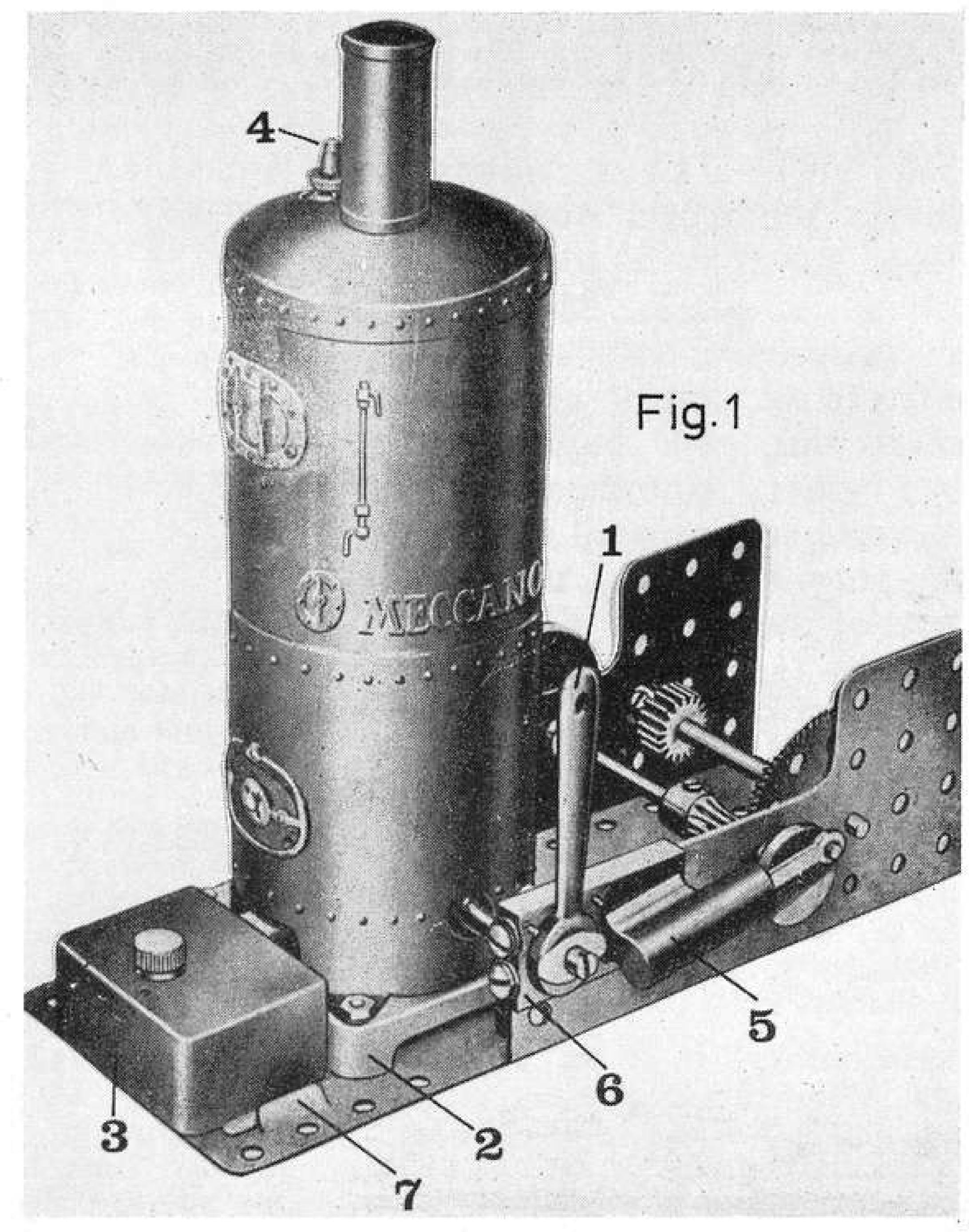


Photo showing the original 1929 Meccano Steam Engine taken from the 1930 Steam Engine Manual.

Engine was certainly in production by this time and the author's own sample bears the label of October 1929. At 21 shillings, the Meccano Steam Engine was even more expensive than the Geared Roller Bearing featured in the last issue of M.M.Q., but it really represented splendid value. Quality and construction could not be matched at to-day's prices if they were multiplied five times — largely due to the precision and craftsmanship which went into the making of the cylinder block and ports.

This in no way detracts from the present-day Meccano Steam Engine which also represents excellent value for money and has all the power normally needed for quite large models. However, Frank Hornby's specifications of 1929 were purely in the form of improvements to a steam engine for model driving, based on its ability to be built into a model by means of an integral base and turned-up flanges, punched at a standard spacing, and thus permitting it to match into an existing constructional system. Three views appear in the original drawings: a vertical elevation of the engine from the piston side, a plan view from the top and a perspective view from the gearbox end, again featuring the piston side, but showing quite clearly the general design of the safety valve and drain-off cock fitted to the far side of the boiler.

Perhaps a general description of the principal features of the 1929 Steamer will indicate its advantages over the cheaper toy steam engines of the day. As might be expected of a Frank Hornby design, the whole thing could be taken to pieces with a screwdriver and the special double-ended spanner provided with the Steam Engine.

BASEPLATE. 7" x 3" (last 3" of base length reduced to 2½" width) in heavy gauge steel with 2" x 1½" folded-up lugs perforated with holes for gearing etc., Rear end of plate had two raised parallel lips to secure spirit burner.

SPIRIT LAMP. Reservoir wholly contained outside boiler area to prevent overheating of spirit with fire risk. Burner tube fitted with asbestos wick. Filler cap brass, turned, with air vent.

BOILER. Heavy gauge, brass, approx 1¾" dia. by 3½" long, mounted vertically and supported by outer detailed jacket of thin brass finished in bronze and lacquer. Safety valve of spring-loaded plunger type serving as filler. cap; locked by spanner provided. Drain-off cock also operated by smaller end of spanner. Boiler jacket contains heat from lamp for 360° efficient heating; fumes and steam exhaust via jacket lid and flue detachable from top of boiler jacket for cleaning purposes.

CYLINDER AND BLOCK. Precision-ground brass block with reversing ports controlled by lever also acting as speed control. Detachable from steam and exhaust pipes via union nuts fitting spanner provided. Oscillating cylinder taking a lead alloy grooved piston of 3/8" dia. and 9/16" throw.

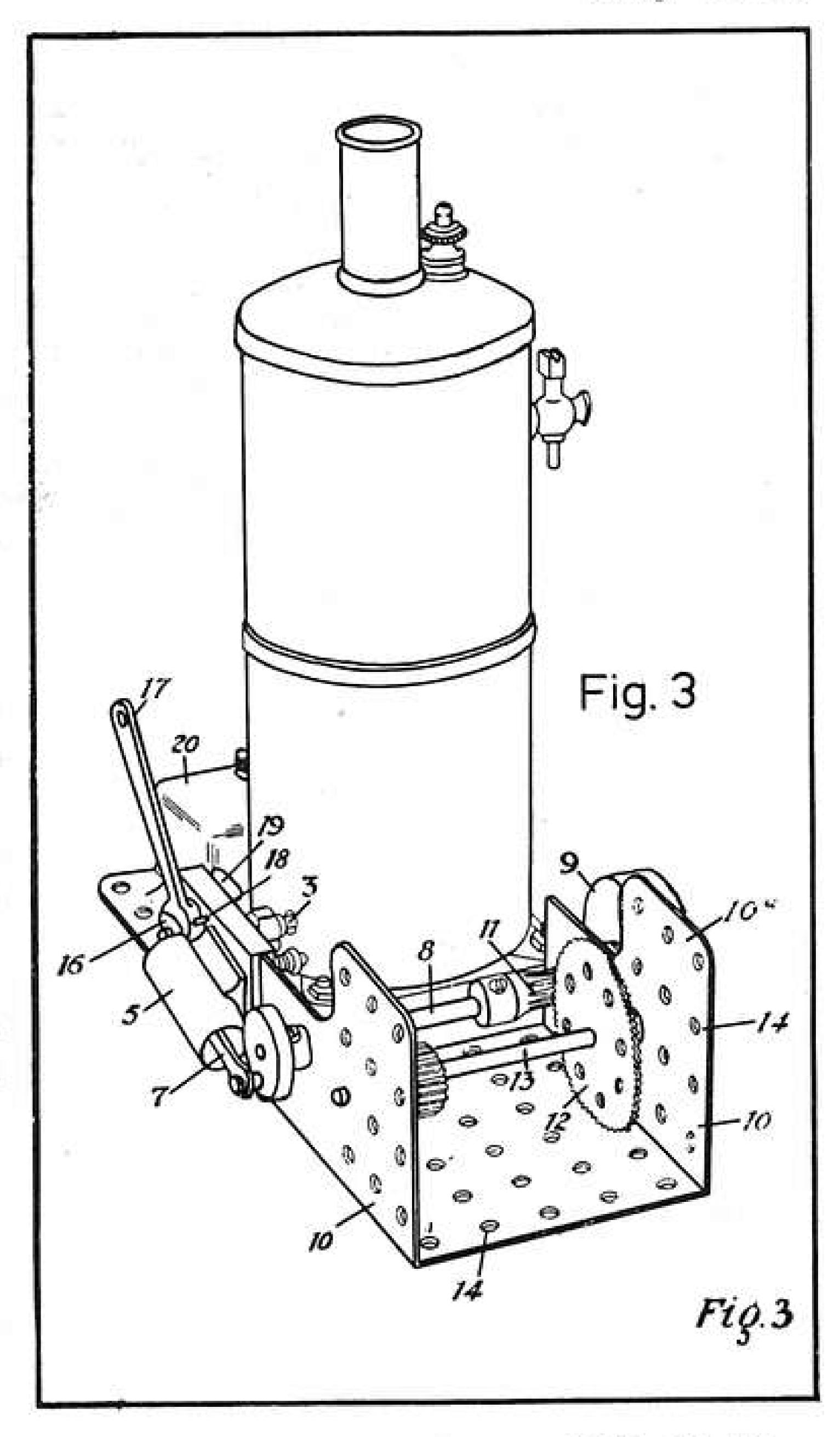
PRIMARY REDUCTION GEARING. Crank shaft of smaller dia. (approx. 1/8") than standard Meccano shaft, carrying counterbalanced fly-wheel and special \(^4\)" dia. 12-teeth pinion of fine pitch. Counter shaft at 1" centres carrying special 8-hole, 77-teeth gear wheel of fine pitch. This initial reduction of more than 6:1 provided adequate power to the counter shaft before additional reduction gear was added.

A number of these briefly summarised features of the 1929 Steam Engines' make-up are illustrated in the accompanying photographs of the author's personal engine. The counter shaft referred to is of standard Meccano shaft size so that further auxiliary gearing could be taken off or mounted in the baseplate bearings. This early model is a pleasure to operate just by itself and runs as sweetly to-day as it did some 45 years ago — probably better, in fact, as it is now nicely run-in!

As with many of Meccano Limited's products, certain anomalies arise in terms of detail and colours. Blue and gold feature on the Steam Engine illustrated, but reds and greens are used on other examples which the author has handled. The drain-off cock can also vary - the design as in the original specification being the most common and spanner-operated, while that on the engine illustrated here is of the needle screw-in type. This could well have been supplanted by the spanner-operated type to prevent fingers being burned on a hot engine. At the top of the reversing lever, a tapped hole is available of Meccano thread size for the attachment of control rods or levers. This is the most common form illustrated, but on p.36 of the M.M. for January 1930, the reversing lever is shown with an erinoid knob screwed into the top. The same applies to the engine shown here.

Something of a collectors' piece itself, the Steam Engine manual shows a range of Meccano models employing the engine, but most of the models are of simple design and quite easy to build. Two supermodels are illustrated by single shots, one of which is Super Model No. 19a, a steam digger which was fully illustrated in a supplementary instruction leaflet. A "mystery" supermodel also appears on p.15 of the manual in the form of a steam-driven Derrick Crane with the promise of a special Super Model Leaflet No. 6a which apparently never saw the light of day. However, the parts list and various other clues enable the advanced modeller to build this "mystery" Derrick Crane, but for the benefit of the general readership, this model will be featured in the next MMQ. Apart from the manual itself and two pages of the January 1929 M.M., very little publicity was given to the 1929 Meccano Steam Engine which went out

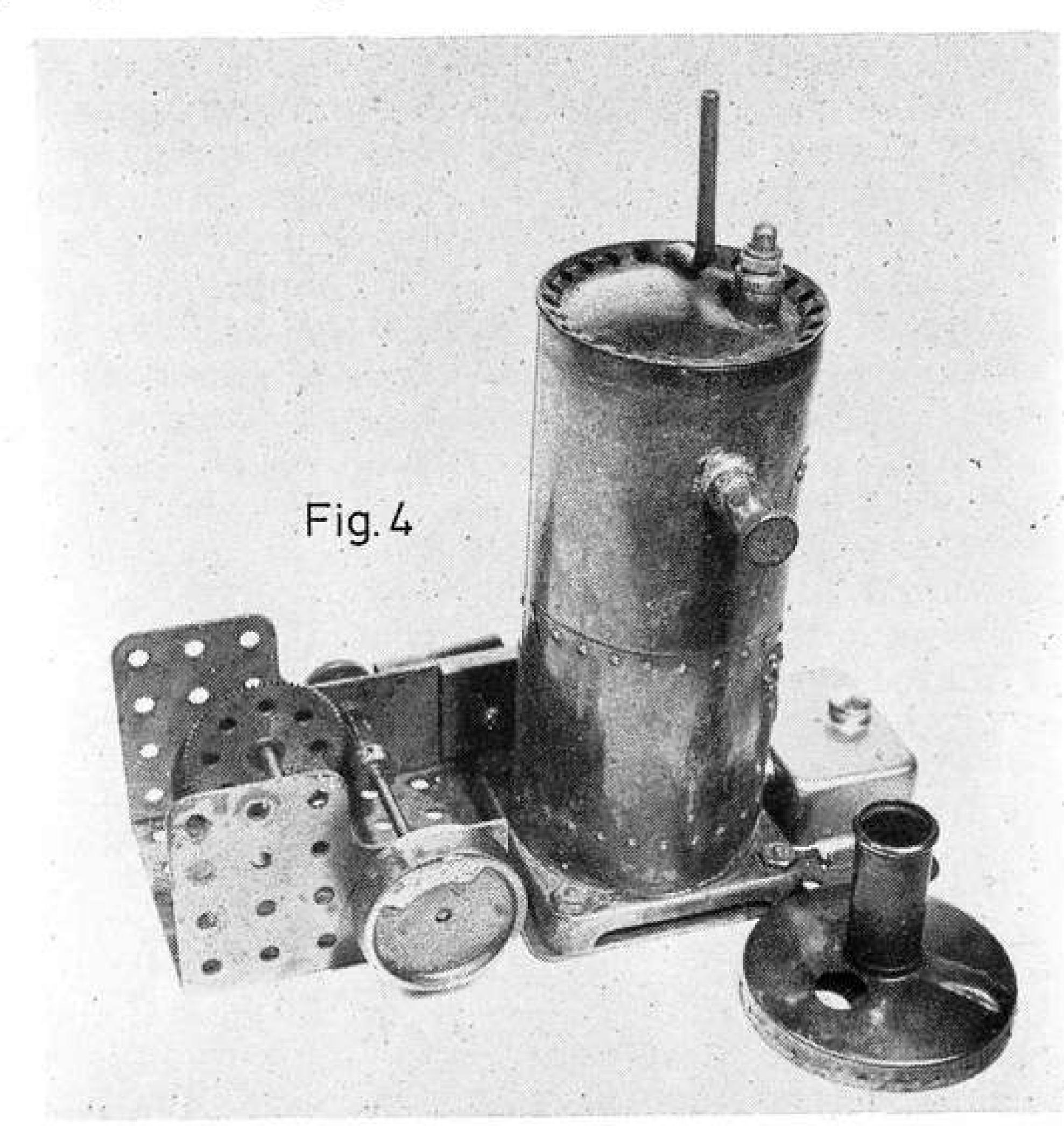
Copy of perspective view of the Meccano Steam Engine from the original Frank Hornby Specification of 1929. Although the specifications were lodged with the patents office in January, 1929, they were not accepted until September, by which time the Steam Engine was almost certainly in production.



of production a few years before the Second World War, but there is no doubt that it is one of the finest engines to go on the market at its price.

Just to let readers get some idea of the service behind the early production model, here (see page 38) is a complete price list for January 1930 showing how every part of the Meccano Steam Engine could be purchased separately. It goes without saying, however, that stocks were exhausted many years ago!

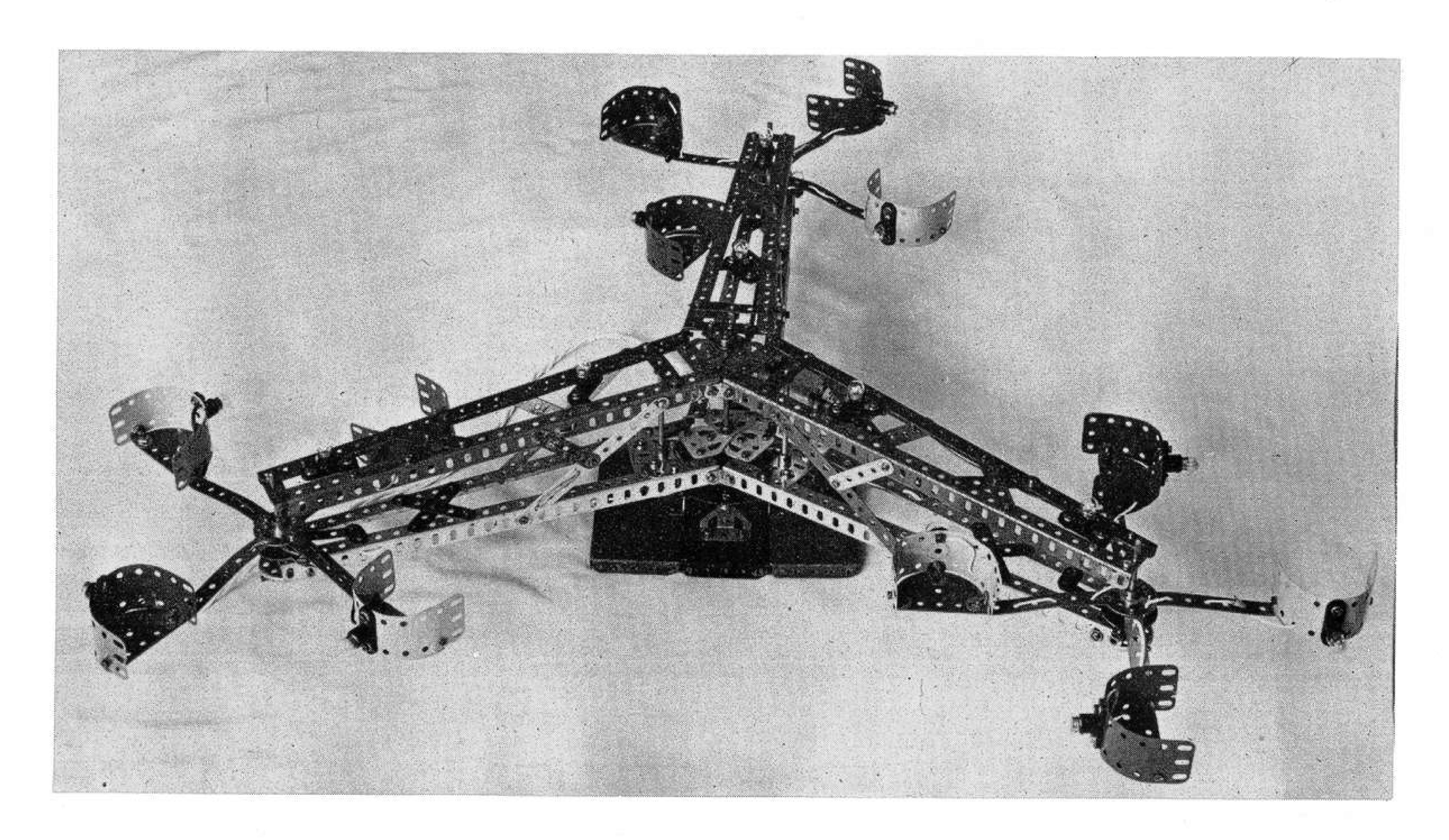
View from the flywheel side of the author's Engine with chimney flange removed. Note vent holes at top of boiler jacket, exhaust steam pipe and alternative drain-off cock. (Compare with fig. 3).



