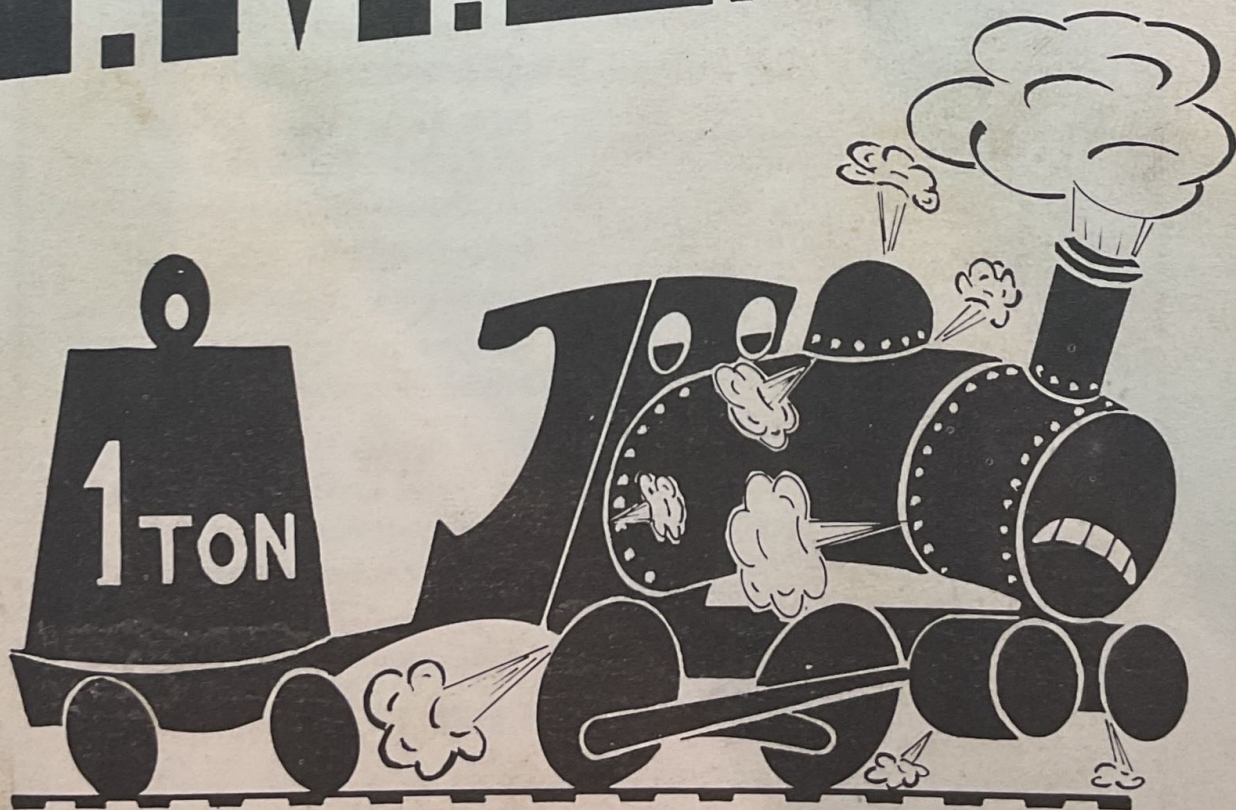


76

KINVER & WEST MIDLAND S.M.E.LTD.

**I.M.L.E.C.**



Programme

~

10p

# DON YOUNG DESIGNS

DON YOUNG thanks Model Engineers for their wonderful support in the past difficult months and wishes Kinver & West Midlands SME Ltd. a successful IMLEC 76.

*Our present range includes:*

**DRAWINGS.** for more than 20 Steam Locomotives, including the Dinorwic "Alice" Class 0-4-OST, our most popular current design.

**FITTINGS.** The quality range from Gordon Chiverton *PLUS* a commercial selection from Arthur Grimmett.

**CASTINGS.** A selection for 7 Locomotives not available from other suppliers.

**FORTHCOMING ATTRACTIONS:**

More new Don Young for beginners and experienced Model Engineers. Constructional series to be published in LIVE STEAM Magazine.

A range of books to be published in the U.K. and U.S.A.

Take advantage of the services offered in the Orange Catalogue, Price 25p (\$1.50) from: **DON YOUNG DESIGNS, Bardonela, Adgestone, Sandown, Isle of Wight**  
PO36 0HN Telephone: Brading 644.

