Contents

EDITORIAL

Space limits this Editorial. I ask for articles and letters
for the Newscast: we need a wide selection of material. If (as
the author of this month's "central feature") you can contribute
towards printing it would help.

The circulator. Last November I sent two out, each to cover
half the membership: one has just returned; the other seems lost.
I have material for another; but with only one copy I request all
who wish to receive it to write to me. No circulee may keep it
over a week before passing it on with comments.

The Duodecimal Society of America held a very successful
Annual Meeting at the Carnegie Endowment Center on *19 April 1174.
They are justly proud of their 'Manual of The Dozen System' and
will print an Esperanto version of their leaflet. Charles S. Bagley
has devised a duodecimal inch micrometer.

In France, M. Jean Essig continues expounding duodecimals
e.g. in Lille University and to some industrialists in Lyons.

SOCIETY ACTIVITIES

The Draft Rules, proposed at the General Meeting and promised in the last Newscast are printed on the next two pages. Will Members please return with any amendments the spare copy they will receive so that the Rules may be ratified at the next meeting in accordance with Rule 8.

A sort of Duodecimal Encyclopaedia is being built up to contain facts on every duodecimal aspect. Accounts of specialist applications of base twelve are needed (e.g. football-pool permutations, nautical tables, printing units, computor programming, etc.)

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

Metric Committee

18, Adam Street
Adelphi,
London, W.C.2.

See comments
on pages
5 & 6

30th October 1959

Dear Sir,

Thank you very much for your letter of 26th October and for the pamphlets on the Duodecimal Society of Great Britain. We have already been in touch with the Duodecimal Society of America.

duo- /sic/

Whilst there is a great deal to be said for the /decimal system system on many grounds, we feel that in our investigation we must deal with the practical considerations of transitional difficulties and transitional costs. Whatever the shortcomings of the Arabic system of numerals it has been accepted and used without difficulty for centuries, and on practical grounds we consider that it would be impossible to persuade the world that the confusion and cost of changing to a duodecimal system would be outweighed by the long-term benefits which might flow from the change.

Yours faithfully,

sgd.

(T. P. Thomas)

The Duodecimal Society

of Great Britain

RULES

1. Name

The Society shall be called "The $\frac{\text{Dozenal}}{\text{Duodecimal}}$ Society of Great Britain".

2. Aims

2.1 To draw the attention of responsible people and organisations, with and without technical interests, to the superiority of the duodecimal method of counting and measuring.

2.2 To organize constructive opposition to any legislative proposal to extend the decimal metric system.

2.3 To conduct research into numbers and standardized units with especial reference to those using base twelve.

3. Membership

Membership shall be open to all persons in Great Britain or abroad interested in the aims of the Society. There shall be four grades of members as follows:--

3.1 Life Members -- persons who pay a sum ......[1] times the annual subscription as currently prescribed for Ordinary Members.

3.2 Ordinary Members -- persons who pay the annual subscription as currently prescribed.

3.3 Young Members -- persons of *19 years of age or under or who are still full-time at school, college or similar place of education who pay half the annual subscription payable by Ordinary Members.

3.4 Subscribing Supporters -- persons who actively support the work of the Society but who do not wish formally to become members; to receive the same rights and privileges as a full member they must pay a subscription as appropriate.

(2)

4. Members' Rights

Fully-paid-up members as indicated at rule 3 shall be eligible as follows:-

4.1 To receive the Society's journal.

4.2 To receive any freely-distributed publication of the Society and notice of other publications.

4.3 To vote at Society's meetings.

4.4 To inspect the Society's accounts. (3)

5. Subscriptions

Subscription rates shall be those currently fixed by the Council as appropriate to grades of Membership shewn in rule 3. Annual subscriptions shall be due on the first day of the financial year. Members, other than Life Members, joining during a financial year shall pay a sum equivalent to one-twelfth of their appropriate annual subscription for each month remaining until the next financial year starts.

6. Funds

The funds of the Society shall be banked with the London Trustee Savings Bank. All cheques drawn on the account must bear the signature of the Treasurer and one other member of the Council. The Society's financial year shall be from .... to .... (4)

7. Meetings

7.1 A General Meeting shall be held annually.

7.2 Special Meetings may be called at the discretion of the Council.

8. Voting

Voting at meetings shall be by simple majority of those present. Proposals involving the Society's rules or independence shall require a two-thirds majority of all members (excluding abstentions), voting being by the most convenient means possible. In the event of equality of voting at any meeting, the Chairman shall have a casting vote in addition to his vote as a member of the Society.