## MULTIPLE ROUNDABOUT

ALL THE FUN OF THE FAIR!

by G. G. Morgan



FAIRGROUND AMUSEMENTS, have always fascinated me (writes Mr. Morgan, of Ruislip, Middlesex), and I keep an eye open for any Meccano models of them. Over the years models have appeared of almost all fairground "rides", but, as far as I know, this Multiple Roundabout is a new one to Meccano.

The main roundabout rotates, as well as the small ones on the ends of the arms. The model is based fairly accurately on the prototype in that the method of transferring the rotary motion to the mini-roundabouts is copied from it. Construction is fairly straightforward. In the description which follows, "centre" refers to the centre of the whole model, and all holes are counted along the Angle Girders from their ends nearest the centre.

#### BASE

The base can be completely separated from the roundabout and is very simple since the motor is on the roundabout itself.

A support for the central Rod is built from two 2½" x 1" Double Angle Strips 1, bolted at right angles to the underside of a 2½" x 2½" Insulating Plate 2, the securing Bolts also fixing two 3½" Strips 3 to the upper surface of the Plate, directly above the Double Angle Strips. It is important to ensure that the holes through all five pieces at the centre of the Plate are lined-up so that a Rod can rotate freely in them.

Bolted to two opposite corner holes of the Insulating Plate are two 1" Flexible Wiper Arms 4. These will later have to be adjusted so that they touch on the continuous band of a Commutator under the roundabout, without fouling the Commutator Bolts, or touching any metal parts. Two Wiper Arms are used to ensure a smooth flow of current to the motor. 12V. D.C. power is supplied across the Wiper Arms and the metal of the base. The model takes 1.3A. A Gear

Ring 5 is fixed to the end holes of Strips 3, being spaced away from them by three Washers at each fixing point. Trunnions are then attached to lugs of the Double Angle Strips, and the whole is bolted centrally on three 5½" x 2½" Flanged Plates fixed side by side.

#### MINI-ROUNDABOUTS.

For each of the three miniroundabouts, two 12½" Strips are bolted at right angles across an 8hole Bush Wheel. It will later be found necessary to bend these slightly so that, the cars will pass through the space in the main roundabout. Each car consists of a 2½" Semi-circular Plate, around which is curved a 5½" x 1½" Plastic Plate, fixed to the

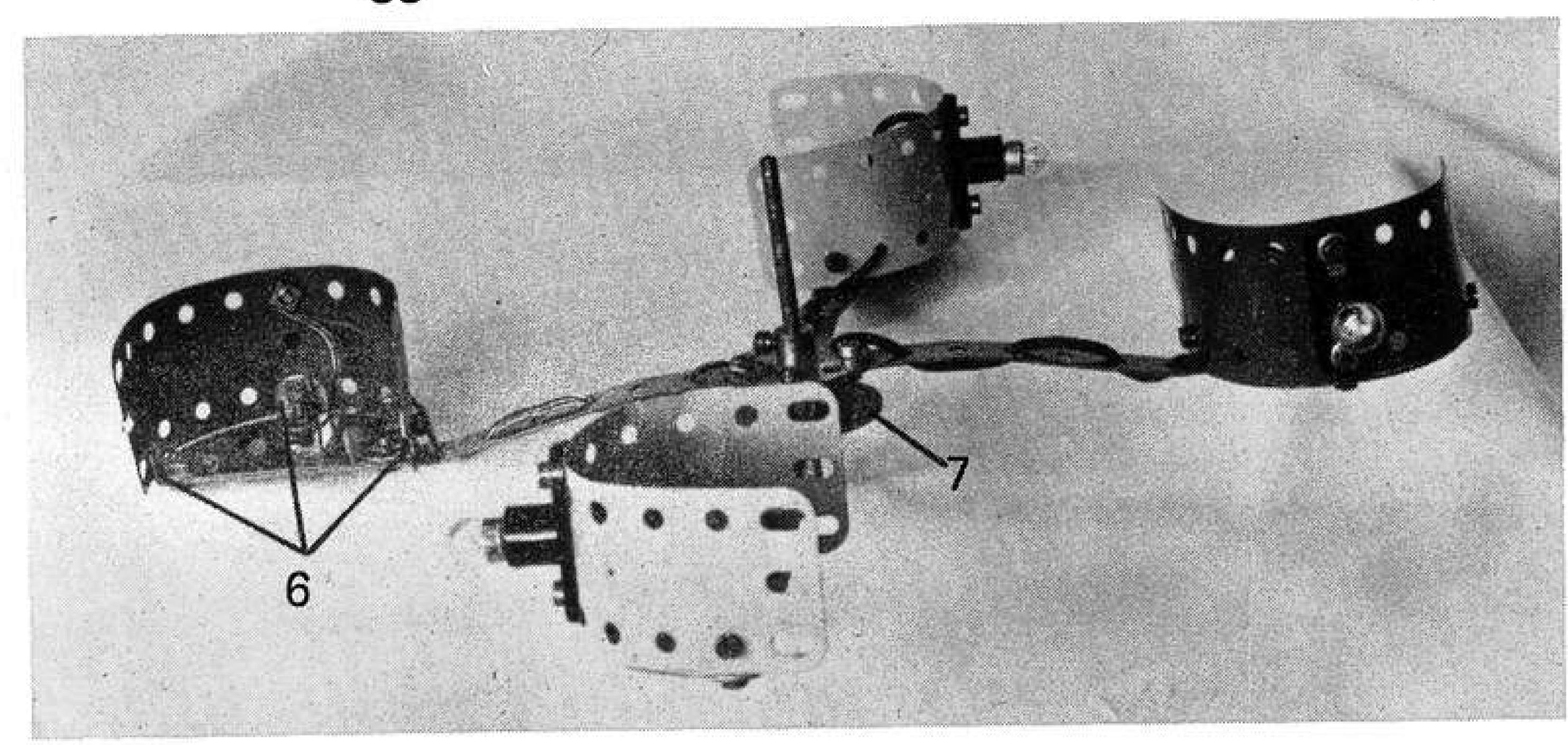
Above, a general view of the author's Multiple Roundabout. Comparatively easy to build, it makes a fine working model.

Semi-circular Plate by three Angle Brackets 6. The Bolts through the front two of these Brackets also fix the cars to the 12½" Strips. Due to the low clearances in the main roundabout, the Bolts in the bases of the cars should pass upwards. One should make sure that the cars face in the same direction on all the miniroundabouts.

Bolted to the back of each car is a Lamp Holder, the lower securing Bolt in this case also fixing the centre Angle Bracket to the back of the car and hence earthing one Lamp Holder terminal to the metal of the model. As the back Plate is plastic, the Holder is not short-circuited, and a wire is taken from the upper Lamp Holder Bolt back to a Flat Commutator 7 mounted, face downwards, immediately underneath the Bush Wheel on a 3½" Rod.

#### MAIN ROUNDABOUT

Moving to the main roundabout section, this is most easily built as upper and lower frameworks which are later joined together. Initially, two frameworks are each built from three Flat Trunnions 8 fixed radially onto a 6-hole Bush Wheel 9, the Bolts passing through the centre holes of the Flat Trunnions into the Wheel. The central Rod 10 will later locate in the apex holes of the Trunnions. A 2½" x ½" Double Angle Strip 11 is bolted centrally under the base of each Flat Trunnion, then two 12½" Angle Girders 12, with their circular holes horizontal, are fixed to the lugs of the Double Angle Strips. Girders 12 in adjacent arms are connected by Obtuse Angle Brackets 13, but note



A close-up view of one of the three identical mini-roundabouts.

that the Bolts in these Brackets are not tightened at this stage.

The ends of the Angle Girders in each arm are joined by 1½" Strips 14, while bracing 2½" Strips 15 join the fifteenth hole of one Girder to the eighteenth hole of the other Girder, a Bolt being placed through their point of intersection. This fit is not perfect, but Meccano Bolts will still pass through the holes.

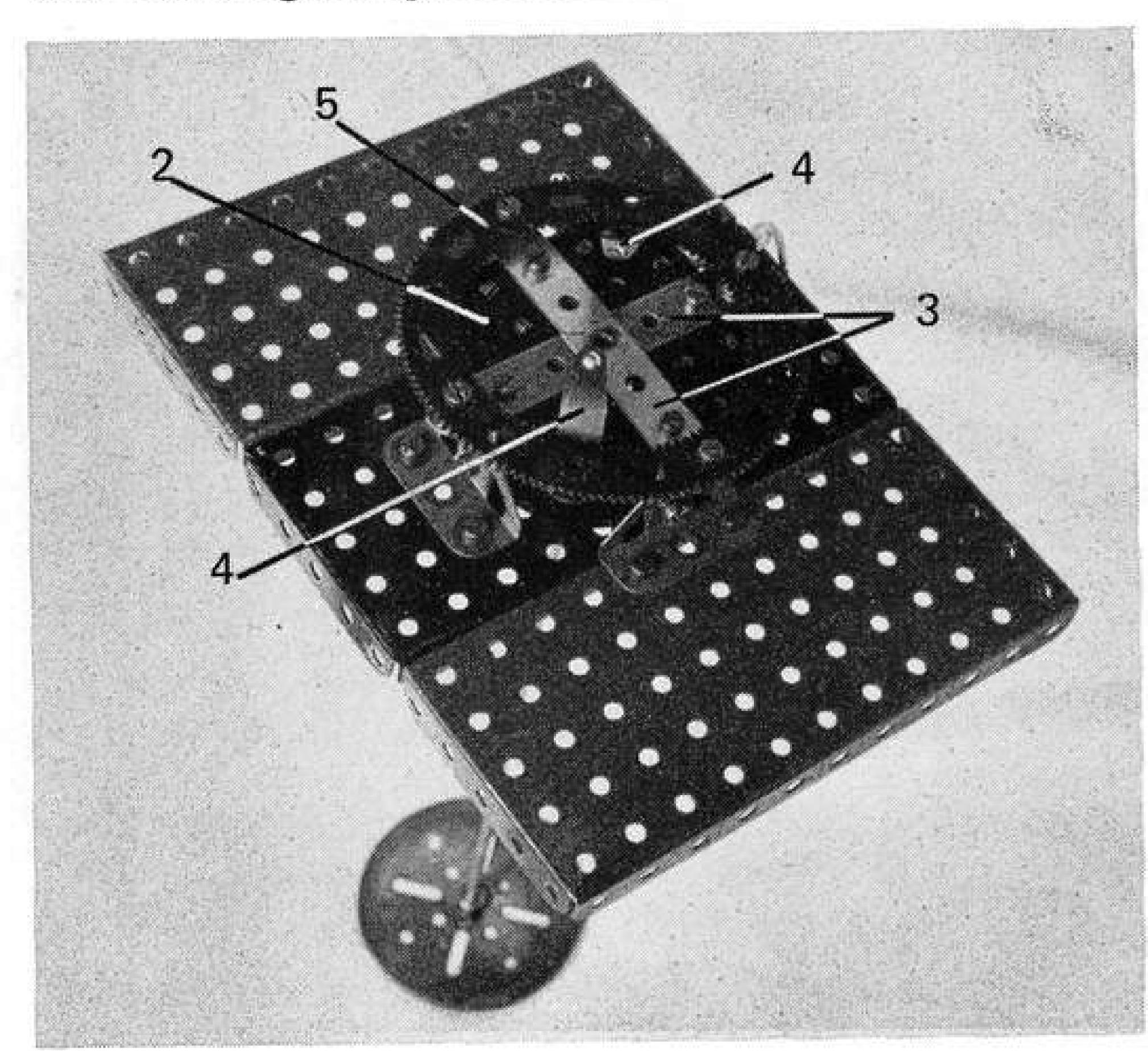
In the upper framework of each arm a 2½" Strip 16 is bolted through the third holes of the two Angle Girders, while a Lamp Holder is secured towards the outer end of the arm by a Fishplate 17 fixed through the twenty-third hole of one Angle Girder, and by an Insulating Fishplate 18 fixed through the twenty-first hole of the other Girder. Similarly, an inner Lamp Holder is bolted to an ordinary Fishplate in the seventh hole of one Girder, and an Insulating Fishplate in the eighth hole of the

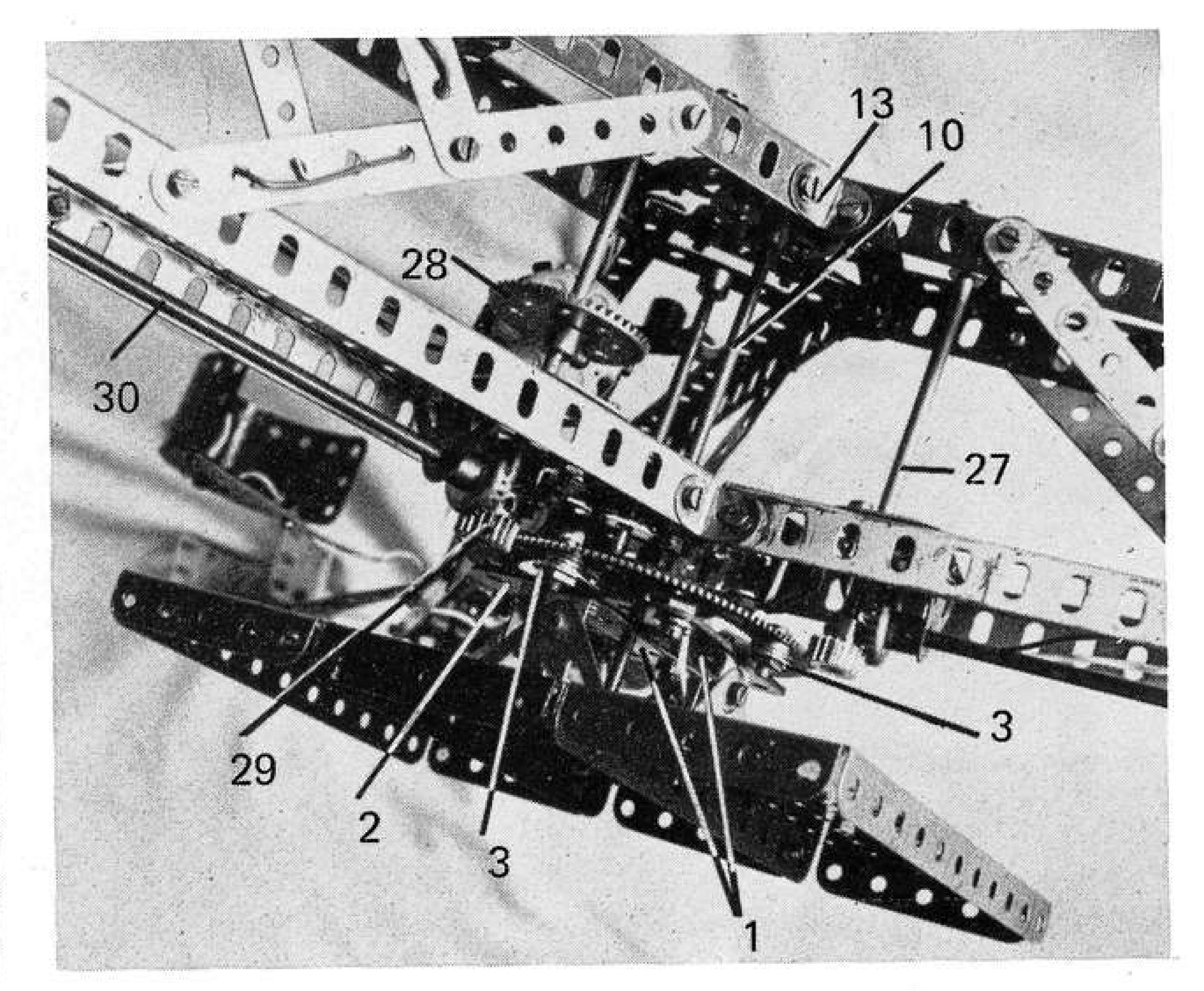
other. To reduce the length of wires, the Insulating Fishplates should be on the same side for both Lamp Holders.