*BOLTS . NUTS AND FASTENERS*

*G.K.N. WOOD SCREW DISTRIBUTORS*

## JOHN SMALLMAN LTD.

Abrasives

Drills, Taps and Reamers

Electric Tools

Files

Hacksaw Blades

Mounted Stones

Moore and Wright

Rawlplug

Rocol

Swarfega

Engineers Supplies

**DUDLEY ROAD, LYE, STOURBRIDGE**

Telephone: LYE 4651 (4 lines) Telex: 339683

BRIDGNORTH BRANCH 5523 & 5367

OLDBURY BRANCH 021-544-7611

# REEVES

## THE LEADING SUPPLIER TO THE MODEL ENGINEER

The largest and most comprehensive stock of castings and materials, specially stocked for steam modeler in the world.

### LOCOMOTIVES

3½" gauge    32 designs    5" gauge    19 designs    7¼" gauge    5 designs

### TRACTION ENGINES

1" Sc MINNIE

1½" Sc ALLCHIN

2" Sc BURRELL COMPOUND SHOWMANS ROAD LOCOMOTIVE

### STATIONARY ENGINES

16 DESIGNS ALWAYS AVAILABLE FROM STOCK

### WORKSHOP EQUIPMENT

NUMEROUS DESIGNS ALWAYS AVAILABLE WITH SETS OF CASTINGS  
FOR A WIDE RANGE OF APPLICATIONS

All our castings are held in permanent stock for "over the counter sales" or through our World Wide Mail Order Service.

No appointment is required! Our retail staff will be pleased to advise and serve you during normal business hours.

MONDAY to FRIDAY 9.00 to 12.30 and 1.30 to 4.00  
SATURDAY 9.00 to 12.30

## A. J. REEVES & CO. (B'HAM) LTD.

HOLLY LANE, MARSTON GREEN  
BIRMINGHAM B37 7AW

Telephone: 021-779-6831-2-3

COMPREHENSIVE  
CATALOGUE  
50p POST FREE  
OVERSEAS  
POST EXTRA

# "THE SPIRIT OF I.M.L.E.C."

---

Ever since the start of man's adventure with the steam locomotive the competition has been high in respect of one man's fiery beast outdoing another.

The first tests were quite simple, which ever locomotive managed to pull the largest load was deemed to be the winner regardless of how much fuel it used in doing it.

Things have come a long way since those early days so much so that man's inquisitiveness in finding out the best way to do things has meant the end of steam traction on British Rail.

It is probably because of the untimely death of the steam locomotive that model engineering is becoming more popular and one only has to look at the faces of the spectators to realize that a strange attraction still exists between a living breathing steam locomotive and anyone anywhere near it, whether it be the full size job or one of our smaller versions. Just like the designers and builders of the real thing we are just as anxious to prove that one design is better than another and that is why I.M.L.E.C. is held. I say one of the reasons because I believe that like most other enthusiasts, steam fanatics take any opportunity to get together and have a good "chin wag" and it is through meetings like this one that inspiration is gained, whether it be to join a model engineering society for the first time or to start building that working steam model that up until now has just been a dream.

If this meeting today has aroused the competitive spirit in established model engineers or brought forward an exchange of ideas and techniques, or just brought back memories of a bygone age to the spectator then this to me is the spirit of I.M.L.E.C.

"Long may it continue."

ALAN HARRIS,

*I.M.L.E.C. Chairman*

# I.M.L.E.C. 1976

Ladies and Gentlemen,

I would like to extend to you a warm welcome from the Committee and myself on behalf of all members and hope you enjoy today's proceedings.

You may be interested in the origins of this Society so here is a brief history of how it all began and how we have developed into the present day Society.

Back in the 1920's a group of men interested in Boats and Steam Locomotives formed themselves into the West Midlands M.E.S. whose headquarters were at Kingswinford, near Stourbridge. They built a 3½" gauge track around an existing pool and activities continued there until the Second World War.

Several members lived in Wolverhampton and because of travelling difficulties formed an allied group which was known as the West Midland Model Engineers, Wolverhampton Branch. They held their meetings in Wolverhampton Library and sometimes at members' homes. At a meeting in Wolverhampton Library in May, 1943, it was proposed and accepted that the Society became the Wolverhampton Model Engineering Society and continued to operate as such, despite poor membership, until 1951. A multi gauge track, 600ft. in length was built and operated from 1946 at the rear of 'The Mount Pleasant' Inn, Wombourne, until 1961.

However, in 1951, under the guidance of the Secretary, Mr. B. Princep, the Society formed itself into a Limited Company and was known as the Wolverhampton S.M.E. Ltd. The reason for this change was to obliterate insurance problems, which in retrospect was unique for this period as a good many Societies today are seeking to do the same.