9. Government

9.1 Council — There shall be a central Council elected by postal ballot before the annual General Meeting, comprising Officers who are full members of the Society as follows:-

> Chairman
> Vice-Chairman
> Secretary and Treasurer
> Education and Publicity Secretary

The Council shall issue invitations to become President of the Society. The Council shall be responsible for the management of the Society within the policies decided at General and Special Meetings.

9.2 Committees — The Council shall nominate such Committees as are necessary to assist it in matters such as educational facilities, discovery and development in numeration and mensuration, and editorial functions.

Notes (1) The multiple of the Ordinary Membership fee is to be filled in. Two dozen, *16 and one dozen were suggested.

(2) Honorary Members We agreed this was not appropriate until the Society was larger.

Initiation Fee We agreed that it was not advisable for us to have new members pay an extra initiation fee.

(3) Auditing will be discussed at the next General Meeting and if necessary an addition made to rule 6.

(4) Dates mentioned included

1	January	calendar year	(A date other than 1 January
19	March	solar or zodiac year	(makes for awkwardnesses such (as "financial year 1173/1174"
21	March	Lady Day	(and (except for zodiac year)
5	April	Income-tax year	(difficulty in division into (months; but a Spring date is
about	April	Easter day	(easier for Members to pay (subscriptions.

DECIMAL COINAGE AND
THE METRIC SYSTEM

SHOULD BRITAIN CHANGE?

A joint report of Committees appointed by The British Association
for the Advancement of Science and The Association of British
Chambers of Commerce -- Butterworth's Scientific Publications, 7s. 6d.

This report appears, in both tone and content, an informal,
cautious outline of the British attitude to decimal coinage and the
decimal metric system for weights and measures.

The enquiry's terms of reference were: "To report on the
practicability, implications and consequences, both international and
domestic, and the costs of a change over to the metric system and/or
the decimalisation of coinage in the United Kingdom,": also ".....
increased rationalisation or decimalisation of the present units ...."
(p.3). Thus the Committee could not consider long-term values or
new systems.

The scope was also limited, perhaps unavoidably, as they
recognize: "We have made no attempt to obtain the views of the
general public -- the man-in-the-street and the housewife. Any change
in coinage or weights and measures would have far-reaching implications
for the public and no change should be made without seeking the views
of the public" (p.5). Also "There may be a large body of opinion
which has not responded to our enquiry thinking that they were not
particularly concerned" (p.70). The Committee rashly assume that
their respondents, and even the public, objectively and expertly know
what is best.

Decimal coinage is recommended and the Government should take an
early decision in principle: "The longer the delay the greater will
be the transitional cost". "Although respondents express little
dissatisfaction with the present system of coinage in industry and
commerce, there is wide approval of the concept of decimal coinage".
Although "the vast majority of these /i.e. retail or cash/ daily
transactions are concerned with sums under £1" (p.18), the Committee
objectively relay the strong desire to retain the pound as the main
unit, purely on sentimental grounds (which are demolished by no less
an authority than Lombard in 'The Financial Times' on May 7 1960). The
Committee show little faith in British financial standing when they
use an expectation of further devaluations of money among their
reasons (p.24). If rationalizing coinage decimally costs £100m., we
should do it properly -- duodecimally.

For weights and measures "... the Committee cannot recommend compulsory adoption of the /decimal7 metric system by the U.K. at the present time", but stresses decimal and rationalization trends. The report reviews how surprisingly international are the uses of the inch and pound and draws noteworthy attention to the lack of an international authority for sponsoring these units, such as that to which it attributes the success of duodecimal metrics.

Rationalization in the report acquires a falsely limited sense almost synonymous with decimalization of the Imperial system and it is admittedly seen as "a step towards decimal thinking" (p.52). Although the questionnaire devoted a seemingly unrestricted question to rationalization of units, the report does not expatiate on the response. Nonetheless three sound ways to rationalize are recommended: a) reduce to one unit in each category (length, weight, capacity) for each industry; b) end obsolete systems (e.g. troy apothecaries', pennyweight); c)define international yard and pound.