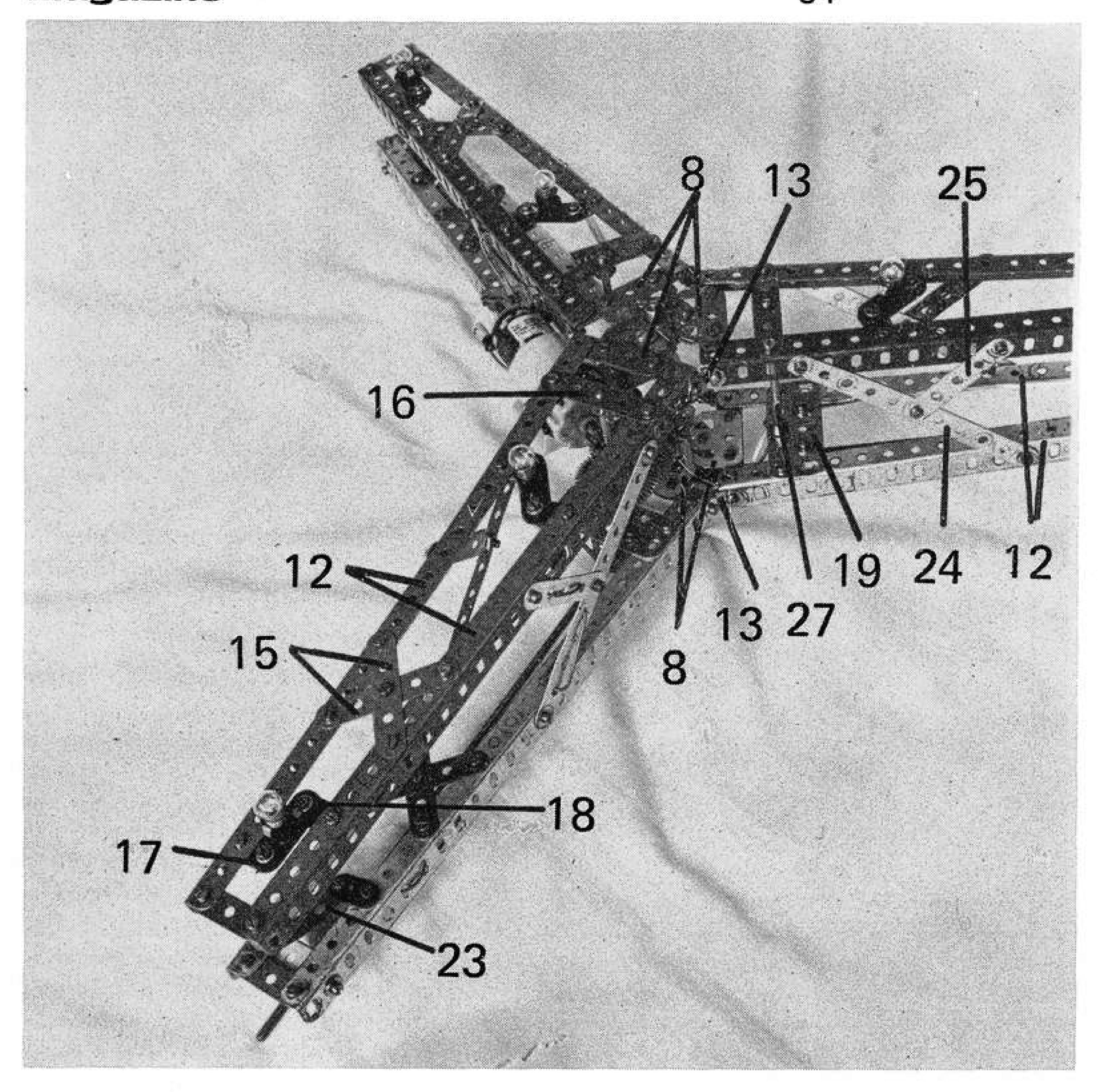
To the lower framework in each arm a 2½" Flat Girder 19, with round holes towards the centre, is fixed by Bolts through its end round holes and the third holes of each Angle Girder 12. A Trunnion 20 just rests across the Angle Girders, being slightly wider than the gap between them, but is bolted to the elongated holes of the Flat Girder, as near to the centre of the roundabout as possible. Two Angle Brackets 21 are attached by their elongated holes to the back ends of another Trunnion 22, being tightly bolted through the twenty-fourth elongated holes of the Angle Girders. This method of fixing overcomes the problem of the separation of the holes in the Angle Girders.

A 1½" Flexible Wiper Arm 23 is fixed by an Insulating Fishplate to

Below, the base, removed. Below right, the base and central gearing, assembled.

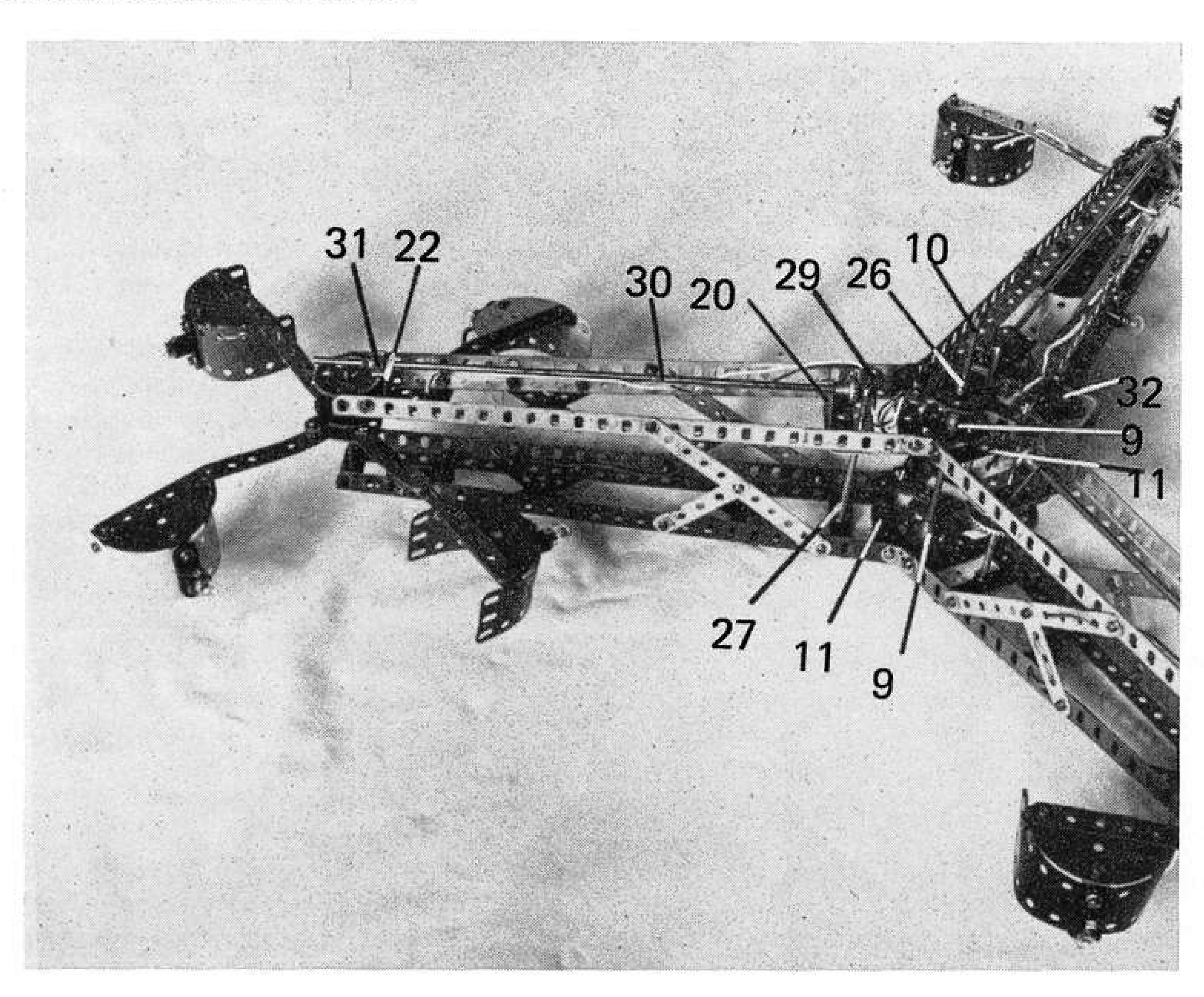






A detail top view of the main roundabout, from which the mini-roundabouts have been removed. Note the use of cross-bracing to strengthen the connections between Girders.

An underside view of the roundabout with the base removed to show the drive mechanism. The Flat Commutator is required to carry power to the lamps on the mini-roundabout chairs.



the twenty-first hole of one of the Angle Girders. This must later be adjusted to make contact with the Commutator on the mini-roundabout. I suggest positioning the Wiper Arm to touch on the inner segmented bend of the Commutator, so that the lights on the mini-roundabouts will flash as they rotate.

The upper and lower frameworks are now located on a 6½" central Rod 10 and a Collar placed over Flat Trunnions 8 on each framework to hold them firmly down. At the centre of the model the bottom of upper Angle Girders 12 should be 2½" from the top of lower Girders 12. The frameworks are then joined by a 5½" Strip 24 running from the fourth hole of the upper Angle Girder to the twelfth hole of the lower one, on each side of each arm. The 5½" Strips are anchored by 2½" Strips 25 running from their centre holes to the eleventh holes of the upper Angle Girders. The Bolts in these Strips and in the Obtuse Angle Brackets 13 should only be tightened when the spacing between the upper and lower frameworks has been adjusted to 1-5/8" at the ends. This gives an elegant slope, but leaves space for the cars to pass through. It is important that the lower Angle Girders do not slope downwards, otherwise the gears will not mesh properly.

A Flat Commutator is fixed under the roundabout on central Rod 10, with a gap of about 3/16" between its boss and that of Bush Wheel 9. Wires are taken from this Commutator to Wiper Arms 23, and up Strips 24 and 25 to the Lamp Holders on each arm. Below the Commutator is one Washer, and then a Collar 26, upon which the roundabout rests. The main roundabout can now be placed in the base.

#### DRIVE MECHANISM

In producing the drive mechanism three 4½" Rods 27 are journalled, one each in Strip 16 and Flat Girder 9, in each arm of the model, being held in place by Collars at top and bottom. A 1½" Bevel Gear 28 is secured on one only of these Rods, while mounted on the lower ends of all the Rods are ½" Pinions 29 which engage with the Gear Ring on the base. They also mesh with 1/2" Contrate Wheels on the ends of  $11\frac{1}{2}$ " Rods 30, journalled in Trunnions 20 and 22 in the arms. The Contrate Wheel on each arm is spaced from Trunnion 20 by a Washer, while mounted on each Rod, boss outwards, against Trunnion 22 is a ½" Pinion 31.

The mini-roundabouts can now be positioned in the arms, their axles

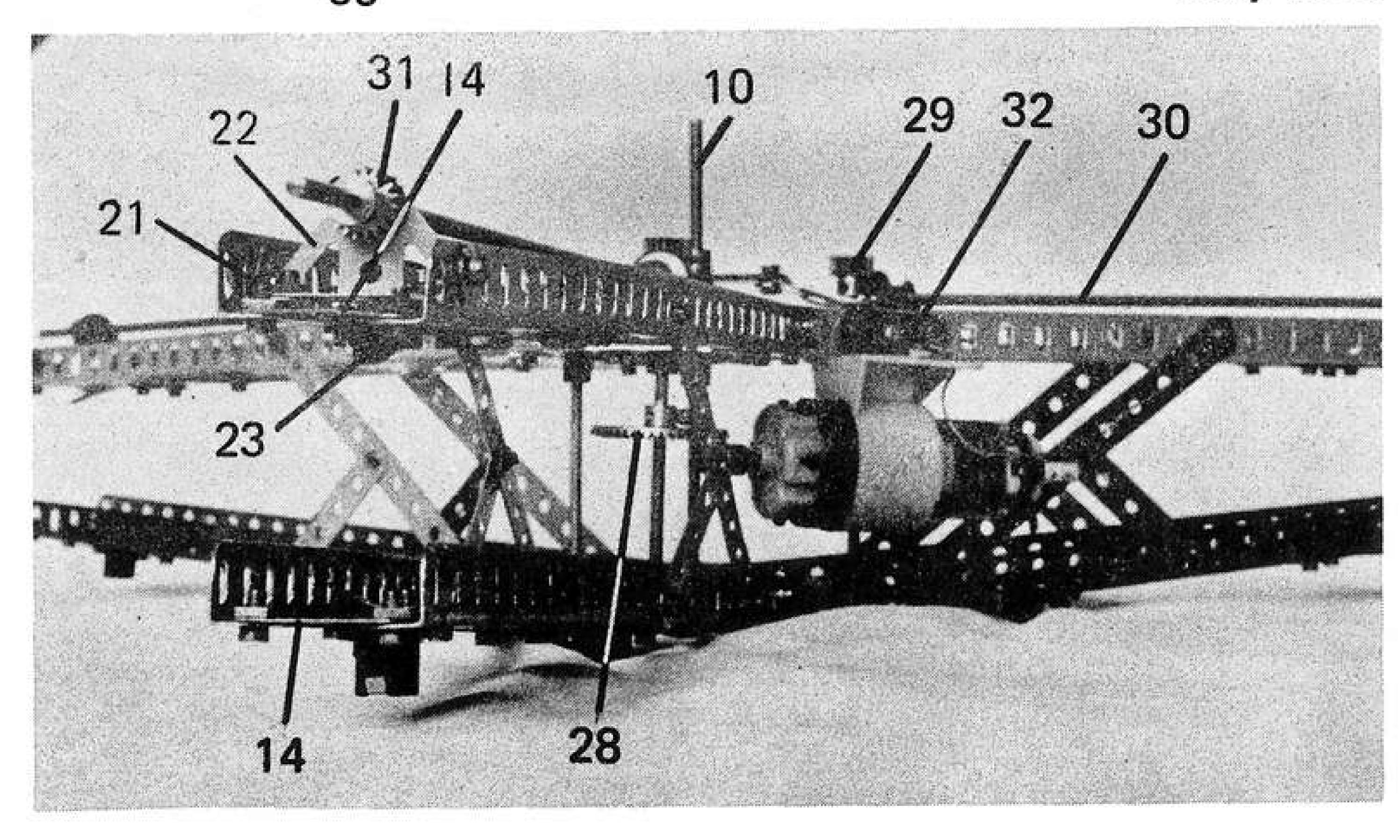
being journalled in 1½" Strips 14. Mounted on the lower end of each axle is a 1½" Contrate Wheel, the weight of the mini-roundabout keeping this engaged with nearby Pinion 31. The mechanics of the model should now work if rotated by hand. Operational power, however, is supplied by a Motor-with-Gearbox bolted

#### PARTS REQUIRED

1-14 295- 37a 6-126a 3-15a 285- 37b 1-180 36- 38 12-194d 2-46 12-214 1-511 6- 6a 2-24b 6- 48a 9-513 3- 52 2-531 9- 59 3-28 3-532 3-103f 10-111c 18-539 6-12c 1-30a 11-126 18-540 1-30c 4-551

to a Trunnion which is in turn bolted to one lower Angle Girder 12 through its second and third holes. (Angle Girder 12 and Flat Girder 19 are not sufficiently aligned to enable a Bolt to be passed through the fourth hole of the Girder). A ½" Bevel

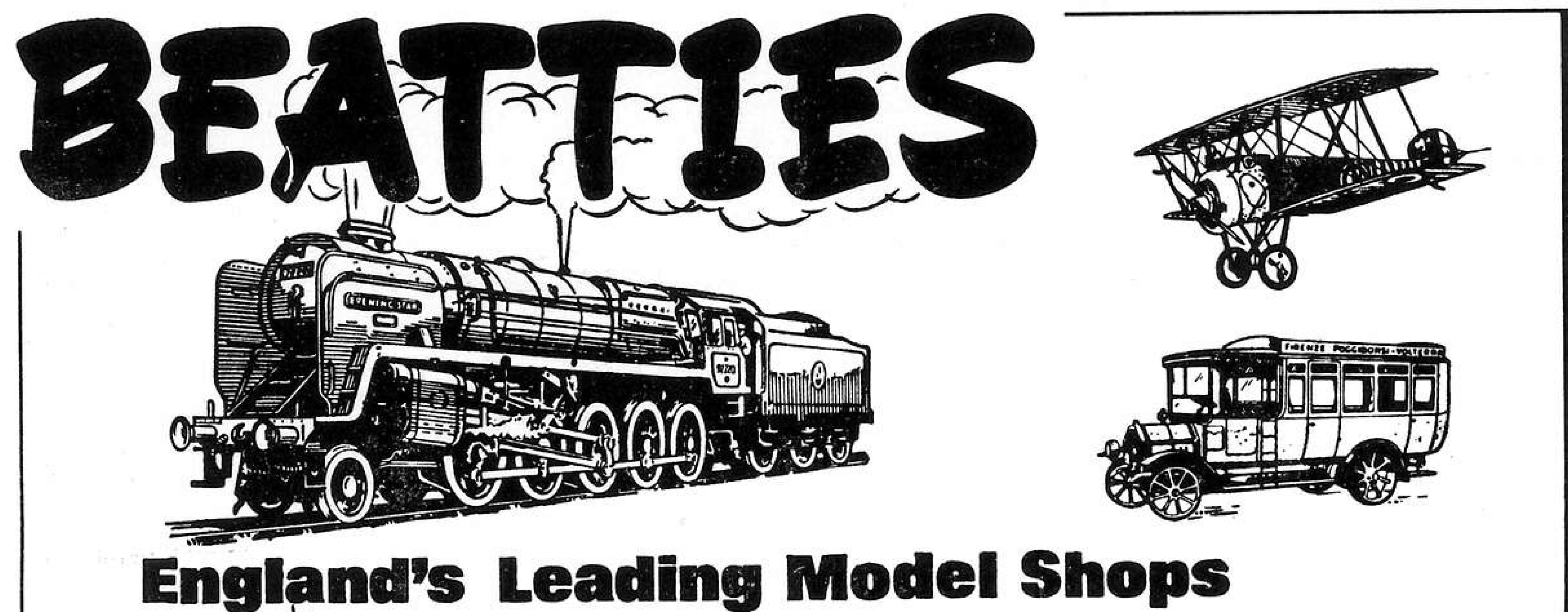
1 - Motor with Gearbox.



A detail view showing construction of the arms of the main roundabout.

Gear on the Motor shaft engages with Bevel Gear 28. These Bevel Gears are not quite in line, but are near enough to function quite satisfactorily. One terminal of the Motor is connected by insulated wire to the Commutator under the roundabout while the other terminal is earthed to the metal frame of the model.

I found the model would work without strain on the motor in any gearbox ratio of more than 6:1 but it is necessary to "catch" the roundabout as one disconnects the power after it has been run at high speeds to prevent the flywheel action of the model driving back on the Motor Gearbox and damaging it.





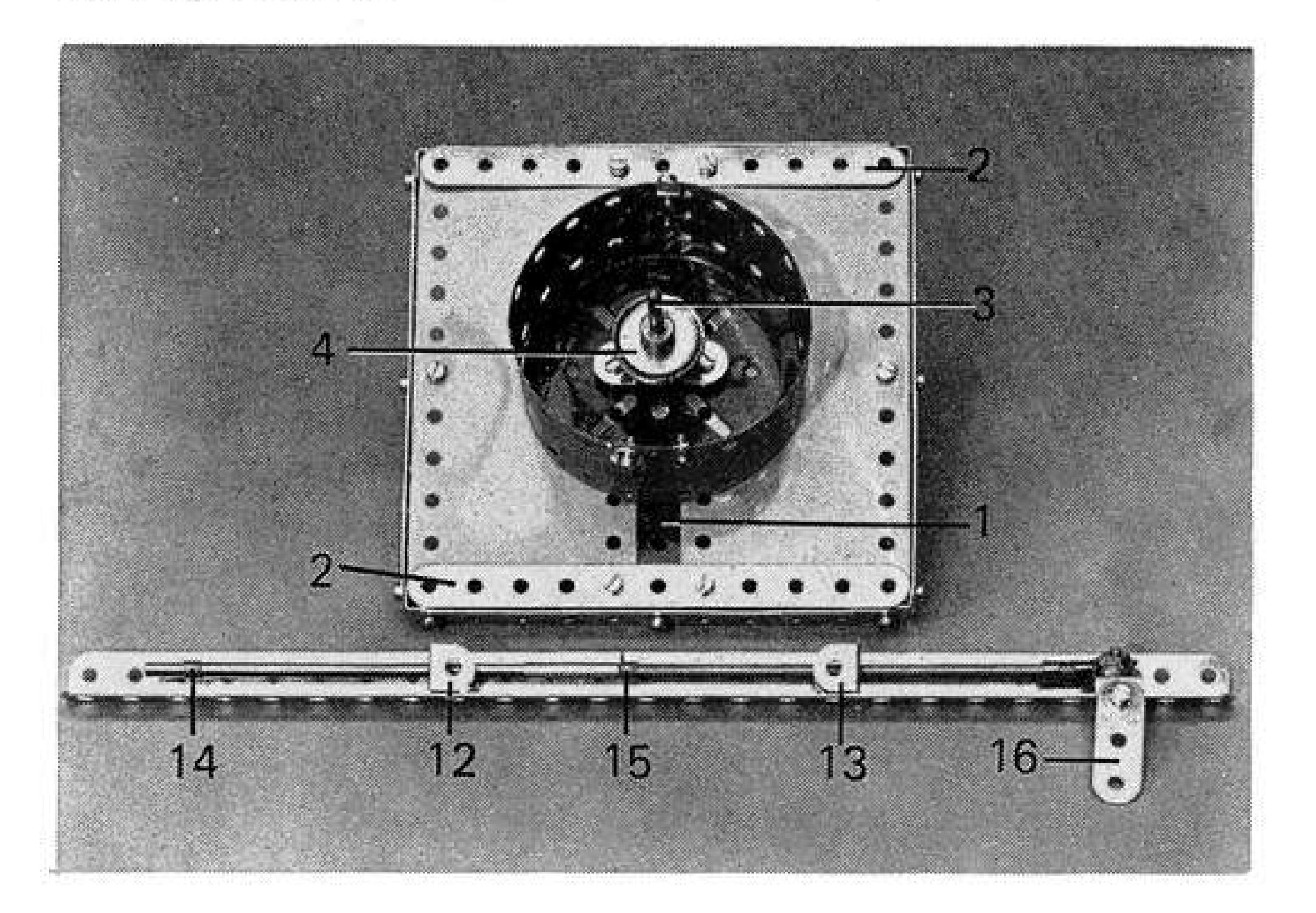


BRANCHES:

10, THE BROADWAY SOUTHGATE N.14 112, HIGH HOLBORN LONDON W.C.1

14, SPRING GARDENS MANCHESTER 2 18, KING CHARLES STREET LEEDS 1

SEE THE COMPLETE RANGE OF MECCANO SPARE PARTS AND SETS AT ANY BEATTIE SHOP ALL THE YEAR ROUND.