Up to 1961 the Society flourished at Wombourne and then had to move due to the sale of the land for building purposes, and after many problems the management of the Society this time secured a 20 year lease on an acre of land here, at the Marsh Playing Fields. In 1970, as our interests now lay in Kinver by a majority vote the Society became known as the Kinver and West Midlands Society of Model Engineers Limited. The following year, 1971, the track was extended to 1,200ft. and so this brings us up to the present.

For the future it is hoped to cater for a 7¼" gauge G.L. track somewhere within our existing boundaries and we hope to have this completed within a few years.

Membership is now over a 100 strong and the Society holds regular meetings every two weeks in the winter months and every week during the summer on Fridays.

I hope that if anyone wishes to know any more about the activities of this Society they can feel free to contact myself or any of the Committee during the day, and we will do our best to answer any questions.

Thank You for your invaluable support.

P. MILES,  
*Chairman.*

# LIST OF ENTRANTS FOR I.M.L.E.C.

I.M.L.E.C. 76 KINVER & WEST MIDLANDS S.M.E. LTD.  
MARSH PLAYING FIELDS, KINVER

<i>Society</i>	<i>Owner</i>	<i>Driver</i>	<i>Description of Locomotive</i>
Kinver & W.M.S.M.E.	N. Sanderson	N. Sanderson	5''G. 4-6-0 Modified Springbok
Chingford & District M.E.C.	P. Wood	P. Wood	5''G. 4-4-0 Maid of Kent
Derby S.M.E.	S. Baker	S. Baker	5''G. 0-6-0T Eva May
South Africa	J. Love	M. Busbridge	3½''G. S.A.R. Loco
Cannock S.M.E.	M. Jeffries	M. Jeffries	3½''G. 2-6-4T Jubilee
Chichester S.M.E.	B. Green	B. Green	5''G. 4-6-0 Springbok
N. Staffs. S.M.E.	F. Nadin	Dr. J. B. Hollins	5'' 4-6-0 Springbok
Wirral S.M.E.	E. V. Harrison	E. V. Harrison	5''G. 4-4-0 "City of Truro"
Keighley S.M.E.	J. S. Richardson	J. S. Richardson	5''G. 0-6-0 "Minx"
Southampton S.M.E.	W. Perrett	W. Perrett	5''G. 0-6-0 Speedy
Bristol S.M.E.E.	J. Colman	J. Colman	5''G. 4-4-0 S.E.C.R. Class 'D'
Cheltenham	M. W. Smart	M. W. Smart	5''G. 4-4-0 Midland Compound
Private	L. Joyce	L. Joyce	3½''G. 4-6-0 G.W.R. King
Rugby S.M.E.	F. G. Winsall	F. G. Winsall	5''G. 4-6-0 Torquay Manor
Chesterfield & District S.M.E.	A. H. Sell	A. H. Sell	5''G. Saddle Tank (Gwynedd)

# Calculation of Results

(Note: Parameters marked \* are shown on results board and can be logged on pages 8 and 9 of this programme).

The dynamometer car measures and gives a direct reading of Total Work Done\* in foot pounds and Total Distance Travelled\* in feet. In addition the Overall Run Time\* (minutes) and Weight of Coal Used\* (pounds) are recorded.

From these parameters the following calculations can be made:

$$\text{Average Draw Bar Horse Power} = \frac{\text{Total Work Done (ft. lb.)}}{\text{Overall Run Time (mins.)} \times 33,000} \text{ h.p.} \dots\dots\dots(1)$$

$$\text{Coal Consumption Rate} = \frac{\text{Weight of Coal Used (lb.)} \times 60}{\text{Overall Run Time (mins.)}} \text{ lb./hr.} \dots\dots\dots(2)$$

$$\text{Specific Fuel Consumption (SFC)} = \frac{\text{Coal Consumption Rate}}{\text{Average Draw Bar Horse Power}} \dots\dots\dots(3)$$

Substituting (1) and (2) and (3):

$$\text{SFC} = \frac{\text{Weight of Coal Used (lb.)} \times 1,980,000}{\text{Total Work Done (ft. lb.)}} \text{ lb./D.B.H.P. hr.} \dots\dots\dots(4)$$

$$\text{Now, Overall Thermal Efficiency} = \frac{\text{Work Output} \times 100\%}{\text{Heat Input}}$$

Assuming the calorific yield of the coal to 14,000 B.Th.U./lb., 1lb. of coal yield 14,000 x 778 ft. lb. of heat where 778 is the number of ft. lb. per B. Th.U.