The advantages for decimal currency, weights and measures proposed could in all cases be equally used to support duodecimal ones, which would in fact eliminate some disadvantages. The most mentioned units are of currency and length where the twelve-divided foot and shilling have most importance. In educational aspects I underline "the only disadvantage mentioned was the loss of mental skill in dealing with twelves".

What in fact did the Committee think about dozenals? A copy of what was written to the Committee has been sent to Members./ The Committee's reply is reproduced verbatim on page 2.

By this answer the Committee show they realise the advantages of duodecimal arithmetic but doubt their powers of persuasion. They allow the habits of the past few centuries, when mathematics was embyonic and the possession of a few, to hamstring all future aeons, when mathematics is rapidly advancing and the possession of all.

/Note: please send 8s. 6d. if you would like me to get and post you a copy7

/(In 'The Duodecimal Bulletin' for December /1959: there are some free spare copies available for Members on request.

A REVISED CVRRENCY

BY S. FERGVSON
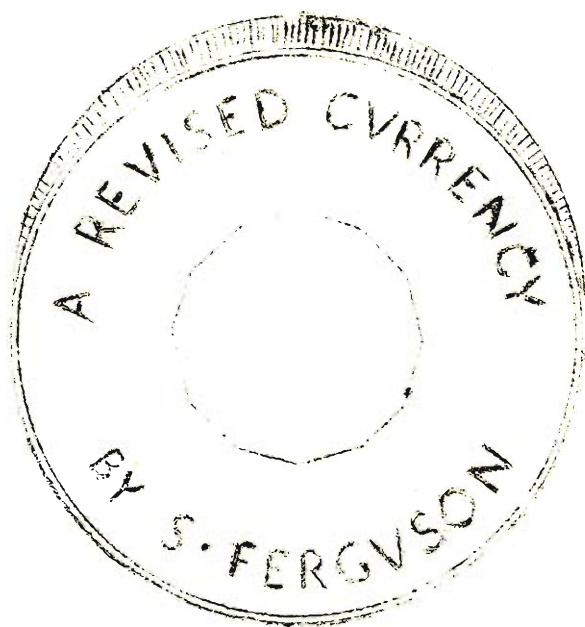
A REVISED CURRENCY

by S. Ferguson

/Note: *indicates duodecimal, /decimal; $\mathcal{L}$ = ten or dek, $\mathcal{E}$ = eleven or el/

England has a currency system at present which can be accommodated to both decimal and duodecimal proposals by virtue of its twenty-shilling pound and dozen-pence shilling. With the introduction of either a completely decimal or duodecimal system at least one unit will have to go. Of proposals so far published, the decimalists favour the pound at the cost of the penny and shilling; the duodecimalists favour the shilling and penny, at the cost of the pound as unit of reference.

The cost of a decimal changeover is largely a matter of the alteration of machines and the printing and minting of new units of currency; the cost is also a matter of public interest in that any attempt to decimalise a pound will require new coins below 6d., and thus confuse the shopper and the tradesman; the alteration of the basic units of our currency can cause nothing but confusion and expense. On the other hand, the cost of a duodecimal currency is the cost of removing the half-crown and introducing new coins above 2s., new notes for the old pounds; there will be little or no confusion in the market-place, the basic units remaining.

Statisticians may count their thousands of pounds, but the majority of people count their shillings and pence, using the pound only where the number of shillings is too large to be easily written or spoken; for instance we refer to multiples of shillings, over /£1 and below /£5, rather than to pounds. Duodecimal suggestions exploit this natural tendency by making a new unit of a dozen shillings or more, keeping the basic everyday units.

It is interesting to note how the basic units have not altered since the Conquest, and how the higher units have vacillated. Apart from Edward III's gold pennies, the penny-shilling ratio has held since the Conquest, and one must go back to the Anglo-Saxon kingdoms before one finds a different ratio. /The ratio *10:1 was brought in from the continent at a time when the Mercian shilling was fourpence/. To show you the divergence in names and values, the table below compares the value of the names applied to gold coins in copper pence (decimal) and in shillings (duodecimal). The name pound, by the way,

is part of our Roman heritage, from the time when ∤240 pennies were
coined to the pound troy of silver, a ratio unaltered except by
debasement – at one time the ratio was ∤960=1. Our symbols L,s,d,
from the Latin libra, solidus and denarius, are reflected in the
pre-Revolution monetary system of France, which had a livre of
∤20 sous, a sou of *10 denier.