## Past Masters"

#### A New Series by Spanner

## ACK-ACK GUN

I WAS going to head this article "A Golden Oldie", only I thought I might be mistaken for a 'disc-jockey'!

The title, however, would have been appropriate; the model featured here is appealing enough to warrant the golden part of the pop radio catch-phrase and it is certainly "old" — if 35 years can be called old when talking of Meccano. It was first described in the August 1938 edition of Meccano Magazine, yet it is just as valid a constructional project today as when it was originally designed all those years ago.

Why, you may ask, are we reshowing an early M.M. model in the new MMQ? The answer is simple: you, or a large number of you, want us to do so. Following publication of the first issue of the new magazine last April we received a lot of congratulatory letters from readers and, as had been requested, many of them included very constructive suggestions and ideas for future issues. One of the suggestions which was made regularly in different letters was that we should re-run some of the countless out-

standing models which have been featured in old magazines and manuals over the years. The feeling among the writers was that probably the majority of today's readers would not have seen the models when originally published, so they would be perfectly valid model-building offerings, and those comparatively few readers who had seen the originals, rather than being annoyed by their reappearance, would be interested to see them again. The argument seemed logical to us and so we propose to feature, fairly regularly, a model from the past. It may not be possible, or desirable, to include something in every issue, but we hope to have something to show in most issues for the next year or two.

We begin the series with the accompanying Anti-aircraft Gun, rebuilt from the August 1938 M.M. It is a working model in the sense that it shoots Washers, or Collars, and it therefore goes without saying that it must not be aimed at the face. Originally, it was built from a No.5 Meccano Set, but, with numbering and content changes over the years, it now

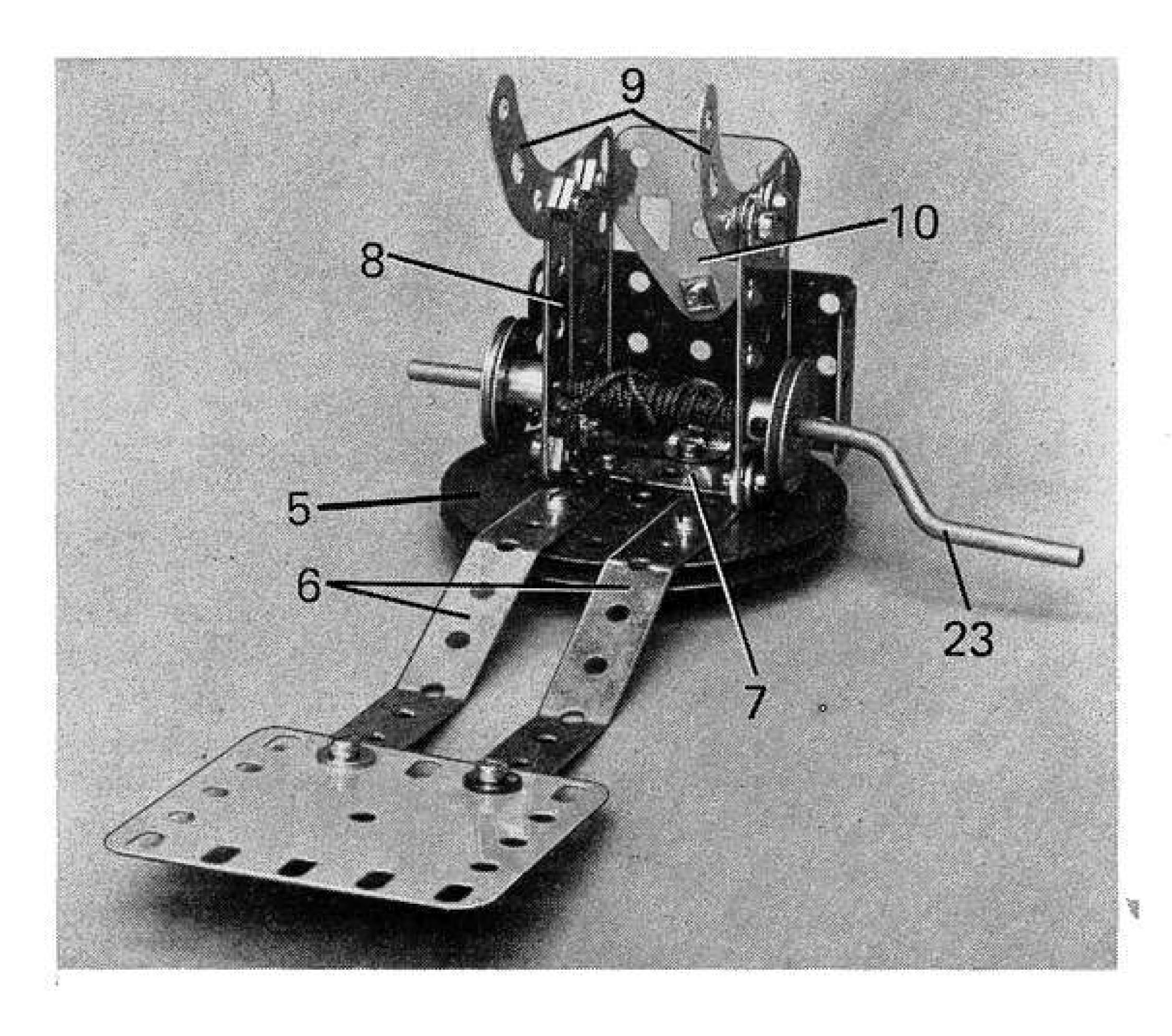
qualifies as a No.6 Set model with the addition of one extra Cord Anchoring Spring. (This is not essential, as will be explained.)

#### BASE

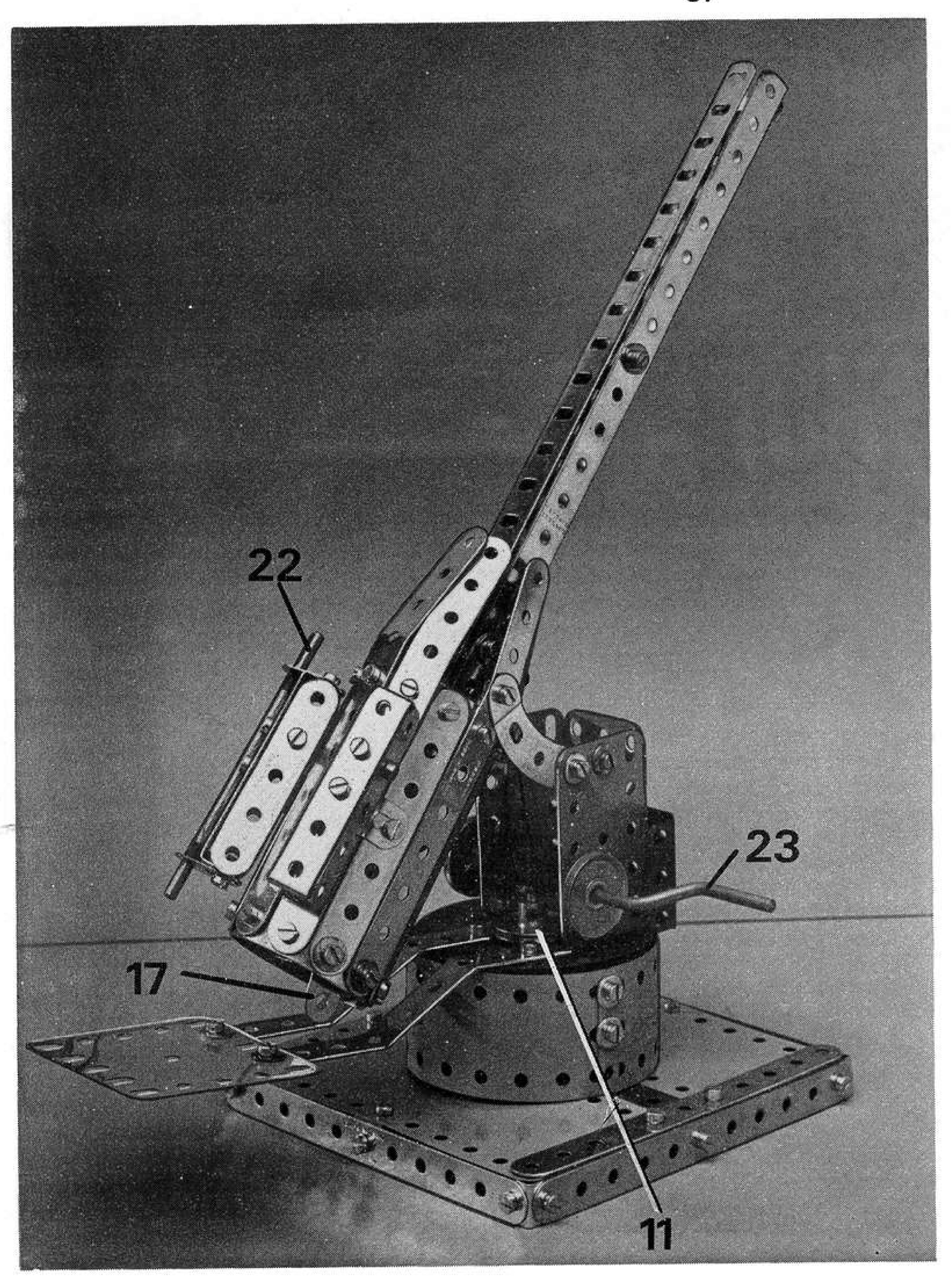
As regards construction, the base of the gun is produced first. It consists of a 5½" x 2½" Flanged Plate 1, to which two 5½" x 2½" Flexible Plates, overlayed by two 5½" Strips 2, are bolted to result in a 5½" x 5½" square area. The sides of the base are supplied by further 5½" Strips, two bolted direct to the end flanges of Plate 1 and two attached to the Flexible Plates by Angle Brackets. In addition, the ends of the Strips are attached to each other also by Angle Brackets.

A 3" Pulley, boss upwards, is next bolted to the top centre of the base and, around this, a cylinder formed by two overlapping 5½" x 1½" Flanged Plates is wedged. The Plates are not bolted to the Pulley, but if they are bolted tightly together when forming the cylinder, they will grip the rim of the Pulley firmly. Fixed in the boss of the Pulley is a 2" Rod 3 which is further supported by a Double Bent Strip fixed by ½" Bolts to the face of the Pulley, but spaced from it by four Washers on the shank of each bolt. A 1" Pulley with boss 4 is added to the Rod.

Now bolted to the non-boss face of a second 3" Pulley 5 are two 5½" Strips 6 and a 1½" x ½" Double Angle Strip 7. The Strips are bent, as shown, to a zig-zag shape and to their outer ends is fixed a 2½" x 2½" Flexible Plate which serves as the firing platform. Fixed to the lugs of the Double Angle Strip are two 2½" x 1½" Flexible Plates, the rear inside edges of which are overlayed by 2½" Strips 8. Two 2½" Stepped Curved Strips 9 are bolted to the upper ends of these Strips and also



Above, the base of the Anti-aircraft Gun with, below it, the gun barrel partially dismantled to show its internal design. Left: the swivelling gun mounting with the firing platform and elevation control handle.



First in a new series, an impressive Anti-aircraft ("Ack-Ack") Gun re-built from the August 1938 issue of Meccano Magazine. It can be assembled from a current No. 6 Meccano Set.

through the centre top holes of the Flexible Plates to serve as the gun pivots. Attached by an Angle Bracket to the forward edge of Pulley 5 is a 2½" x 1½" Flanged Plate, to the upper end of which a Flat Trunnion 10 is bolted to complete the gun support. The assembly is then positioned on Rod 3 where it is free to revolve, but is held on the Rod by a 1" Pulley 11.

#### **GUN**

Turning next to the gun, proper, the barrel consists of two 12½" Angle Girders arranged to form a box

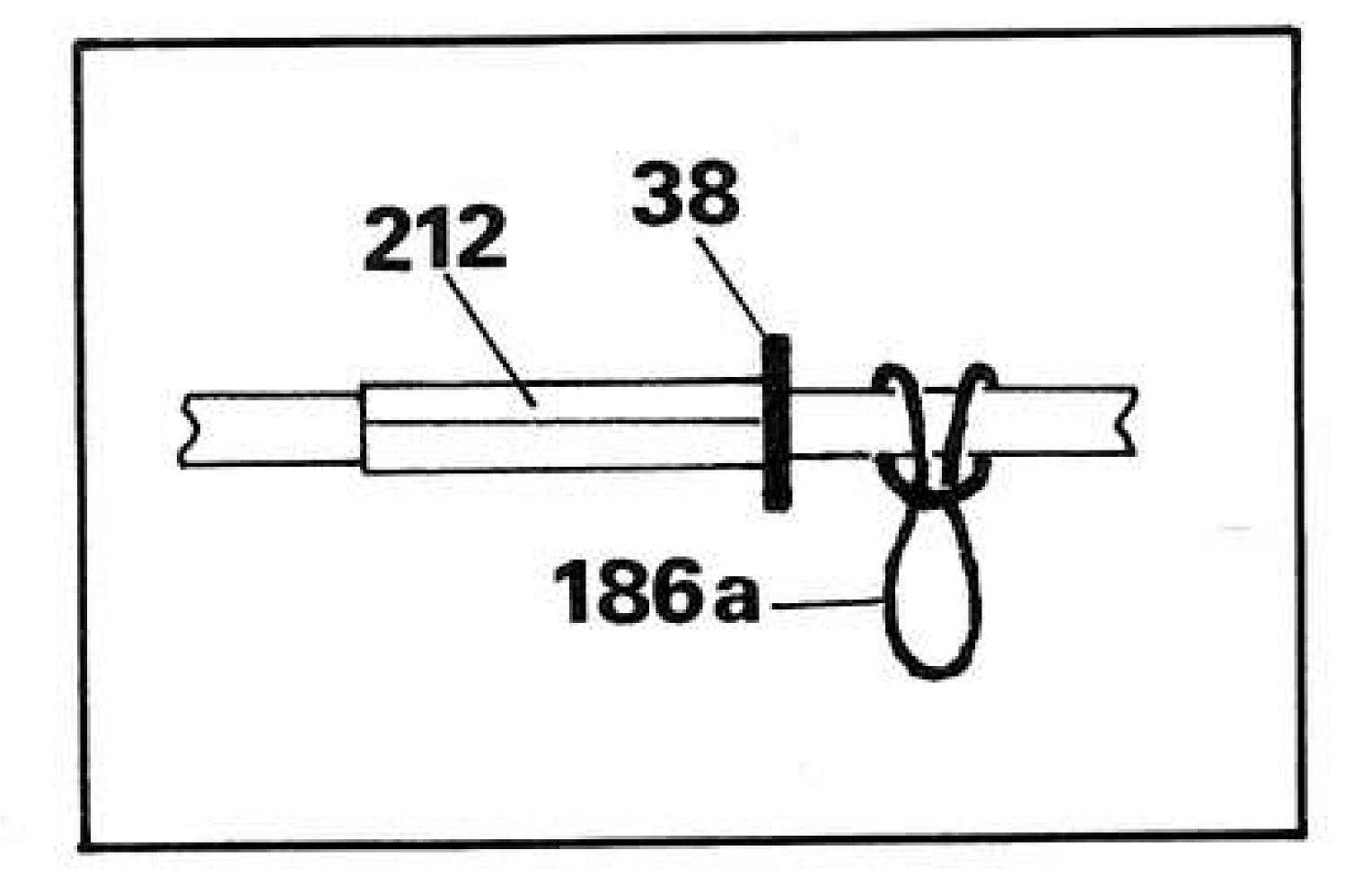
girder and held together by two Double Brackets 12 and 13, using a Washer under the head of each securing Bolt. At this stage in construction, however, the Double Brackets are bolted to only one of the Girders, the other Girder being fitted later when the firing mechanism has been completed. Journalled in the centre holes in the Double Brackets is a 9½" compound rod, supplied by a 5" and a 4½" Rod joined by a Rod Connector with the 4½" Rod nearest the muzzle end of the barrel. A Cord Anchoring Spring 14 is mounted on the 4½" Rod approximately 1/2" from its end to form a stop for the washer, or Collar, used as the "shell". Another Cord

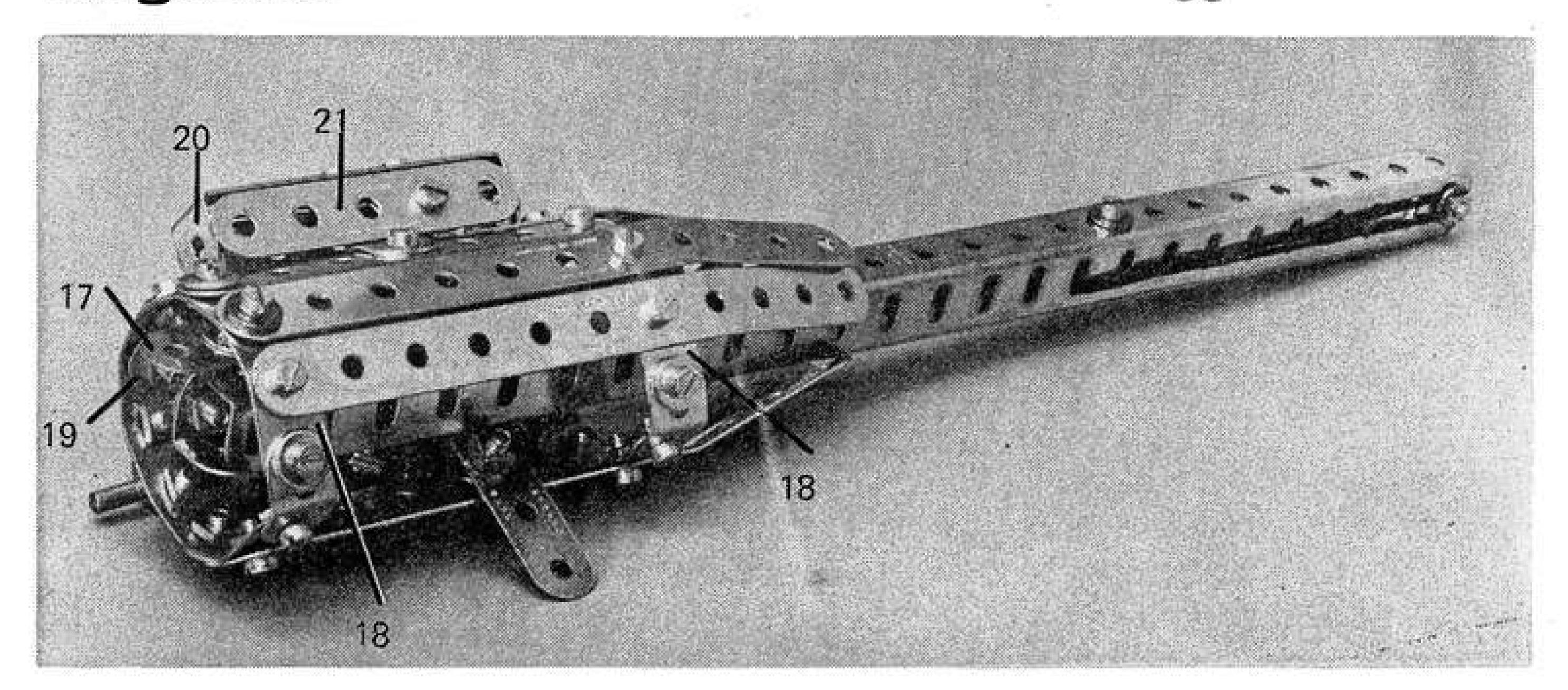
Anchoring Spring 15 is mounted on the 5" Rod adjacent to the Rod Connector. Located on the hook of this latter Spring is a 6" Driving Band which is threaded through the elongated hole in the Angle Girder directly behind Double Bracket 12 and is then stretched forward to be held on a Bolt located in the front end hole of the Angle Girder. If the second Spring is not available, a Washer can be placed on the Rod, against the Rod Connector, and the Driving Band "hitched" onto the Rod as shown in the accompanying sketch.