From (4):

$$\text{Overall Thermal Efficiency} = \frac{1,980,000 \times 100}{\text{SFC} \times 14,000 \times 778} \% \dots\dots\dots(5)$$

$$= \frac{18.1785}{\text{SFC}} \% \dots\dots\dots(6)$$

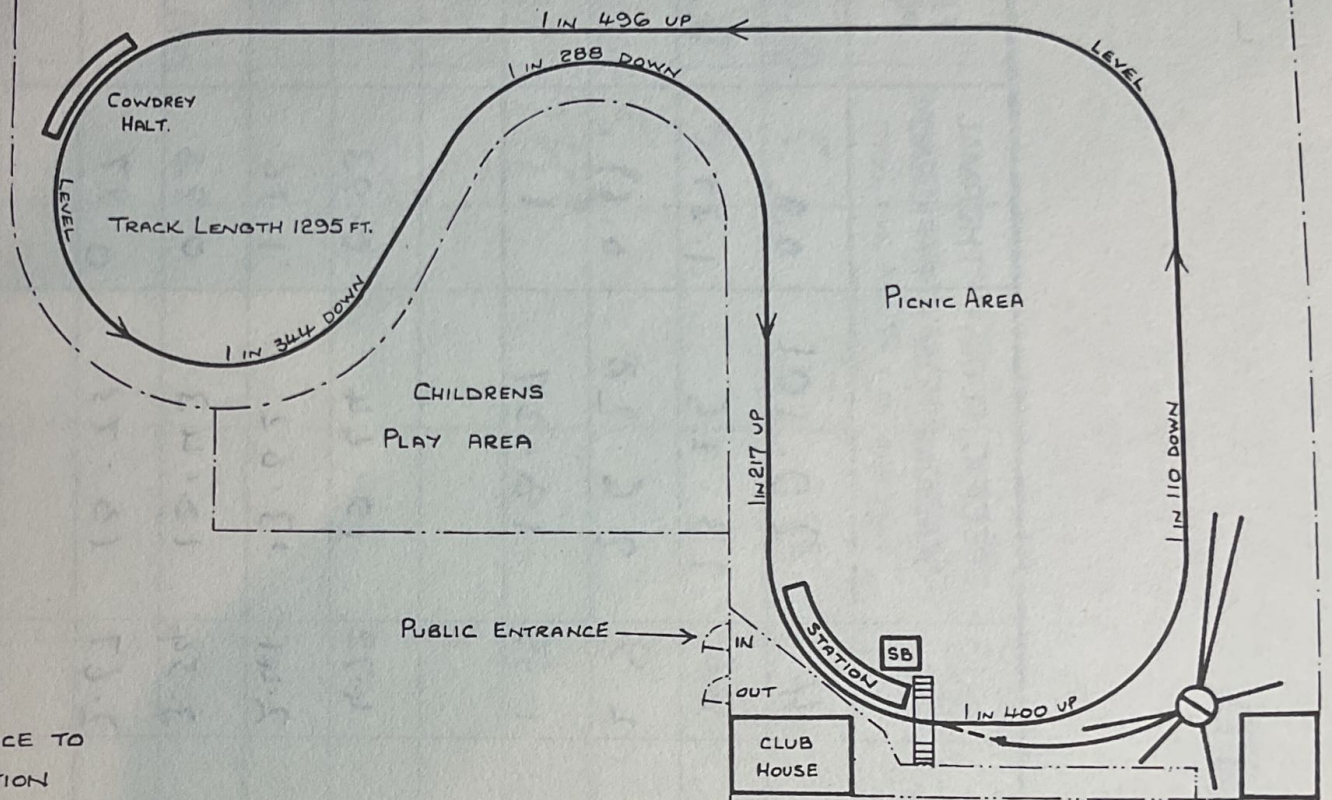
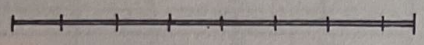
The locomotive which returns the highest Overall Thermal Efficiency is the winner.





# KINVER AND WEST MIDLANDS S.M.E. LTD

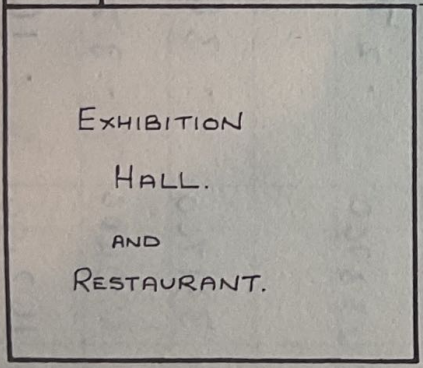
7 1/4" G. RAILWAY.