Table A   Comparison of names and values

∤Copper pence	*shillings	Names	Fraction of pound	
360	26;0	Ryal, sovereign	∤1.4	---
270	1Ɛ;0	Sovereign	∤1.1	---
252	19;0	Guinea∅	∤1.05	---
240	18;0	Sovereign, Unite, Broad, Guinea	∤1.0	*1;0
160	11;4	Mark	∤⅔	0;8
120	Ɛ;0	Angel, Ryal	∤0.5	0;6
100	8;4	Noble,	5/12	0;5
80	6;8	George, Angel, Noble,	⅓	0;4
72	6;0	Florin	0.3	3/Ɛ
60	5;0	Crown	0.25	0;3
24	2;0	Florin (Gold penny)	0.1	½
20	1;8	(Gold penny)	1/12	0.1
12	1;0	Shilling	0.05	1/18
6	0;6	Tester	0.025	1/34
4	0;4	Groat	1/60	1/50
1	0;1	Penny	1/240	1/180

∅A coin more popular than the ∤18;0 sov. in its day.

From the comparison of names, it is clear that people wanted
a unit of at least the size of a ∤20s. sovereign, and indeed, were
it not for inflation, we would have it still; from the table also,
it is clear that coins representing $2/3$, $\frac{1}{2}$, $\frac{1}{4}$ and $1/3$ of one pound
were once useful, ratios that shown their usefulness by the number
of names these units were given, each name showing that the coin
of a previous name had appreciated or depreciated according to the
price of gold at the time, but that a unit of, say, $1/3$ £ was
needed, and had to be again provided.

The name florin was definitely applied to a 6s. coin at one
time, but the name was appropriated for a new unit originally

bearing the title "one-tenth of a pound".

The pound, today, is worth but $1/3$rd of its pre-war value, or $1/9$th of its value under Victoria, and perhaps as much as $£1/100$th of the pound (experts differ) in Dr. Johnson's day. Even today it is announced as *15;3s. as compared with *18;0s in the year 1171, or as *17;6s in *1171 as compared with *18;0s in 116£. Already suggestions have been put forward to alter the sizes of our coins, and we see, in other countries using the pound, those proposals already fact - Ghana's penny, Cyprus' 5 mil are of the value of our penny, but the size of a halfpenny, for instance. If we too want better metals used in our coins, we must reduce their size - a *10s. piece, for instance, could be almost pure silver, but the size of the old 5s. piece.

Showing the inflation of our currency, the coins in use have changed their metals, and some have gone: *1148 ($£1928$) saw the last gold coins; *1163 ($£1947$) saw the last silver; in *1169 ($£1953$) a cheaper quality cupro-nickel ushered in the Second Elizabethan Age. Under Victoria the penny was reduced from one ounce (av.) of copper to $1/3$ ounce copper-bronze; for Edward VIII the silver 3d. became nickel-brass; in *1168($£1955$) the farthing was last minted, and has since disappeared, and one can presume that the halfpenny will not be long in following suit. The guinea, the six-shilling piece, the crown, the double-florin, the half, three-quarter and third farthings, all have disappeared.

It is on the question of inflation that several of the decimal suggestions can be ignored; we have no coin smaller than the half-penny, and thus there is no point in calling one shilling $£50$ mils, or one pound $£1000$ mils, when the 1 mil will be less than $\frac{1}{2}$d; our new smallest unit of currency must be tangible, not imaginary.

On the matter of sizes and metals it is worth noting that decimalists require new small copper coins to replace the old, and new cupro-nickel coins; they propose the interim solution of replacing the penny and halfpenny by coins the same size, despite the appreciation of the penny under these conditions. The duodecimal suggestions also postpone the day of size changing, but remove the 2;6s coin, and add new units, units that could well be minted in new sizes and good metals - giving us better quality metal in circulation, of sizes fitting their value, and the schema of revised sizes for all.
$\underline{/}$See Table D for suggested new sizes and metals$\underline{7}$

To the suggestions themselves: we "duodecimalists" must reject
the decimal proposals, but it is worth noting some of the drawbacks
of the decimal units. .