A handle 16 is provided at the rear end of the 5" Rod to enable it to be "cocked" preparatory to firing. This is supplied by a 1½" Strip tightly fixed by an Obtuse Angle Bracket to a Rod and Strip Connector secured on the end of the Rod. Note that the Angle Bracket is spaced from the lug of the Connector by one or more Washers, as necessary, on the shank of the securing 3/8" Bolt so that it does not catch against the sides of the barrel. The barrel can now be completed by bolting the second Angle Girder in position, with handle 16 projected out through the gap between the two Girders. Patience may be needed to fit the Nuts on the Bolts inside the barrel, but it can be done!

The trigger mechanism for the gun is provided by a 3" compound strip 17, built up from a 2½" and a 1½" Strip. The inner end of the compound strip is lock-nutted to an upward pointing Fishplate bolted to the right-hand side of the barrel through its fifth round hole. Secured to strip 17 through its third hole from the inner end is an Angle Bracket, the spare lug of which is extended by a Fishplate which projects over the top of the barrel. A downwardpointing Threaded Pin is secured to the Fishplate and full use must be made of the slotted holes in both the Fish plate and Angle Bracket so that, when strip 17 is moved, the Pin locates in the adjacent slotted hole in the top of the barrel to hold lever 16 in position when the gun is cocked. The Pin

How to hitch the Driving Band on the barrel rod when a second Cord Anchoring Spring is not available.





The barrel of the Ack-Ack Gun.

actually slips down in front of the 3/8" Bolt fixing the Obtuse Angle Bracket to the Rod and Strip Connector on the end of the 9½" compound rod.

The wider portion of the barrel is built up on two 5½" Strips 18, each of which is carefully formed (preferably using pliers) into a circle with the ends joined by an Obtuse Angle Bracket. Bolted between the two circles are seven 5½" Strips and two 3½" Strips, the forward ends of the 5½" Strips, being bent inwards, as shown. The Strips are arranged as follows, looking at the rear end of the assembly: the two lowest holes in the "circles" are clear of Strips, then, working clockwise from this gap, come two 5½" Strips, a 3½" Strip, three 5½" Strips, the other 3½" Strip and, finally, the remaining

two 5½". Strips. The bent inner ends of the 5½" Strips, incidentally, overlap slightly.

When finished, the complete unit locates over the lower end of the barrel, where it is secured by a Double Bracket 19. Lever 16 projects downward through the gap in the underside of the unit.

Two assemblies which, according to the original M.M. article, represent recoil shock absorbers, are each built up from a 2½" x ½" Double Angle Strip 20 and two 2½" Strips 21, the latter attached to the Double Angle Strip by Angle Brackets. The assemblies are fixed to the barrel in the positions shown by ½" Reversed Angle Brackets. An imitation sight is attached to the left-hand assembly, this being represented by a 3½" Rod 22 held by Spring Clips in two Fish-

plates bolted to the lugs of the Double Angle Strip. The completed gun is now positioned in its mounting by simply lock-nutting the side two 5½" Strips of the gun to the upper ends of Stepped Curved Strips 9.

Last, but by no means least, a gun-elevation control mechanism is provided by a 3½" Crank Handle 23 which is held by two 1" Pulleys in the second holes up of 2½" Strips 8. A length of Cord wound round the Crank Handle is anchored to the gun barrel so that, when the Handle is turned to wind in the Cord, the Barrel is pulled down and, when the Cord is let out, the heavier weight of the lower end of the gun causes the barrel to rise: a simple, but effective way of finishing off a very pleasing model.

14 -	2	2 - 19b	2 - 90a
2 -	3	1 - 19s	2 - 111a
12 -	5	3 - 22	1 - 111c
2 -	6a	2 - 35	1 - 115
2 -	8	87 - 37a	2 - 125
6 -	10	82 - 37b	1 - 126a
3 -	11	14 - 38	2 - 176
12 -	12	1 - 40	1 - 186a
3 -	12c	1 - 45	2 - 188
1 -	15	1 - 48	2 - 189
1 -	15a	2 - 48a	1 - 190
1 -	16	1 - 51	2 - 192
1 -	17	1 - 52	1 - 212

## COLLECTORS' COLLECTORS'

(Continued from page 31).

Printed alongside is the list of original prices for the 1929 Meccano Steam Engine, mentioned on page 31 of this issue. All the information included is copied from the original Price List, but collectors please note that our list has been laid out to fit the available space. It is not a photo reproduction of the original.

N.B. It would appear that the insulating knob for the reversing lever was available as an optional extra.

Within two months of the issue of the original Price List, dated January 1930, prices for most of the metal parts shown were increased by 25% or more, and the Steam Engine complete went up in price to 25 shillings. Inflation is nothing new!

#### PRICE LIST OF MECCANO STEAM ENGINE AND COMPONENTS

STEAM	ENGINE, Complete	. 21/-
s. d.	s. d.	s. d.
Baseplate 1.0	Reversing Cam	
Flywheel and	Stud each 0.1	Water Level
Screw 1.9	Cylinder each 0.9	Cock Washers
Screws for Flywheel	Cylinder Stud	doz 0.6
doz 0.3	doz 0.6	Safety Valve
Crankshaft 0.1	Cylinder Nut	Complete each 0.6
Crankshaft Pinion	doz 0.9	Safety Valve Body
+ screw 0.4	Cylinder Spring	each 0.2
Driving Wheel	doz 0.6	Safety Valve
and Set screw 0.6		Spring doz 0.6
Boiler mounting	Piston each 0.3	Safety Valve Nut
screws doz 1.0	Insulated Handle	doz 0.6
Hex. Nuts for	for	Safety Valve
Boiler doz 0.6	Reversing lever on	Washers doz 0.6
Steam Chest (cyl.	Cam each 0.2	Safety Valve
block) each 2.3	Crank each 0.4	Washers (small)
Plug Screws for	Exhaust Pipe	doz 0.3
(cyl. block) doz 0.9	Complete each 0.8	Safety Valve Pin
Washers for Plug	Boiler Complete	doz 0.9
Screws doz 0.3	each 4.0	Spirit Lamp each 1.3
Fix. Screws, Steam	Boiler Cap and	Spanner each 0.2
Chest doz 0.9	Chimney each 0.10	Spirit Lamp
Reversing Cam	Boiler Casing	stopper each 0.1
each 0.8	each 3.0	Wick doz 1.0
Reversing Cam	Water Level	Filler Funnel
spring each 0.1	Cock each 1.0	each 0.4
spring cacii U.1	COUR CAUIT I.U	

#### Laughs Galore

with the

## MONKEY

### A "FUN" MODEL FROM HUNGARY

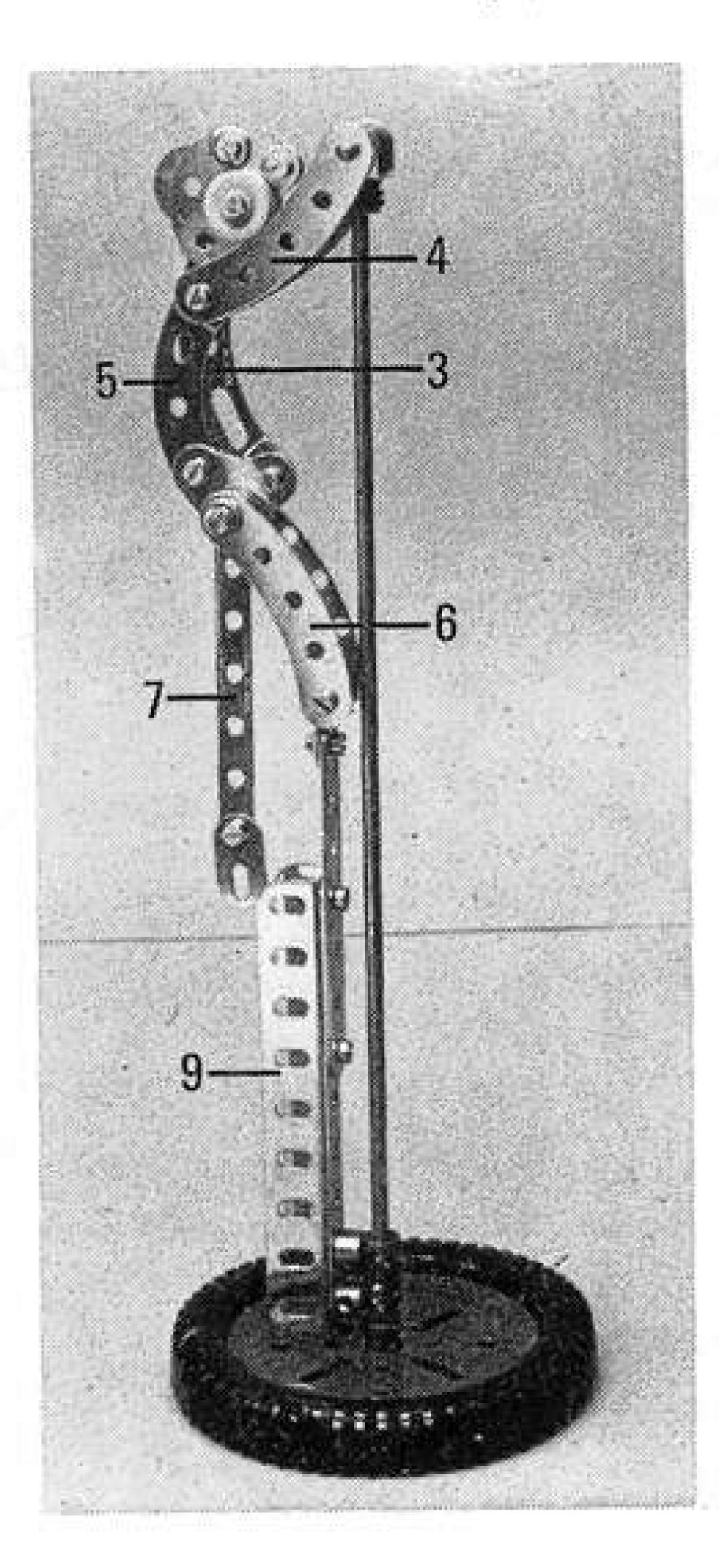
Described by "Spanner"

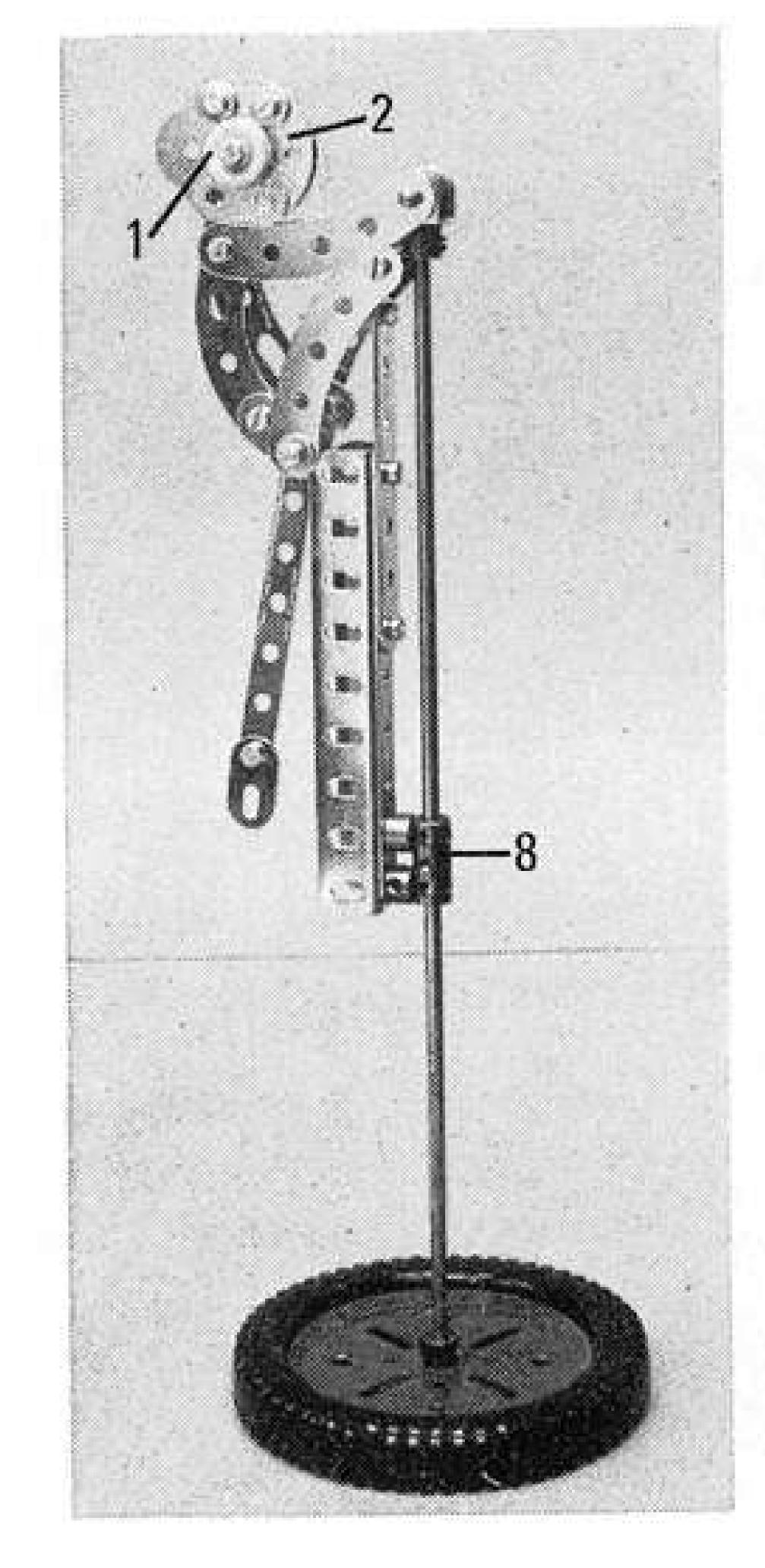
IF I was to mention the name Andreas Konkoly to an experienced Meccano modeller, the chances are his immediate comment would be: 'Ah! Yes, the Meccanograph man'. And this would be the expected reaction, for Mr. Konkoly, of Budapest, Hungary, is probably one of the best known designers of Meccanograph pattern-drawing machines throughout the whole Meccano fraternity. His interest, however, is by no means limited exclusively to such models. He also has another love, which he describes quite simply as "building animal figures".

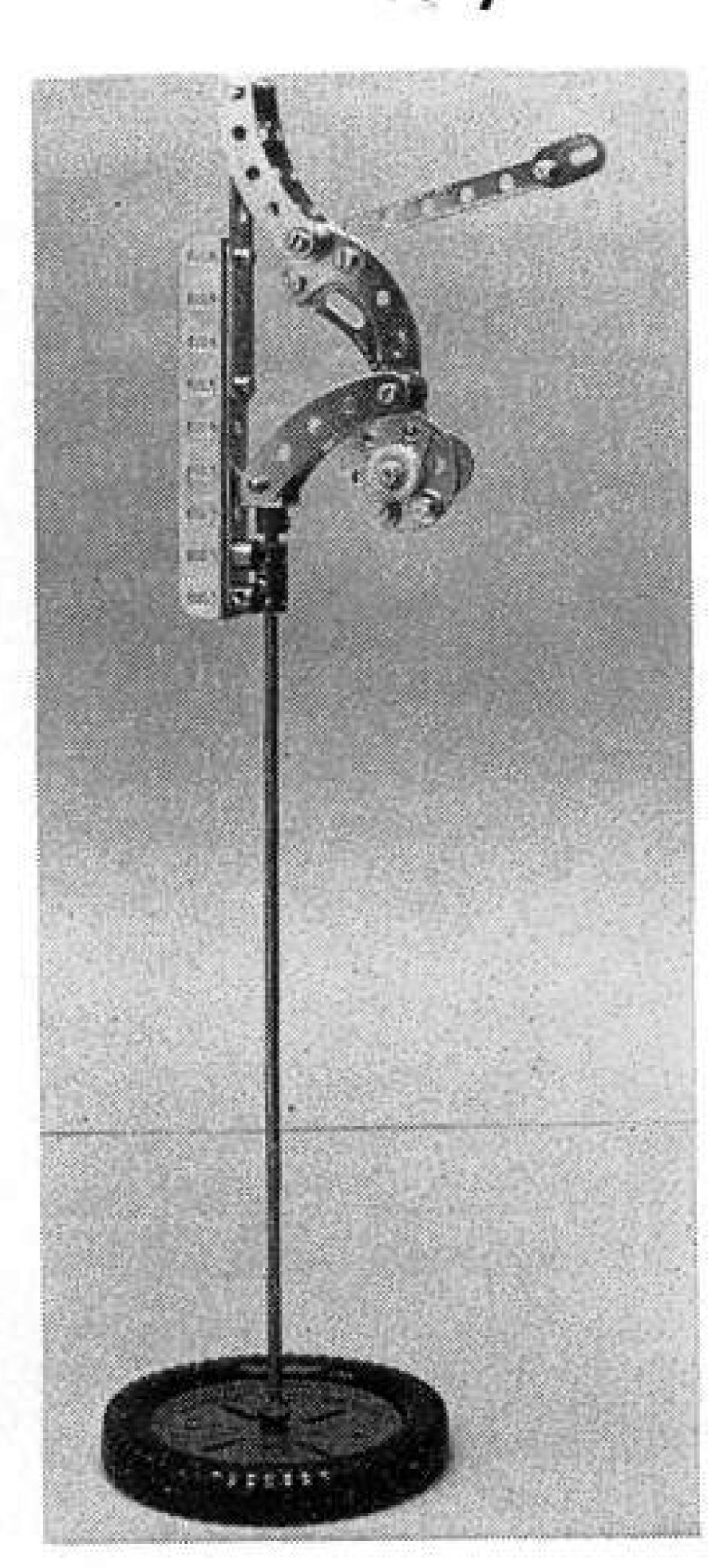
Animal figures may seem a far cry from meccanographs, with all their intricate movements and countermovements, but then Mr. Konkoly always manages to build plenty of fascinating movement into his animals. Two examples featured in past issues of the M.M. immediately spring to mind: a walking horse, towing a chariot, and a centipede which rattled briskly along. Both these models were fairly advanced constructions, but Mr. Konkoly has now come up with another, equally captivating, yet very much simpler offering in the shape of the Meccano Monkey featured in the accompanying photographs. When the handle 9 is jiggled about, the Monkey performs surprisingly realistic gymnastics. It's a marvellous little "fun" model which should keep "youngsters" amused for hours. (It certainly amused us!).