CAR PARK.

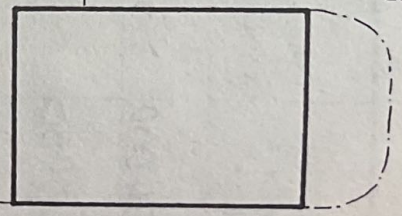
TOILETS

ENTRANCE TO EXHIBITION



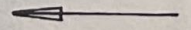
EXHIBITION HALL AND RESTAURANT.

CAR PARK.



COMPETITORS CAR PARK

COMPETITORS ENTRANCE



# KINVER & WEST MIDLANDS SOCIETY OF MODEL ENGINEERS LTD.

## SPECIAL RESPONSIBILITIES

I.M.L.E.C. Management Committee:

Chairman: ALAN HARRIS

Secretary: DICK HARPER

Committee Members:

H. BROOKIN, D. FRADGLEY, LIONEL READ, CHRIS PLANT

Chief Judge: ALAN HARRIS

Track Management: CHRIS PLANT, DICK HARPER

Catering Manager: H. BROOKIN

Exhibition Manager: LIONEL REED

Security and Traffic Management: D. FRADGLEY

Programme: CHRIS PLANT

Calculators:

K. LAPPER

B. CLARK

G. FIDDLER

L. SPITTLE

Observers:

R. HUMPHRIES

F. RICHARDS

G. ASHFIELD

J. STEADMAN

Chief Engineer: Mr. BOB HARDWICK

Communications System: Mr. P. MILES

Grateful thanks to Members Wives for their invaluable help with the task of Catering. Thanks to ERIC GRIFFITHS for the loan of his Dinometer Car and the help given by BRISTOL S.M.E.

Lastly, thanks to all K.&W.M.S.M.E. Members who participated in this, the Eighth I.M.L.E.C. without who's help it would not have been possible.

## K. & W. M. SOCIETY COMMITTEE

Chairman: P. MILES

Vice-Chairman: A. HARRIS

General Secretary: B. CLARK

Membership Secretary: G. ASHFIELD

Social Secretary: H. BROOKIN

P.R.O.: ERIC GUEST

Committee Members:

F. RICHARDS, R. E. J. HUMPHRIES, L. SPITTLE, J. EVANS, J. LEE

Secretaries Address:

B. CLARK,  
13 Forge Lane,  
Cradley Heath, West Midlands

Headquarters and Track:

MARSH PLAYING FIELDS,  
KINVER

**SOUND DESIGN, MAXIMUM VALUE  
AND HONEST WORKMANSHIP  
HAVE WON USER APPROVAL  
THROUGHOUT THE WORLD**

**ML7 & SUPER 7  
3½" Metalworking Lathes**

Supplied for Bench or Cabinet Mounting. The range of accessories including 3 and 4 jaw Chucks, Collets, Fixed and Travelling Steadies, Vertical Slides, Quick Change Gearbox etc. extend the versatility of these Lathes.



**myford** LIMITED  
BEESTON NOTTINGHAM TEL: 254222



## MENU

FULL HAM OR CHEESE SALADS

PLOUGHMANS LUNCH

HAM OR CHEESE SANDWICHES

TEA OR COFFEE

SOFT DRINKS, CRISPS

THE ABOVE IS A SELECTION OF THE MAIN  
ITEMS ON SALE IN THE RESTAURANT AREA  
IN THE EXHIBITION HALL.

---

H. BROOKIN . CATERING MANAGER

# MODELLERS

E  
C  
C  
A

## SPECIALISTS IN MODEL RAILWAYS

5 Star reasons why should visit our spacious premises in Wall Heath:-

★ **'N' GAUGE:** Large stocks of British and Continental Locomotives, Rolling Stock and Lineside Buildings.

★ **'OO' GAUGE:** Extensive range of proprietary sets, Locomotives, Rolling Stock, Scale Kits, Scratch-Building Accessories, Building Kits and Track Parts.

★ **'O' GAUGE:** Most comprehensive range of kits, Scratch Building Accessories and Motors.

Superior quality hand-built Locomotives built to order by R.C.P. Models.

★ **SECONDHAND:** Always a large selection in all scales.