Machines giving change need altering; the basic units of our
currency are upset; we lose the base of division by three, four and
six, and must instead of these use the seldom-wanted five. I
would not suggest the decimalists cannot see these faults, indeed
they have expounded at some length .... "The small trader ....
may not immediately appreciate the logic of having to ring up
sixpence on collecting five cents, or five cents on collecting
sixpence, depending on whether he has had his cash register
adjusted ......" "........the slight appreciation of the penny
to ⅟1.2 pence could be easily overcome ...." "........... a
scheme having both a 'heavy' and a 'light' penny ...." ".......
where copper coins are used in meters there should be a refund
of one 5 cent coin in every 6 such coins collected ...." "the
overcharge caused by using a 5ct. coin instead of the penny at the
rate of ⅟0.0833 florin per coin." "...... there would appear to
be no redress where three 5ct. coins were used instead of three
pennies in a 'phone kiosk ...." It is clear to us that the
shilling of *10 pence, divisible evenly by 2, 3, 4 and 6, is of
greater efficiency, and of greater practical value than a
decimalised pound divisible only by 2 and the seldom-used 5.

Turning to the decimal suggestions, the table on the next
page compares the systems so far proposed.

E R R A T A   to   'A Duodecimal Calendar' by C. J. McMullen
                   printed in 'Duodecimal Newscast', January *1174.

page 6, line *27	...	...	...	...	for 20E7 read 1EE7
page 9, table H	Shrove Tuesday		...	for Amf. 21 read Fiŝ. 2	
	Ash Wednesday		...	for Amf. 22 read Fiŝ. 3	

Table B   Comparison of proposed decimal currency systems

*Present value	£1=1000 mil	£1=100 cents	10s.=100 cents	5s.=100 cents	8s4d=100ct
18;0s.	1	1	2	4	2.40
0;0	500 mil	50ct.	1	2	1.20
8;4	---	---	---		1
5;0	250 mil	25ct.	50ct.	1	60ct.
4;2	---	---	---	---	50ct..
2;6	125 mil	12½ct.	25ct.	50ct.	30ct.
→ 2;0	100 mil	10ct.	20ct.	40ct.	24ct.
1;8	(83⅓m)	---	---	---	20ct.
→ 1;0	50 mil	5ct.	10ct.	20ct.	12ct.
0;	---	---	---	---	1Cct.
→ 0;6	25m	2½ct.	5ct.	10ct.	6ct.
→ 0;3	12½m	1¼ct.	2½ct	5ct.	3ct.
(→)0;2²/5	10m.	1ct.	2ct.	4ct.	(2.4ct.)
(→)0;1¹/5	5m.	½ct.	1ct.	2ct.	(1.2ct.)
0;1	---	---	---	---	1ct.
0;0³/5	2½m.	¼ct.	½ct.	1ct.	(0.6ct.)
0;06	---	---	---	---	½ct.

→ coin

The decimal suggestions except one are all similar, and are inefficient
for the reasons given above; the other suggestion of ⨍100^d=1 unit of
8s.4d may be dismissed as all coins above 1^d would need changing, and
that this suggestion keeps only the penny; however of the suggestions
so far proposed, this is the only decimal one that would have any
chance of being useful in the market-place.

The duodecimal suggestions so far collected are largely of one
pattern - from the penny, up - and only one goes as low as the
impractical farthing; one goes down from the pound, and upsets the
everyday units, of penny and shilling.

We need a unit of the size of, or over, a pound, and not one
smaller, or we will lose one of the advantages of our system – that
it contains large quantities with few numerals. A unit of *10s would
be too small for the statisticians, but it would prove the more
popular in the market place of two units *10s and *100s. We could
have both, however, using the *100s as a unit of reference, (bank-notes
only), and the *10s as our major everyday unit in coin and note. This
*100s unit, grandly suited to the purposes of those who count millions
of pounds in their statement(*1000 of these units are ⨍12,441 12.0d.)
would be roughly twice the value of the pound, pre-war, and just over
the value of that of the Victorian Era. Doubtless inflation will
disturb it but it is a fine size to herald our New Era, the Era of
Duodecimals.