#### CONSTRUCTION

Dealing first with the Monkey, itself, the head is built up from, in







Down . . .

Up . . .

And Over!

Three views of the Meccano Monkey as it performs an acrobatic trick. Full credit for the model goes to Mr. Andreas Konkoly of Budapest, Hungary.

order, a ½" plastic Pulley without Boss 1, a 1" Triangular Plate, a 6-hole Wheel Disc 2 and two ¾" Washers, the last serving as ears and sandwiched against the Wheel Disc by a third ¾" Washer. All are secured along with a 3" Stepped Curved Strip 3, on a ½" Bolt. Two ordinary Washers are held by Bolts in the upper holes of the Wheel Disc to represent eyes.

In the case of the arms, fitted loose on a ¾" Bolt, again in order, are a 2½" Curved Strip 4, a Collar and a 2½" Stepped Curved Strip 5. The Bolt is then passed through the upper elongated hole of Curved Strip 3; a second Collar and second ½" Curved Strip are added, and all are then pivotally held in place by two lock-nuts. The lower ends of Stepped Curved Strips 3 and 5 are connected by a 1" Corner Bracket, using the lower elongated hole of Strip 5 and the end hole of Strip 3.

Passed through the corner hole of the Corner Bracket is a ¾" Bolt, this carrying in order, a Washer, a 2½" Curved Strip 6, four Washers, the Corner Bracket and Curved Strip 5, a 3½" Narrow Strip 7, four more Washers and a second ½" Curved Strip, followed by two lock-nuts. The two Curved Strips serve as the Monkey's legs, while the Narrow Strip represents its tail. A Fishplate is bolted to the lower end of the Narrow Strip to act as the tail-tassel.

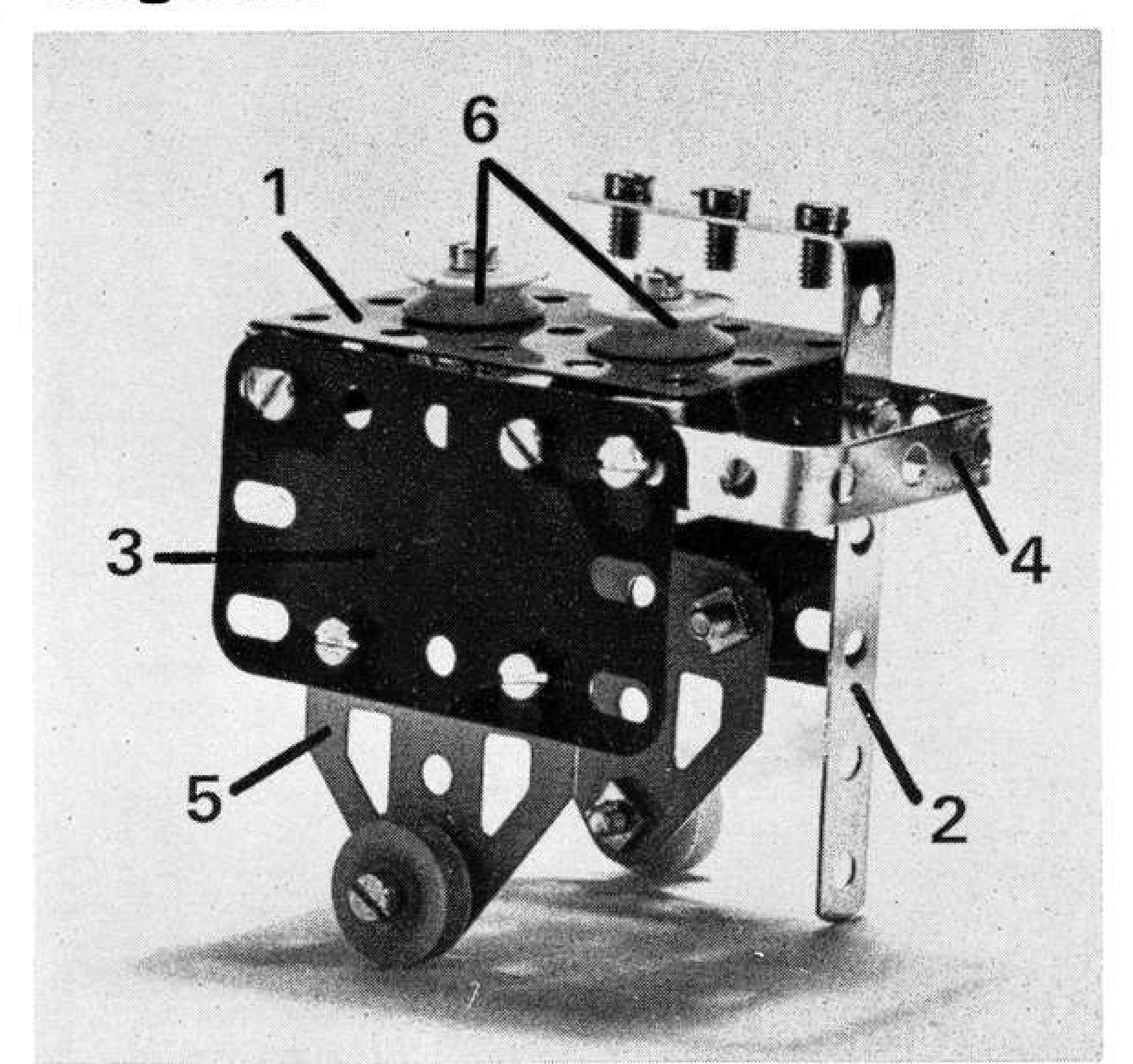
With the Monkey completed, the operating handle 9 is supplied by

two 4½" Angle Girders, bolted together to form a "U" section girder, the upper fixing Bolts also holding two 3½" Strips in place, one on top of the other for strength. These Strips extend the girder three holes upwards. A right-angled Rod and Strip Connector is bolted to the upper ends of the Strips, while a Coupling 8 is attached, as shown, to the lower end of the girder, being spaced from it by a Collar on the shank of each securing 3/8" Bolt. The legs of the Monkey are pivotally attached to the Rod and Strip Connector by a lock-nutted 34" Bolt, while the Coupling slides on an 11½" Rod fixed in the boss of a 3" Pulley with Motor Tyre.

To complete the model, a large Fork Piece is fixed by its boss on the upper end of the Rod. The legs of the Monkey are then pivotally attached to the lugs of this Fork Piece by a 1" Rod held in place by two Collars between the lugs. Note that this, and all the other pivoting joints in the model must move freely.

#### PARTS REQUIRED

2- 3	1-24c	1- 63	1-111a
2- 9a	15-37a	1- 77	2-111c
1-10	8-37b	1- 89a	1-116
1-13	12-38	4- 90	1-133a
1-18b	3-38d	1- 90a	1-212a
1-23	6-59	3-111	1-235b



#### "OUT-OF-THE-ORDINARY"

says Mike Peddie of these two

# POCKET MECCANO MODELS

IN THE April MMQ we announced the results of the 1972 Pocket Meccano Competition and illustrated the three winning models. Following this announcement, many readers will undoubtedly be interested to see, and build, some of the other competition entries and, for this reason, we shall be featuring several of the more interesting models from time to time, whenever space permits.

Something which has never ceased to amaze me when browsing over the competition entries is the incredible variety of models. When one considers the fact that there are only 68 parts in a Pocket Meccano Set, 47 of which are Nuts and Bolts, it is remarkable how many completely different models young, active minds can conjure-up. There was, of course, a fair number of constructions based on popular subjects such as cranes, helicopters and motor vehicles (all these subjects proved equally popular in the 1971 Pocket Meccano Competition), but, if my memory serves me well, I cannot recall seeing two identical models. A pleasing number of entries were out-of-the-ordinary, to say the least, and it is from these that I will be choosing most of the examples to feature. They are all based on different subjects, and I begin here with an Ice-Cream Cart and a Swivel Armchair, both of which gained well-deserved runnersup prizes in the competition.

#### ICE-CREAM CART

Congratulations for the Ice-Cream Cart ("Stop me and buy one!") go to 9 year-old Allan Rowe, of Wootton, Isle of Wight. To build it, four

Angle Brackets are bolted, two to the inside ends of each flange of a 2½" x 1½" Flanged Plate 1, one only of the securing Bolts also fixing a 4½" Narrow Strip 2 to the outside of one flange in the position shown. The Bolt passes through the centre hole of the Strip, which is itself bent over between the third and fourth holes to form a right-angle. This Strip serves as a stand-cum-"cone carrier".

Each side of the cart consists of a 2½" x 1½" Plastic Plate 3, the upper corners of which are bolted to the appropriate two Angle Brackets mentioned above. Note that one of these fixing Bolts at each side also secures the cart handle 4 in place, this being provided by another 4½" Narrow Strip, bent as shown. The Bolt passes through the second hole of the Strip, the end of the Strip being further bolted direct to the Plastic Plate. Bolted to the lower edge of the Plastic Plate is a Flat Trunnion 5, in the apex hole of which a ½" Bolt is held by two Nuts. A 1/2" Pulley without boss revolves freely on the shank of this Bolt

To complete the model, two more ½" Pulleys 6 are secured by ½" Bolts to the top of Flanged Plate 1 to represent the ice-cream tub lids and, finally, Bolts are dropped into the three horizontal holes of the "cone-carrier" to represent, quite obviously, ice-cream cones.

$\mathbf{P}_{A}$	RTS REQU	IRED
4-12	17- 37b	2-126a
4-23	1- 51	2-194
20-37a	4-111a	2-235d

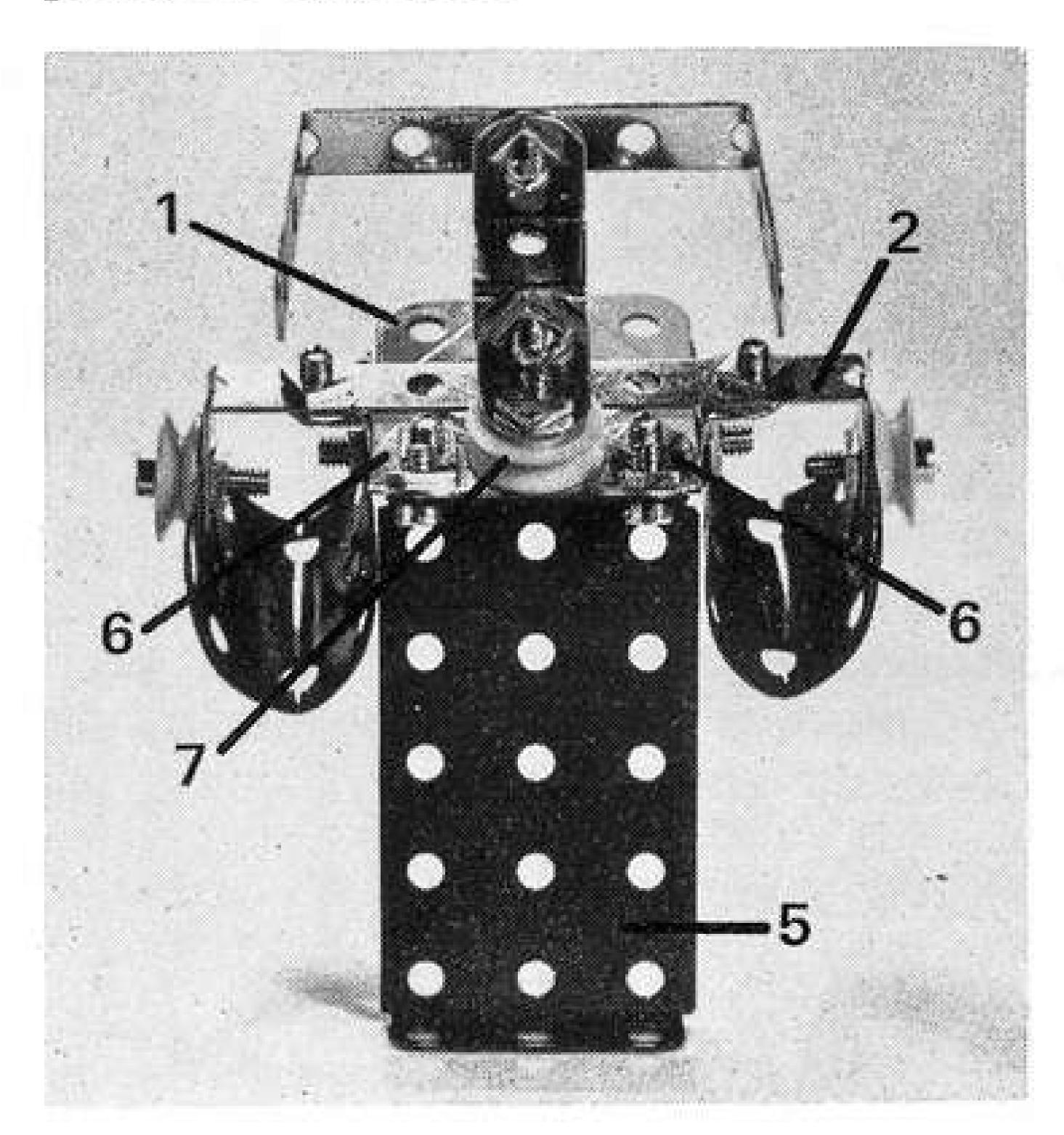
SWIVEL ARMCHAIR

Model No. 2, the Swivel Armchair, is the handiwork of 12 year-old J. S. Kershaw of Sale, Cheshire. It is a very realistic model indeed and I found it particularly appealing.

Beginning construction with the seat, two Flat Trunnions 1, overlapped as shown, are bolted together through their centre holes, the Bolt also attaching a 4½" Narrow Strip 2 to the underside of the seat. The ends of this Strip are carefully bent upwards, two holes in, to form a right-angle.

Each arm of the chair is supplied by a  $2\frac{1}{2}$ " x  $1\frac{1}{2}$ " Plastic Plate 3, curved to shape and fixed — along with a  $\frac{1}{2}$ " Pulley — to the end of

Heading photo above, an Ice-Cream Cart designed by Allan Rowe of Woolton, Isle of Wight. Below, an inverted view of the Swivel Armchair pictured opposite.

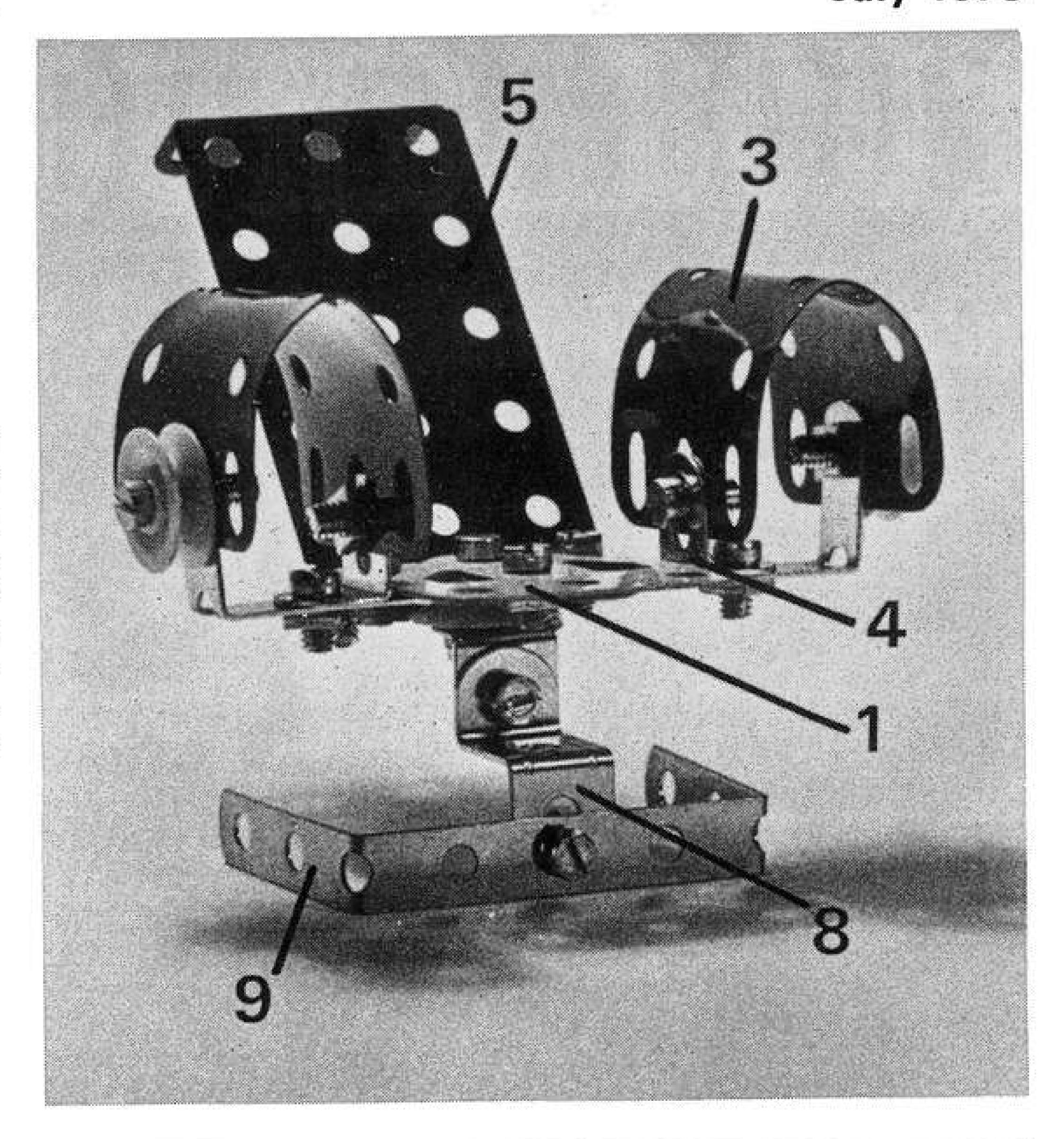


Narrow Strip 2 by a ½" Bolt. The other end of the Plate is attached to the inside face of an Angle Bracket which is securely bolted through the third hole from the end of Strip 2. To serve as a "backrest", a 2½" x 1½" Flanged Plate 5 is attached to the rear edge of Flat Trunnions 1 by means of two Fishplates 6 which are bent to a slight obtuse angle, and the securing Bolts for which pass through the rear corner holes of the Trunnion and the adjacent holes of the Flanged Plate.