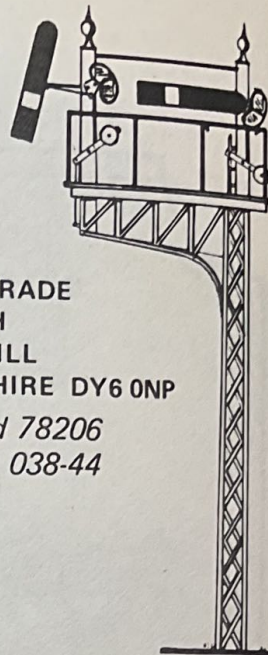
★ **PERSONAL SERVICE:** By friendly and helpful modellers.

*Ample Free Parking - Time to Browse*

**Open: Monday to Saturday 09.00 - 18.00hrs. Closed: All Day Wednesday**

5 ALBION PARADE  
WALL HEATH  
BRIERLEY HILL  
STAFFORDSHIRE DY6 0NP

*Kingswinford 78206  
S.T.D. Code 038-44*



Telephone: BRIERLEY HILL 78081 (3 lines)

## R. S. PASKIN & CO. LTD.

FACTORS OF ENGINEERS SUPPLIES & FASTENERS

Reg. Office:

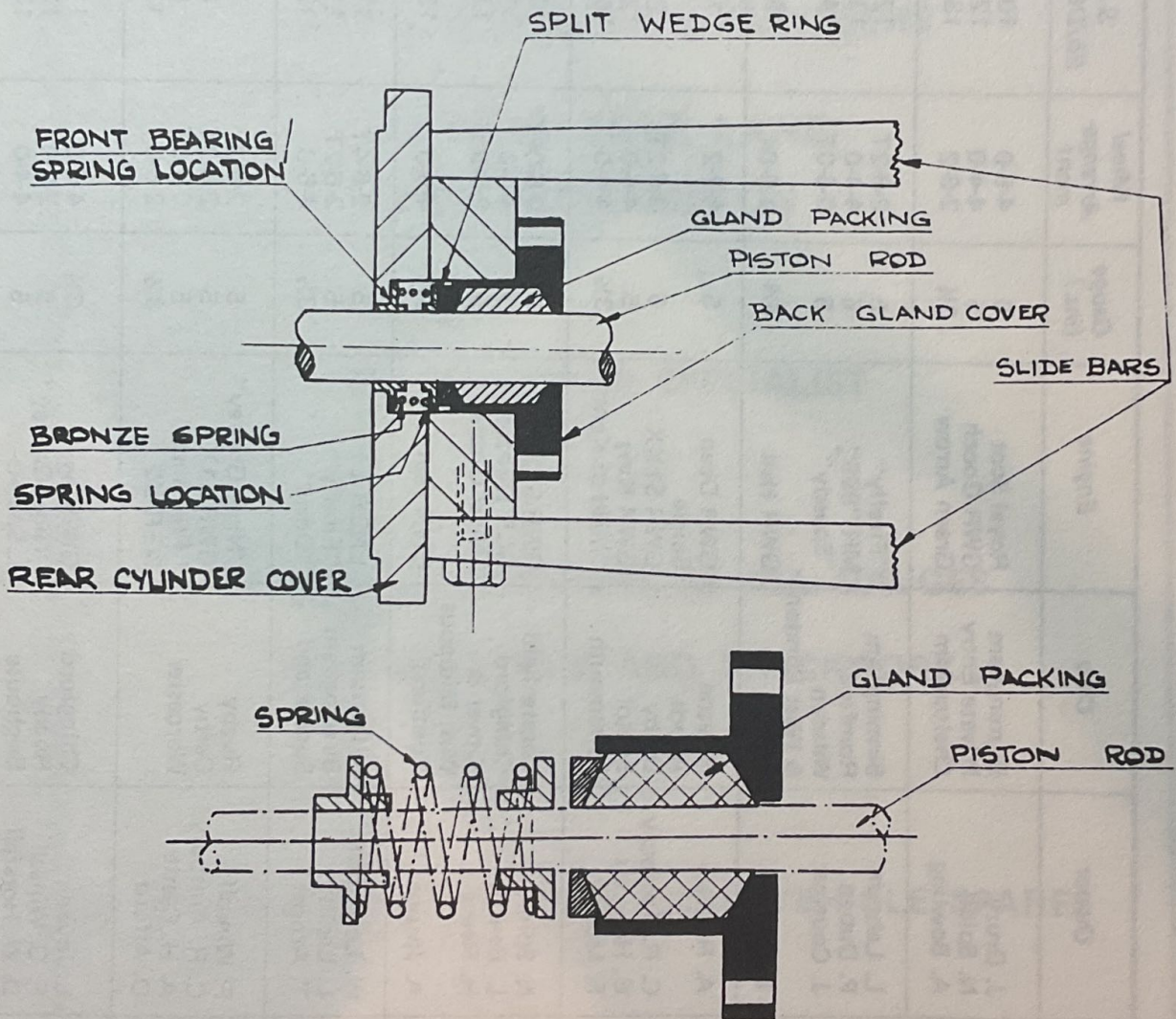
MOUNT PLEASANT

BRIERLEY HILL

WEST MIDLANDS. DY5 2YR



## G.W.R. MODIFIED GLAND ARRANG<sup>T</sup>



While working on the cylinder unit of my 3½" gauge G.W.R. Carlow, I was not satisfied with the appearance of the gland nut for the piston rod, and for that matter, the piston valve rod.

After discussing this with my father, British Rail Western Mechanical Inspector, I attempted to construct a modified self adjusting gland arrangement, as illustrated above. It was designed for use with 1/16" graphite packing. Dimensions were lifted off the illustrations to enable the builder to adapt the principal to the many designs available today.

by R. E. J. Humphries

# Previous I.M.L.E.C. Results

Year	Host Club	Place	Owner	Club	Engine	Gauge (ins.)	Wheel Arrangement	S.F.C. (lb/DBHP hr.)	Efficiency (per cent)
1969	Birmingham S.M.E.	1st	J. Drury	Birmingham	Royal Scot	5	4-6-0	10.10	NOT QUOTED
		2nd	N. Spink	Private Entry	GWR Gooch	5	4-4-0	12.41	