Table C   Companion of Duodecimal currency suggestions

/Present value	*Present value	1	2	3	4	5	6	7	8
£7.4.0d.	100;0s	Crown	Bancoø				ø		
£1.4.0d.	20;0	sterlingø					(Pound)		Victoria
£1.0.0d.	18;0							Quidø	
12s.	10;0	Mark	Mark	Royalø	Roxø	ø			
3s.	3;0					Dollar			
2s.	2;0						Florin		Florin
1s.8d.	1;8							Guy	
1s.	1;0	Shilling	Shilling	Shilling	Shilling				
3d.	0;3					twe			
2d.	0;2						"Penny"		Doit
1⅓d.	0;18							Harold	
1d.	0;1	Penny	Penny	Penny	Penny		"½d."		
5/6d.	0;0ठ							Wee	
½d.	0;06	½d.	½d.	½d.	½d.		"¼d."		
¼d.	0.03	---	¼d.	---	---	farthing	---		

ø=highest unit   øfurther units of *£10 *£100 etc.

Of the proposed names above, a few can be connected with the old
units of currency; the *10s "mark" is chosen from the *11;4s mark, the
*10s "royal" is probably from the * s. ryal, and proposal 6 is based
on the *2s. florin. "Banco" is Sir Isaac Pitman's choice of the
*100s unit; "Quid" is obvious; "Crown sterling" is put forward because
the 5s. Crown is gone, and the 2½s. halfcrown is not included in any
of our proposals.

Proposals 1, 2, 3 and 4 are all of the same pattern, and I remark
upon them later.

Proposal 7 upsets the basic units, and one can query this proposal
on the grounds that it has all the disadvantages of the decimal
proposals, with the sole advantage that base twelve gives it. With
the pound at its present low value there seem to me to be no advantages
in this proposal; it would also require new units of currency, new
coins, rendering all the old ones unusable.

Proposal 4 takes the impractical farthing as its lowest unit,
and has as its highest unit a dollar of the small value of 3s. - a
value that would mean losses in the expression of large sums - £1 is
ø*6;80, /£100-4s. is ø*478, for instance. This proposed 3s. dollar
could, however, be fitted into the schema of 1, 2, 3 or 4 in that a
quarter-mark of 3s. could be called a dollar, but not used as a unit
of reference.

Proposals 6 and 8 are neat in that they offer us a top unit of
reference very near the £, and take the "decimal" florin as a unit of

currency. They reduce the halfpenny to the relative status of a farthing - perhaps an advantage if one views the halfpenny as doomed. The disadvantage I see in these proposals is that they have too small a unit of reference - *20s - a size I have rejected. The other disadvantage is that the basic units are altered, albeit little, and that we should have to have coins below a florin with new values.

By substituting a unit larger than £1 for £1 we have the advantages and uses of the pound without its drawbacks. We should not alter the shilling and penny for a duodecimal division of a pound, but should instead streamline our shilling and penny ratio to get a unit higher than one pound; there is no point in dividing the pound by ten, eight or twelve, no point in taking a unit of reference less than £1.

Finally, as proposals 5,6,7 and 8 upset the pattern of our proved and tested basic units, I would like to single out one of proposals 1,2,3 and 4, rejecting 3 and 4 because their highest units are too small, and to pick the system.

*1000 pence=100 shillings=10 marks=1 Crown sterling, choosing the names given for my reasons earlier on.

In this last system the expression of units is clear enough: marks are written M1;00, the second figure being shillings, the last pence; the Crown sterling:- Cr.1;000 the second figure marks, the third shillings, the last, pence. We need not be as hidebound by this system as one the decimalists by theirs in expressing units: where they must put ₤500 for 5x100 mils, we may put simply 6Mk for 6x*100 pence. The point has been raised that Cr.0;060, for instance, uses too many figures for twoo small a sum - this could and should be more easily expressed M.0;60 or 6;0s - according to need. For your deliberation I suggest we adopt the system [1] proposed in the table, taking the names there put forward.

I give overleaf my own suggestion for the sizes and metals of these new units, and a footnote on colonial currencies.

STOP PRESS: Since this article was written the Royal Mint has reintroduced the Crown piece of 5s. into the coinage. This does not alter the author's choice of "Crown sterling" for the *100s. unit.