To complete the swivelling stand for the chair, a ½" Bolt is passed down through the rear centre hole of Trunnions 1 and is fitted below the seat with a ½" Pulley 7 and an Angle Bracket, all being held in place by lock-nuts. Bolted to the free lug of the Angle Bracket is a ½" Reversed Angle Bracket 8, to the lower lug of which a 4½" Narrow Strip 9 is fixed. The ends of this Strip are finally bent, as shown, into right-angles to provide a steady base.

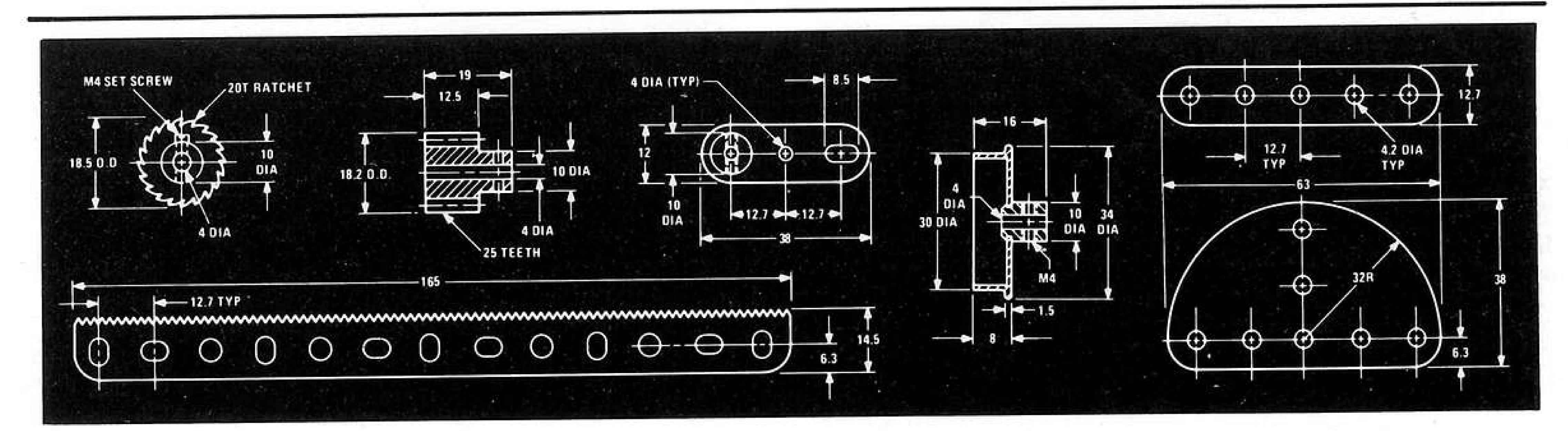
PARTS REQUIRED				
2-10 3-12 3-23	15-37a 11-37b 1-51	3-111a 1-125 2-126a	2-194 2-235d	

A very well-proportioned Swivel Armchair designed by J. S. Kershaw of Sale, Cheshire. It won a runners-up prize in the intermediate section of the last Pocket Meccano Competition.



#### COMING LATER

Meccano limited are working out plans for a new Pocket Meccano competition to be announced later this year, or early next. Watch the MMQ for details.



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Our brand new Meccano catalog features the complete line of standard mechanical parts with detailed dimensions and specifications.

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PARTS

DIVISION OF DESIGNATRONICS

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Above, No. 281 Military Hovercraft, produced to a scale of 1:105. Features include a rear-mounted propeller which turns when the model is pushed along, a machine-gunner representation, an opening frontentrance door, glazed windows and a revolving radar scanner. Finish is in military olive with white engine pod and entrance door and black hover skirt. Army markings and the Union Jack are labelled on the sides.



Above, No. 612 Commando Jeep, produced to a scale of 1:32. Features include spare "jerry cans", a simulated tool roll, a radio aerial, removable spare wheel, two swivelling non-firing machine guns and a uniformed driver complete with removable combat helmet. Overall finish is in military matt green. Below, No. 676 Daimler Armoured Car, produced to 1/42nd. scale. Features include a highly-detailed casting, rotating gun turret, radio aerial and Speedwheels. Overall finish is in military matt olive, with coloured Royal Armoured Corps identification flashes at front and rear. This is an improved version of the famous Armoured Car produced by Dinky from 1954 to 1970.



## DINKY TOYS NEWS

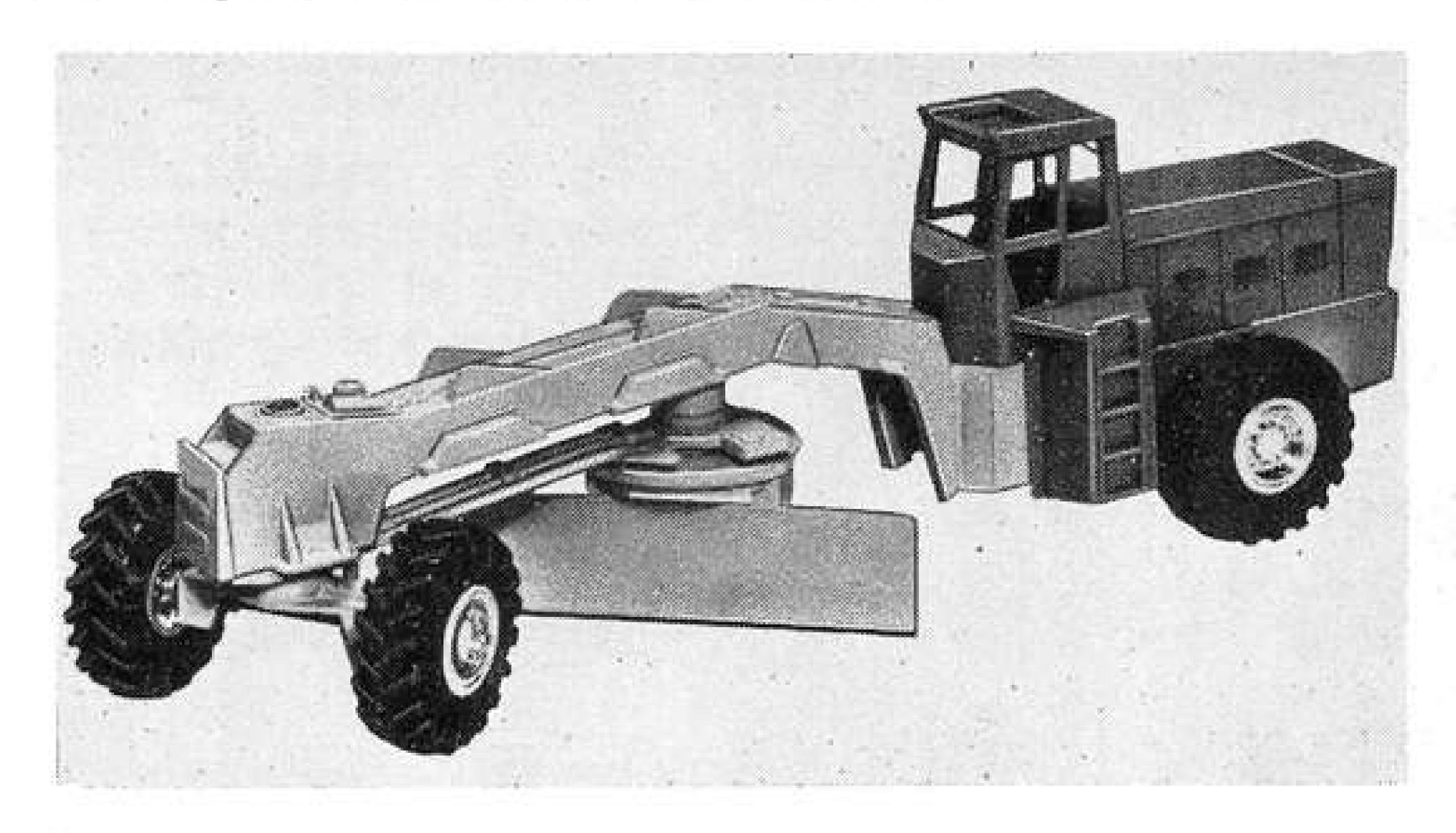
A look at the new Dinky Toy models released since the last issue of "Meccano Magazine Quarterly".



Above, No. 967 Muir Hill Loader and Trencher, produced to 1/42nd. scale. Features include glazed cab, a driver, a lifting and tipping dump shovel at the front and a movable trench digger at the rear. Overall finish is in yellow with orange bucket arms.



Above, No. 282 Land Rover Fire Appliance, produced to 1/42nd. scale. Features include a glazed cab with upholstered interior, opening doors and bonnet, a removable ladder, jewelled headlamps, Speedwheels and representations of a hose reel, roof lamps and a spotlight. Overall finish is in red, with "FIRE SERVICE" labels and insignia included. Below, No. 963 Road Grader, produced to 1/50th. scale. Features include a glazed and upholstered cab, steerable front wheels, a swivelling scraper blade and "chunky" tyres. Overall finish is in orange and yellow with bright-plated scraper and wheels.



## MECCANO CLUB ROUNDUP

This feature, bringing news from Meccano Clubs around the world, will be included in every edition of the MMQ. We invite all Meccano Clubs to submit regular reports for publication, these being approximately 300 words long. They should reach us, at the latest, by the end of the second month before the month of publication: e.g., reports for the October issue should be in our hands by the end of August. We hope that all Clubs will keep in regular contact.

#### CAPE TOWN MECCANO CLUB

On the 8th of January, 1971, I held a meeting at my home, invitations for which I sent to all parties I thought to be interested in a Meccano Club in Cape Town, including old members of the now non-existent Cape Peninsula Meccano Club. This was the inaugural meeting, and since then we have held a meeting each month at a different Member's home.

In February this year we held our first exhibition at a Hobbies Fair organised by a Church, and we raised some twenty-three models.

We have now all been very busy preparing for an exhibition in Johannesburg in June. You will no doubt have heard about this from Mr. Matthews, Secretary of the Transvaal Meccano Guild. Yesterday's meeting was more or less the climax of months of preparation, as one of our members is leaving for Johannesburg on Tuesday with a Volkswagen Combi, and we thus packed all our models in there; twenty-eight altogether.

Colin Cohen.

(The Cape Town Meccano Club has now been in existence for three years, but owing to an unforgivable oversight on my part, no mention of the Club has been made before now either in the MMQ, or, as far as I can trace, in previous editions of the M.M. I apologise most sincerely for this state of affairs and assure members that I will mend my ways in future.

Anybody interested in joining the Club should contact Mr. Cohen at 3 Bellair Road, Vredehoek, Cape Town, - The Editor).

#### CHRISTCHURCH MECCANO CLUB

Since the beginning of this year our Club has been going very strongly indeed. Attendance has increased considerably and at a meeting in May we had 21 members including parents which was most rewarding.

We had a television programme just before Easter this year and it was a great success. It was shown throughout New Zealand and the Club benefited by a cheque from the N.Z.B.C. for allowing the models to be shown. One of the models, built by Club President, Bob Boundy, was a Ferris Wheel from the 1929 Meccano Magazine. The model that was particularly outstanding, however, was a Rabbit built by Kingsley Burrel. It even had droopy ears! There was quite a joke made of it and it was called the 'Easter Bunny'.

Next we had a large display in a local hall with other Societies and it proved quite a success. It was the first time ever that a display by us was held as an Exhibition type of thing. The success of things was very rewarding and the event was covered by Radio and T.V. The outstanding model was a Fire Engine which had flashing lights, a real siren and also a hose which squirted water. It was copied from a die-cast toy and built by Niel Pluck.

At the time of writing we are having an Exhibition in one of our Meccano agent's window, for one week of the May school holidays. It is an impressive display and the new Meccano Sets and our Models set the window off. The Clock Kits aroused plenty of interest at both of the displays and ticked away madly. During the T.V. filming we were asked to stop them because of high sound noise!

As you can see we have been rather active and members are very keen which is an excellent sign indeed. It is certainly a thrill for me to see fellow members busy and the Club going forward.

Bob Boundy.

#### HOLY TRINITY MECCANO CLUB

The seventh meeting took place on Saturday, May 19th with a total of forty-five members and guests present. Following established custom the first hour was devoted to setting up models and drinking tea. A number of the larger models came in sections which had to be rebuilt and tested before being demonstrated.

A short business meeting took place at 2.30 p.m. during which the Club's President, Stuart M. Wilson made the surprise announcement that he was presenting a Cup to the Club to be awarded annually to the member producing the most meritorious model. Details of judging have yet to be worked out, but the award promises to add a further interest to Club life.

The following then demonstrated their models and described the building problems they had had to the Club.

James Dowdswell showed a modified version of the Chairlift described in the Meccano Magazine recently. This model has appeared in the window of James' local dealer and is now on display at M.W Models at Henley. Phil Bratley demonstrated another magazine model, again with modifications of his own, this was one of the swinging chairs.

Going back to pre-war models for inspiration was a fine elliptical harmonograph built by Noel Ta'Bois, a frequent winner of pre-war competitions. This model produced beautiful patterns similar to those made by

Meccanographs, but using the free movement of a swinging pendulum to osscilate the table, rather than the motor and linkages of the standard Meccanographs.

New member Robin Schoolar, whose name will be known to all readers of "Among the Model Builders", showed a neat high jib crawler crane, which was very nicely proportioned. The use of Rods and Rod Connectors for the jib, and Plastic Track for the crawler gave the model a very realistic appearance. All movements of lifting, luffing, slewing and travelling were taken from a single motor through a very compact gear box controlled by two levers.

Keith Orpin demonstrated a superb Roundabout which had taken him since before Christmas to build. Powered by an E15R motor, it was complete in every detail, including a "centre engine" and an organ. Twenty-four horses realistically rode around it, rising and falling majestically just like the real thing. A gaily coloured canopy adapted from an old umbrella completed this magnificent model.

A unique model of the famous Rotterdam Euromast was demonstrated by Bill Roberts. Working from the knowledge gained during one visit to it, and a picture postcard, Bill had reproduced the entire building, including the high-speed lifts to the first balcony and the novel rotating lifting restaurant which climbs up the outside of the mast's top section. By the clever use of a built-up gear ring using threaded pins as teeth the external lifting chains imparted a rotating as well as a lifting motion to the 'restaurant' which in the real thing allows diners an everchanging view of Rotterdam as they eat!

Many other fine models were on display, including a 50-ton travelling jib crane by Phil Bradley, a Blackpool Tramcar, by Geoff Davidson, a much improved version of the Number 10 Leaflet Robot, by Tim Everest, Bert Halliday's prize-winning Showman's Loco, Mike Martin's Walking Dragline, and Eric Dyballs 4-2-2, Great Northern Loco.

Mike Nicholls later showed a film of the construction of the Forth Bridge, part of which showed a Meccano model being used to illustrate the method of spinning the massive suspension cables.

The meeting finished at 7.0 p.m. after a very enjoyable afternoon of Meccanoing!

Tony Homden.

#### MAYLANDS MECCANO & HOBBIES CLUB (Inc.)

Presentation Night 1973 was held on Friday, March 30th, two nights after our 38th birthday. The presentation of the 1972 awards was made by Mr. E. H. Bowra, Chairman of the local Youth Centre and Managing Director of an engineering works in Bayswater. The Presentations were as follows:

Model of the Year. A Four-Wheel-Drive Chassis, designed and built by Barry Pearce (Age 12). The model has a four-forward and one-reverse speed gearbox, a high/low transfer box, rack and pinion steering, clutch and differentials.

Senior Model-Builder. Peter Eldridge, (Age 13). 13 models including a four-wheel-drive motor chassis, the No. 1 Motor Chassis, SML22 Traction Engine, and other models of equal rating. Peter's average for his year's work was 99.75%.

Junior Model-Builder. Barry Pearce, already mentioned as the builder of the Model of the Year, has gained this award for the third consecutive year, with 12 models averaging 99.814%. As he will move to High School in 1973, this will be his last award as a Junior.

Runner-up Senior Model-Builder. Martin Cooper (Age 15) with three models averaging 100%. The models were the Beam Bridge 10.8, Eiffel Tower 10.14 and Dragline SML.27.

Runner-up Junior Model-Builder. Gary Macri, (Age 12) constructed 14 models averaging 97.36%. Gary also built a four-wheel-drive vehicle as well as many of the Meccano Super Models during the year.

Highest Aggregate Points. Points are awarded to members of the club Factions for their work during the model-building sessions, and for voluntary work during their Faction's tour of duty. Clem Bond, age 13, distinguished himself with his concentration during the model-building sessions and the fine work he did while the club exhibited at the Albany Mini-Expo.

Award of Merit. is made to the member who has contributed most in a voluntary way to the work of the club in general. This year's Award goes to Peter Hayward (Age 13) who, single handed, has taken the responsibility of publishing a club Newsletter at regular intervals during the year.

Models that are worth noting under construction at present are Signor

#### MECCANO

Servetti's Magician, by Martin Cooper. The Giant Lorry and Trailer featured in the 1932 Meccano Magazine by Peter Eldridge, and the Super Model Topliss Level Luffing Crane by Clem Bond.