		3rd	A. Bowling	Cheltenham	Green Arrow	3½	2-6-2	13.98	
1970	Whitney and West Oxford S.M.E.	1st	L. Labram	Birmingham	"Firefly"	5	2-6-2T	12.92	NOT QUOTED
		2nd	P. Dupen	Romford	MR "999"	5	4-4-0	13.36	
		3rd	J. Cousins	Wilsden	"Speedy"	5	0-6-0T	14.54	
		1st 3½"	E. Kellet	& West London Bristol	GWR Hall	3½	4-6-0	15.63	
1971	Southampton & District S.M.E.	1st	A. Heyden	Newton Abbot	GWR Dean Single	5	4-2-2	7.99	NOT QUOTED
		2nd	C. R. Amsbury	Derby	GWR 51XX	5	2-6-2T	9.98	
		3rd	G. Hawkins	Bristol	GWR King	5	4-6-0	12.53	
		1st 3½"	F. Morley	Portsmouth	"Maid of Kent"	3½	4-4-0	16.27	
1972	Tyneside S.M.E.	1st	N. Spink	Chesterfield	GWR 57XX	5	0-6-0PT	11.04	1.06
		2nd	L. Bennett	Chingford	GCR Director	5	4-4-0	11.95	1.05
		3rd	H. Reeve	Kinver & West Midlands	"Nigel Gresley"	5	2-8-0	12.86	—
		1st 3½"	A. Jacobs	Romford	GWR Hall	3½	4-6-0	13.81	1.03
1973	Chingford & District M.E.C.	1st	W. Longstaff	S. Durham	LNER L1	5	2-6-4T	11.38	1.6
		2nd	L. Labram	Birmingham	"Firefly"	5	2-6-2T	11.50	1.58
		3rd	T. Arnott	Sunderland	"Doris"	3½	4-6-0	12.30	1.47
1974	Bristol S.M.E.E.	1st	F. Winsall	Rugby	"Nigel Gresley"	5	2-8-0	7.16	2.54
		2nd	C. R. Amsbury	Derby	GWR 51XX	5	2-6-2T	8.50	2.138
		3rd	A. H. Castle	Worcester	"Freelance"	5	0-8-0T	9.40	1.933
		1st 3½"	D. Alford		NER K2	3½	2-6-0	17.85	1.018
1975	T.S.M.EE	1st	L. Joyce	Chingford	GW King	3½	4-6-0	11.71	1.552
		2nd	F. G. Winsall	Rugby	"Nigel Gresley"	5	2-8-0	13.06	1.392
		3rd	D. W. Horsfall	Brighouse	L.S.W.R.	5	4-4-0	13.42	1.355