Table D   Table of suggested sizes

Coins: value	Diameter	Tickness	Edge	Shape	Metal	Present diameter	Value
∲½d.	*0;9"	*0;1"	Plain	Round	A	*1;0"	½d.
∲1d.	1;1	0;1	pl.	Round	A	1;23	1d.
∲3d.	0;Ɛ	0;09	pl.	10-sided	B	0;Ɛ	3d.
∲6d.	1;0	0;16	pl.	10-sided	B	0;9	6d.
∲1s.	1;16	0.16	milled	Round	B	6;	1s.
∱(2s.	1;2	0;2	m.	Round	B	1;16	2s.)
�73s.	1;3	0;1	m.	Round	C/D	1;3 =	2s.6d.
�76s.	1;4	0;16	m.	Round	C/D		
∱1M	1;6	0;2	inscribed	10-sided	D		

Metals A=as now; B=nickel-brass, as present 3d; C=cupro-nickel, Geo. VI;
D=Standard silver

∲=to be changed later 7to be brought in now

∱ The 2s. will not be needed if more 1s. are minted; the 2s. could be an alternative
 to the 3s.

Notes: 3M., 6M., Cr.1., and up.

Footnote on Colonial Currencies.

Some of our colonies have already divided their pound decimally.
Rather than suggest they adopt the suggested they adopt the suggested
English system outright, I would suggest they take their basic unit,
cent or mil, and make *100 or *1000 of these their new "pound".

Present decimal systems

Value	Aden	Australia	Canada	Others		(U.S.A.)
⌐£1	20sh.	25sh.	∲2.70	£1 £1		(∲2.80)
Currency	100ct=1sh.as ours		100ct=∲1	=100ct.=1000 mil		(100ct=∲1)

Rationalising the Australian schema as ours, and applying the
suggestions above in other cases:-

Value	Aden	Australia	Canada	Others		(U.S.A.)
*Cr.1	*100sh∲	*ACr.1;3	*∲11;60 new	*£5,00	£4;200	(*∲12;00 new)
-		ACr.1=9M7	∲1=Ɛ;8s.	£1=24;97s	£1=2Ɛ;68s.	(∲1=Ɛ;35s

/∲taking 1sh of ⌐100cts = 1sh of *10 pence./

P O U N D   T O   C R O W N   C O N V E R S I O N   T A B L E

£	£0	£50	£500	£5000	£50 000	£500 000	£5000 000	£50million	£500million	£
	Cr msd	Cr med	Cr ms	Cr ms	Cr ms	Cr ms	Cr ms	Cr ms	Cr ms	
1	0;180	1;480	11;T8	E6;T8	978;T8	329	177 068;T8	2 837 43T 072;T8	56E 908;T8	1
2	0;340	2;940	23;94	1E1;94	1735;94	656	332 815;94	5 472 878 125;94	E1E 615;94	2
3	0;500	4;200	35;80	2T8;80	24E2;80	983	4T9 022;80	8 0TT 0E6 198;80	14E 322;80	3
4	0;680	5;680	47;68	3T3;68	326E;68	664	02T;68	T 925 534 24E;68	733;02E;68	4
5	0;840	6;E40	59;54	49T;54	49T5;40	81E	037;54	11 560 972 302;54	1TT 938;54	5
6	0;T00	8;400	6E;40	595;40	5E62;28	996	045;40	14 198 130 375;40	3TT 665;40	6
7	0;E80	9;880	81;28	6E0;28	651E;14	E51	052;28	16 T13 62T 428;28	5TT 352;28	7
8	1;140	E;140	93;14	787;14	7298;00	108	059;14	19 64T T68 49E;14	8TT 05E;14	8
9	1;300	10;600	T5;00	882;00		283	038;00	20 286 2T6 552;00	229 968;00	9

£	£5000 million	£50 000million	£500 000million	£5000 000million	£50000 000 million	£500 000 000 million	£
	Cr ms	Cr ms	Cr ms	Cr ms	Cr ms	Cr ms	
1	4 799 674;T8	3E 600;T8					1
2	9 377 129;94	79 03E 001;94					2
3	11 E54 772;80	E7 65T 602;80					3
4	16 732 257;68	136 077 003;68					4
5	1E 30E 900;54	174 699 604;54					5
6	23 TE9 385;40	1E3 0E9 005;40					6
7	28 686 T3T;28	231 718 606;28					7
8	31 264 4E3;14	270 158 007;14					8
9	35 T41 E68;00	2E1 757 608;00					9

£1 billion = Cr. 22,E01,724,604;T80d

£1 sterling (decimal) = Crown sterling (dozenal).