V. Malmgreen.

#### Midlands Meccano Guild. 12th Meeting Report

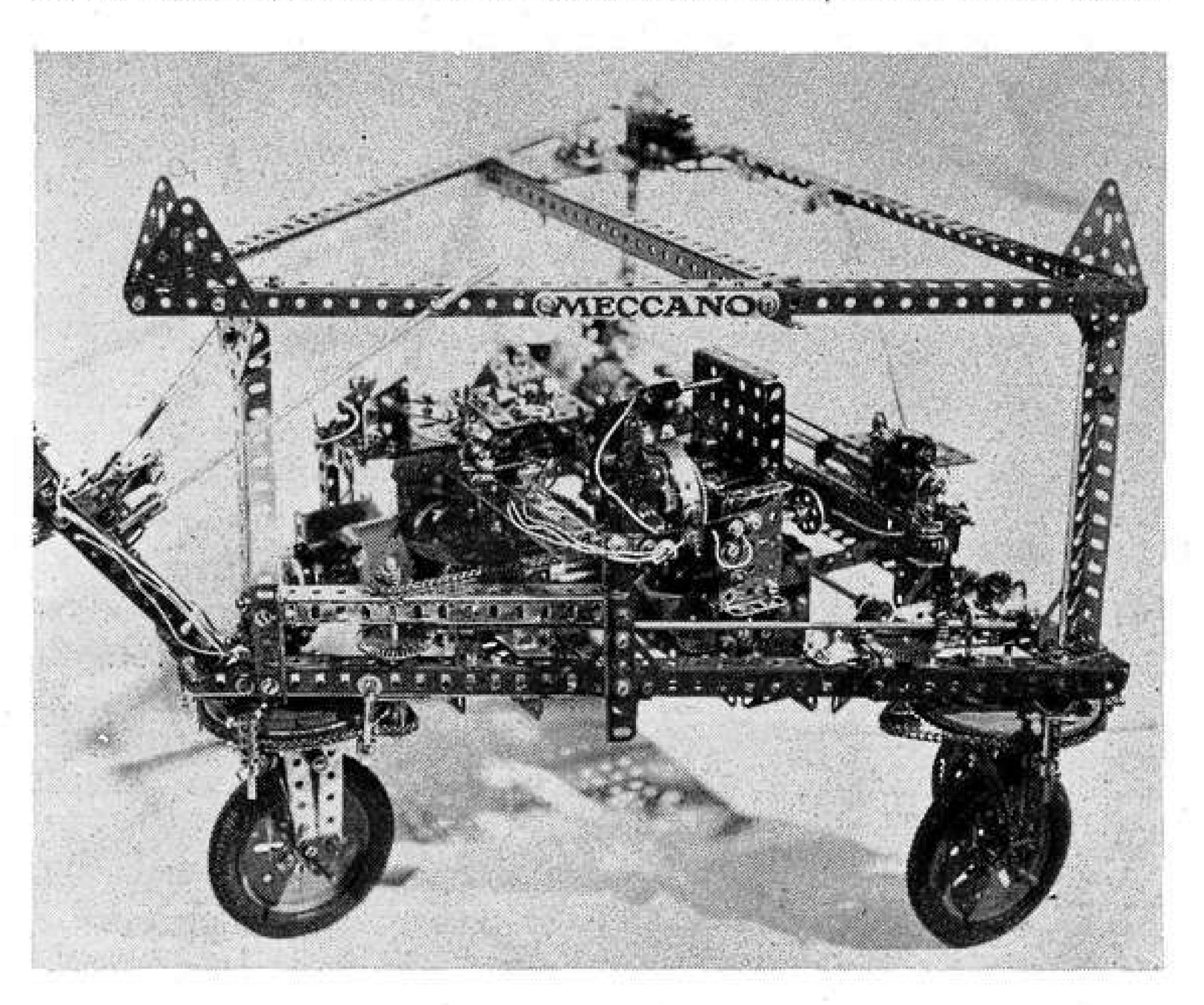
Because of our ever-increasing membership, we have reluctantly had to give up the St. John Ambulance Brigade Hall in Stratford for our twice-yearly meetings, but have been lucky to find excellent alternative premises at the Greig Memorial Hall in Alcester, Warks., where the 12th Meeting of the Guild took place on March 31.

Programmed motion was the theme of several models exhibited at the meeting including the "Servetti" magician by David Guillaume. This model is of a life-size "conjurer" who produced different pairs of cars from under the covers held in his hands by means of clever rise-and-fall motion synchronised with the robot's hand and arm movements. Of generally similar proportions, was Paul Blythe's bubble-blowing robot. Paul's model, however, made one arm dip into a detergent trough, the hand being equipped with a plastic loop. This was then raised to the robot's mouth where a stream of air, sent up by an ingenious impeller fan made from standard parts, blew a mass of bubbles into the audience — to their obvious delight!

A third model, also taking up a full table-top was that of a North Sea Drilling Rig by Bert Shaw. Of massive proportions, the rig stood on three solid sea-legs made on Circular Girder sections, joined up below deck-level by a web of interlocking girders to brace the platform above. Full deck and super-structure details were included to make this first giant effort by Bert a real "show-stopper".

Grandfather clocks are nothing new in Meccano, but the one shown by the Hon. Sec. was novel in many respects. Built entirely from a No. 10 Set, Bert's clock stood over seven feet tall, had a 26-hour weight-driven going train, with a seconds hand through the main dial. It also featured an epicyclic winding drum, adjustable pendulum bob and full-length clock-case. A second grandfather clock was featured by Mike Nicholls who had blended the No. 2 Clock Kit with the framework of the 1932 Meccano Grandfather Clock to produce a piece of 'striking' appearance. Smaller, but very beautiful clocks were also shown by Leslie Dougal.

Continuing on the programmed model theme. Tony Homden showed a fascinating Obstacle Avoiding Vehicle which had three-point castor steering and



The Obstacle Avoiding Vehicle by Tony Homden demonstrated at the 12th Meeting of the Midlands Meccano Guild.

a central "brain" which sensed an obstacle by means of a sprung probe feeding back switching instructions to the steering motor coupled to all three castors. By using a screwed rod traveller as a 'memory store', the vehicle could be made to 'learn' an avoidance path for its second run. Of equal electro/mechanical sophistication was Phil Ashworth's game of skill 'Driving Trainer'. Phil's model was equipped with a gloved steering wheel allowing the 'driver' to guide a light-spot along a twisting road marked on a long, wide paper roll. Photo-cell sensors on a parallel, but hidden road warned of bad steering, ringing a bell and scoring penalty points on a frontal dial. As usual, the model was up to Phil's high standard of appearance, operation and reliability.

Many other first-class models were on show which can only be mentioned briefly in a short report. Bert Halliday had his magnificent Showman's engine with him and Michael Martin gave a full demonstration of the Meccano Manual Walking Dragline. Brian Evans brought another vintage vehicle from his well-known line, this time a 1914 London General Omnibus with detachable carriagework and fully-detailed sprung chassis with gearbox and differential. David Whitmore showed first stages of an excellent miniature sports car with

caliper front brakes, mini-clutch and full gearbox, while Peter Dixon showed a saloon chassis of similar size with simulated hydrolastic suspension. So the story could go on — if only space permitted.

B. N. Love.

#### STEVENAGE MECCANO CLUB

Our year started with a club outing to the M.A.P. Model Engineering Exhibition, for which a 16-seater minibus was hired, and an enjoyable time was had by all. Paul Bourbousson designed and built a Traction Engine which he took to his school. It was so well received there that the Infant School are now rebuilding it with the Meccano Set they have recently purchased. (Paul, by the way, was in the Junior School).

We exhibited again on May 12th at Pin Green Junior School's Fete, showing 24 models. An outstanding feature at this Fete was supplied by our electronic lecturer, Peter Brown, who was actually constructing his model Water Mill at the exhibition. It was well admired by the interested visitors, and plenty of questions were asked on Meccano.

Bernard Dunkley, our London Member, had three of his models on display, one being a model Tram which was running all the afternoon on a track made from Scalextric. The younger members also made up several well-constructed models.

A small group of members attended a Hornby and Meccano Exhibition at Ongar in Essex on May 19th. I was asked by the Exhibition manager, E. Gilmor, to judge the Meccano Competition being held there together with well known meccanoman Jim Gamble. Some very good models were built, and Meccano Motors were given as prizes. We exhibited several models at this display.

We had the pleasure of a visit by our Honorary Member, Roger Le Rolland from Stoke-on-Trent on May, 13th. He travelled down with his wife Gwen to spend the day at Stevenage and he also left me several of his model aircraft which we shall be exhibiting at future displays.

Our congratulations go to one of our first members, Peter Walton, and his wife Janet, who were married recently. We wish them every happiness for the future. (Please accept our best wishes, also, Peter – MMQ staff).

The Club now has its own lapel badge which has been well-received by all members and we have also enrolled the following new members: Adults: Dick Barton of Stevenage; Vic Whitbread of Stevenage; Gordon Kattay of Hoddesdon and Jack Farrington of Cross Keys, Mon. Boys: Mark Wadeson; Howard Barton (Dick's son); Adrian Ogden; Ian Chantler and Grant Bourboussen (6 year-old and the youngest member to join). All are from Stevenage.

Dennis Higginson.

#### THE TRANSVAAL MECCANO GUILD

The Inaugural Meeting of the Transvaal Meccano Guild took place in Johannesburg, South Africa on the 30th September, 1973. The new club was formed by Mr. Peter Matthews who, you may remember, is also curator of the Meccano Museum which, by the way, is also in Johannesburg, now, in new and much larger premises.

The Inaugural Meeting was a great success with eight members present, although the club roll was in fact fourteen. Colin Cohen of the Cape Town Meccano Club was also present to wish the new club every success in the future. I must add that Colin travelled 1,000 miles to be present at the meeting — and even arrived with models! This must surely be a record distance travelled by any Meccanoman to a Meccano meeting.

The second meeting of the Guild took place on the 25th November at the new Meccano Museum building. Members were very interested to see the history of Meccano and much enthusiasm was shown in the displays and literature on show. Mr. Silberman, Managing Director of Regal Trading Co. (Pty.) Ltd., the South African Agents for Meccano, very kindly attended the meeting to answer some of the members' questions. The questions asked were mainly in connection with the shortage of Meccano spares and the high cost of these, Mr. Silberman assured members that he would do all he could to ensure an adequate supply of parts, but added there was little he could do about the high prices. Ten members were present at this meeting.

The third meeting of the Guild was held on the 10th February, 1973, and, as I heard someone say, "It's the best one we've had so far". This meeting was held in the Methodist Church Hall, Malvern, Jo-burg, and this will now be our permanent meeting place. An interesting historical note here is that it was in this very hall that the Malvern Meccano Club was formed way back in 1920 by a Mr. W. Sykes, Mr. Sykes has been contacted and I hope to have him along at one of our future meetings. Eleven members were present, and the club roll now stands at seventeen. Peter Matthews is at the present moment organising a large Meccano Exhibition to be held in conjunction with the 'Rand Hobby Show' at the City Hall, Jo-burg from 23rd to the 30th June, 1973. This will, I think, be one of the largest collections of models ever exhibited in one hall, and it will most certainly be the longest-ever running show organised by enthusiasts, as opposed to Meccano Ltd., itself. The number of models should reach at least eighty. The Exhibition will be the combined efforts of the Meccano Museum, the Transvaal Meccano Guild, and the Cape Town Meccano Club. It is hoped to publish photographs and a report of the exhibition at some later date.

Any Meccano enthusiasts interested in joining 'The Transvaal Meccano Guild' or in viewing the 'Meccano Museum' should contact — P. Matthews, 19 Joan Road, Glenanda South, Johannesburg, South Africa.

Peter Matthews.

## VINTAGE DISPLAY: CROWDS VISIT ONGAR EXHIBITION

Over 1,700 people visited an exhibition of vintage Hornby Trains and Meccano products held at the Community Centre, Ongar, Essex, on Saturday 19th May, and organised by Mr. Edwyn Gilmour of Coopers Hill, Marden Ash.

An enourmous pre-war Hornby Gauge O layout measuring 18ft. x 11ft. sported every imaginable accessory ever produced from the Meccano factory and, throughout the day, the various Hornby Locomotives, some as much as 50 years old, hauled their matching sets of coaches and goods vehicles. In the static display, visitors marvelled at the quantity and condition of the various Dinky Toys, Meccano Aeroplanes and Speedboats. They saw the Meccano Crystal Set — believed to be the only one still in existence — and also saw what may well be the world's largest collection of Dinky Toy Miniature Trains.

The working models provided by the Nottingham Meccano Collection and the Stevenage Meccano Club attracted a constant audience and the children enjoyed working the models. An outstanding exhibit was the famous Meccano Block-setting Crane that has appeared on so many Meccano Manuals over the past years.

On the first floor, working exhibits from the Meccano factory and modern Hornby and Meccano publications (reprints of old catalogues) maintained the theme, while a Gauge 1 steam layout owned and operated by Mr. R. N. Hill of Chelmsford — the only departure from the Hornby theme — also held a good audience throughout the seven hours the show was open. The Hornby Dublo

SECOND ANNUAL

## MECCANO. EXHIBITION

HENLEY-ON-THAMES SATURDAY, SEPTEMBER 1st

MECCANO Models of all types welcomed for display – contact the organisers.

#### TWO COMPETITIONS

for Modelbuilders aged 15 and under.

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layout exhibited by Alan Taylor from Colchester represented the beginning of the smaller scale model railways which became so much more popular after the war.

In a Meccano model-building contest judged during the show, a five year-old Chelmsford boy won first prize in the 5-7 section. He is Richard Tunstall from Wellmeads, Vicarage Road, who was awarded a Meccano Motor for his miniature tractor made with a Pocket Meccano Set.

Section 2 attracted the greatest number of entries (ages 8 to 11) and was won by Anthony Scott of Marden Ash, Ongar for his armoured car. Another Marden Ash boy, John Rayment, won a Meccano Clock Kit for his Eli Wheel, while an entry from Mark Hannington, aged 13, from Harlow won first prize in the 'over 12' category, for which he was awarded an Electric Gearbox Motor. A special prize of a No. 1 Clockwork Motor went to Stephen Robbins of Ongar, while a combined effort from boys of the Great Stony School in the form of a model harbour made with Plastic Meccano received a spontaneous award from a visiting Meccano specialist, Mr. G. Wright of MW Models, Henley-on-Thames, who gave each of the seven boys a Pocket Meccano Set.

Main prizes were presented by Mrs. Doreen Gilmour, wife of the organiser. Proceeds from the Exhibition went to the Ongar Council of Christian Service, whose street-warden system of observation for any in need is becoming quickly known. Some of the money is to be used to launch a project already on the way. This is the Clara Stewart Senior Citizen's Club due to open on June 28th at St. James's Hall.

#### FORTHCOMING EVENTS

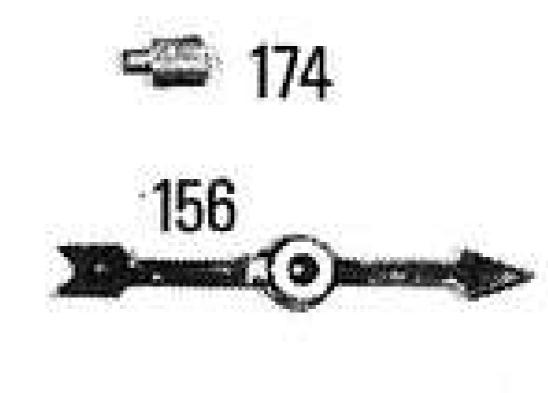
Dinky Toy collectors and enthusiasts living, or visiting, in the vicinity of Portsmouth and Southsea will undoubtedly be interested to learn of two exhibitions of old and obsolete Dinky Toys which are planned for the near future in their areas.

The first exhibition will be held at "The Southsea Show", Southsea Common on the 3rd, 4th and 5th August between 11 a.m. and 9 p.m. The second exhibition will be held in the Connaught Drill Hall, Stanhope Street, Portsmouth, from 8th to 15th September (except Sunday 9th) also between 11 a.m. and 9 p.m. Both exhibitions should be well worth visiting.

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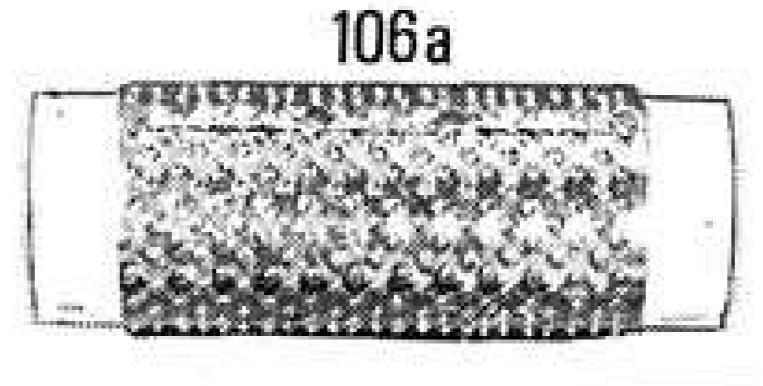
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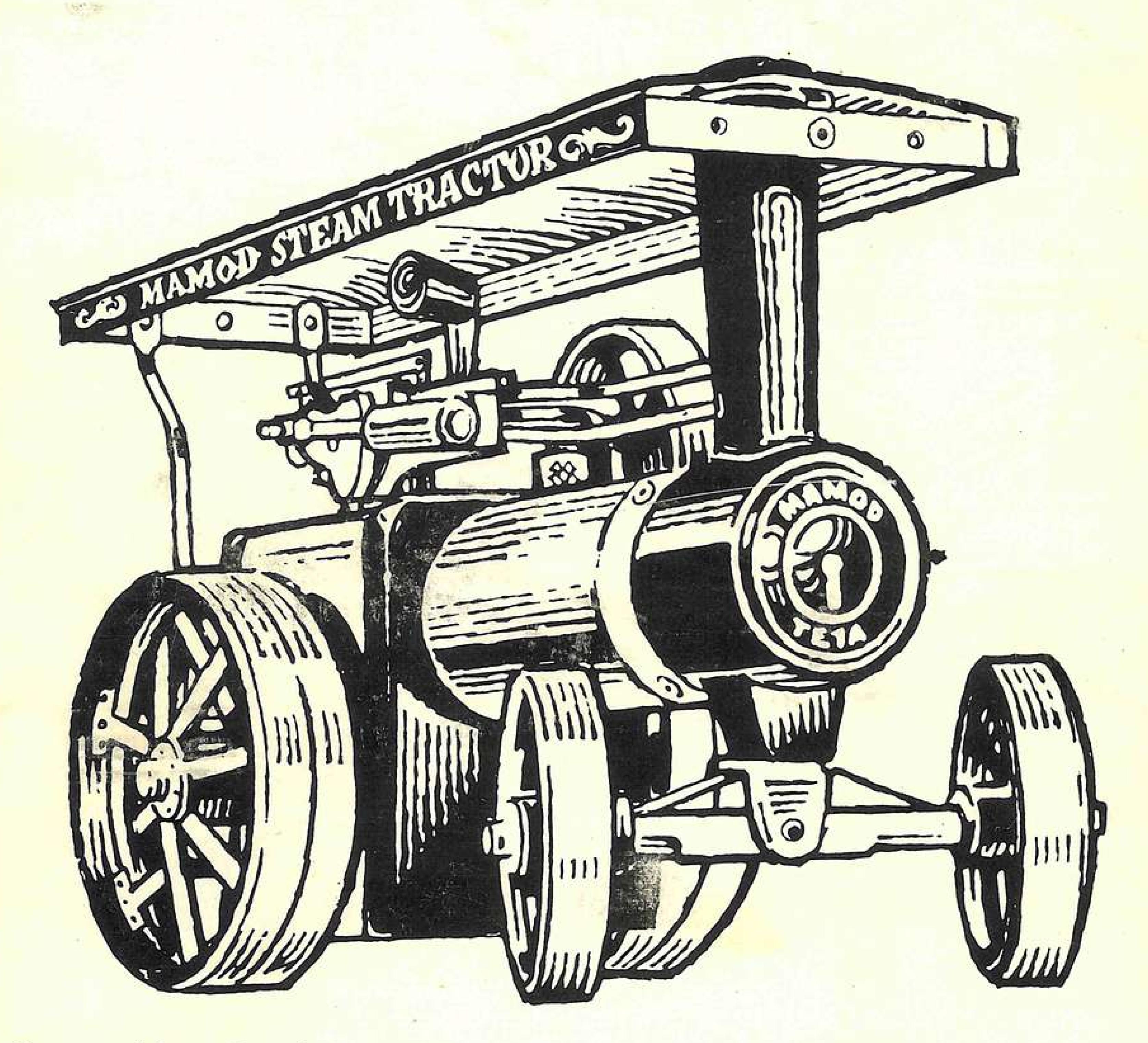
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