# A. J. GLAZE LTD.

*MODEL & PRECISION ENGINEERS*

32 PEAR TREE LANE  
WOLVERHAMPTON

STEAM BOILER SPECIALIST

\* \* \* \*

STEAM LOCOMOTIVES IN ALL GAUGES  
ROLLING STOCK AND TRACKWORK

\* \* \* \*

VINTAGE AND VETERAN ROAD VEHICLE SPARES

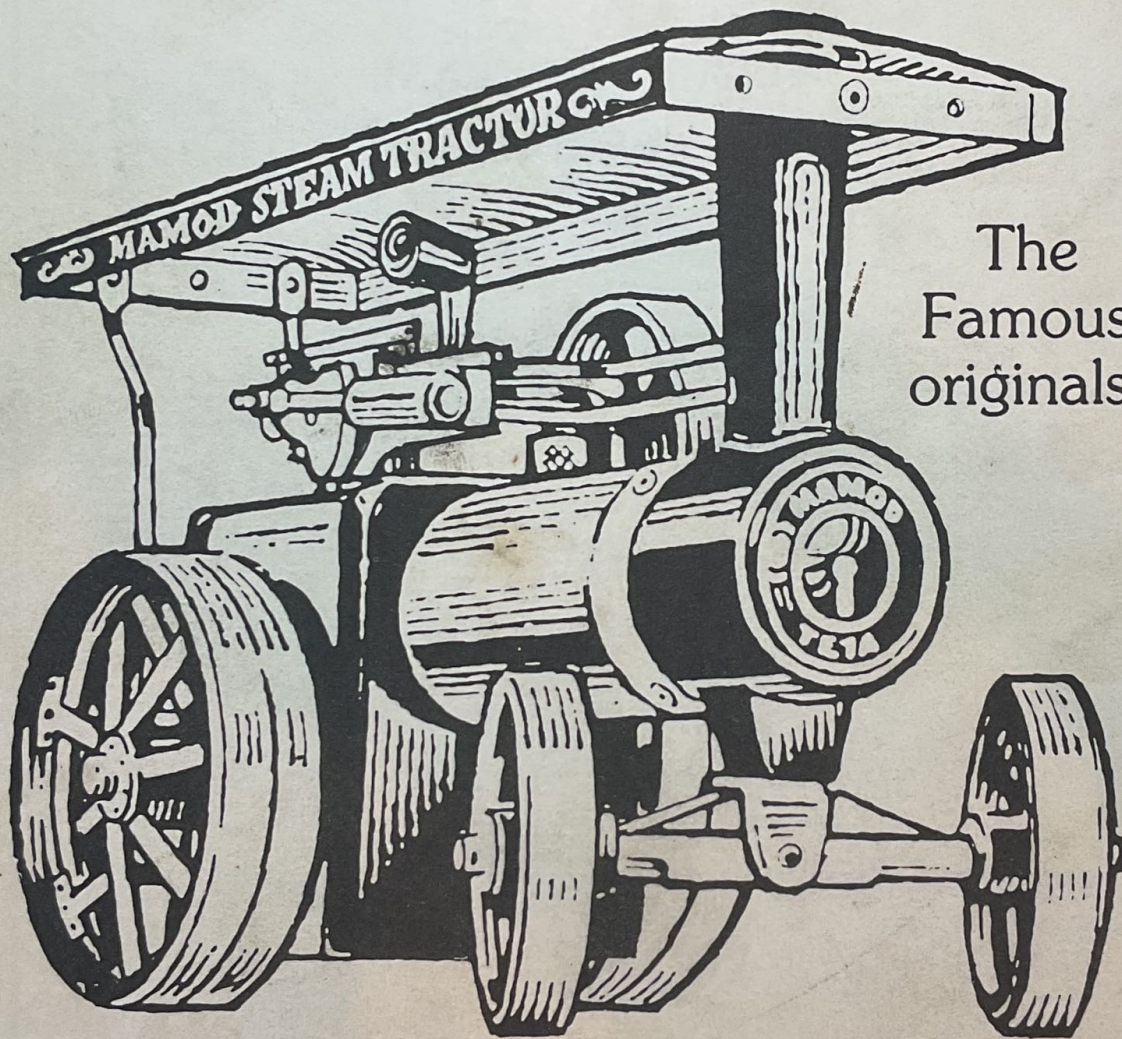
TO ORDER

*PHONE WOLVERHAMPTON*  
*732418*



# Mamod Steam Models

Famous Mamod traction engines, steam rollers, wagons and accessories are more than precise and durable working toys. They are fun models, boys of all ages get really steamed up about. And surprisingly inexpensive, from all leading toy shops.



The  
Famous  
originals.

**Mamod**

The famous  
originals

Malins (Engineers) Ltd.  
Brierley Hill, West Midlands, DY5 2JZ