Cr = Crown
m = mark
s = shilling

T = ten
E = eleven

B O O K   R E V I E W S

Manual of The Dozen System, published by The Duodecimal Society of America, *1174, $5\frac{1}{2}$"x$8\frac{1}{2}$", paper, *33pp., $ or 7s.6d.

At last we have what is at the same time a tutor for the beginner and a book of reference for the expert. This booklet deserves to be in every library and school. Every duodecimalist must have a copy.

The introduction is a catechism for those quite new to dozenals. The four rules are each followed by the usual and some unusual "practical" exercises. Then come powers and primes, fractions and conversions. Only two dozen pages give a thorough grounding in dozenal arithmetic.

The rest of the book contains tables of conversion, logarithms, sines and tangents, all valuable for reference. In weights and measures the American Do-Metric system is briefly outlined as an acceptable integration of many of the conventional units on the duodecimal base. The bibliography is wide.

Report of the Metric System and Decimal Coinage Committee 1959, Dublin, Published by the Irish Stationery Office, *1174, 6"x$9\frac{2}{4}$", paper, *84 pp., 4s.6d.

Although dated *1173 this report was not printed until April this year. It is a very clear, clinical assessment of the "desirability of establishing a /decimal/ metric system of weights and measures and a decimal system of coinage" in Ireland by a Committee appointed by the Irish Minister for Industry and Commerce under the chairmanship of Mr. A. W. Bayne.

Contrary to the Beaver Committee, this one strongly supports the adoption of a decimal system of weights and measures, but does not recommend decimal coinage unless decimal weights and measures are adopted. Much depends on what Great Britain does. Noteworthy quote: "For everyday shopping, the shilling, based on the twelve units of the penny, is by reason of its great divisibility a very convenient coin for small transactions. (§ 147) "

The tables and appendices are particularly useful to compare and summarize facts.

CORRESPONDENCE

DUODECIMAL NOTATION

Dear Sirs: — I am very happy indeed to receive this morning a copy of your DUODECIMAL NEWSCAST, Year 2, No. 1, together with the insert (excert?). The whole thing was very interesting; it makes us here in U.S.A. feel good to see your newer organisation carrying on so well.

Haven't seen my own name in print for some time, so got a little thrill to appear in your list of duodecimal notations (ᘔ for X , k for E). Perhaps a little explanation will amuse you. First, I definitely subscribe to the "least change" bloc; I can see nothing to be gained in changing the meaning of the present digits 1 through 9, since they mean the same in either system. Entirely new symbols would help in distinguishing which system is being used, but that is so simply done in other manners. Our Society in general uses italics for duodecimal and vertical for decimal. Having no italics on any of the typewriters to which I have access, I adopted ; for the unit point in duodecimal numbers and the Society has adopted that along with the italics. So we come to the symbols for 5 x 2 and for one more than that: Since I have to use an ordinary typewriter, I find that in each case, even in the middle of a number, I have to shift in order to make an X or an E ; this throws me clear off my stride, which is precarious at best; so I tried to find lower case letter which had the same height as numerals, and hit upon d , which may stand for dek , and k , which is the eleventh letter of the English alphabet (call it kel since that seems to scan better in naming numerals than el). I note that, in all the suggestions you give, only one other than mine can be written on a typewriter without shifting, and that one, using p and n , makes a long number look jumpy, to me at least.

Best regards for your continued success.

H. K. HUMPHREY

Treasurer, The Duodecimal Society of America,
520, Ash Street, Winnetka, Ill.   13; February 1174;

/Editor's comment Caramuel in *E50 (/1644) was a few years before typewriters. His p is the two digits of /10 joined together, his n of /11./

M E M B E R S H I P

New Ordinary Members

Mr. D. Gordon Bagg, B.Sc., F.R.I.C., M.I.Chem.E.,
　　　14, Green Gate, Warburton Green, Halebarns, Cheshire
Mr. F. J. Binder, Greenmead, Fairfield Road, Shawford,
　　　　　　　　　　　　　　near Winchester, Hampshire
Mr. T. G. Franklin, 59, Lugsmore Lane, Toll Bar, St. Helens, Lancs.

New Supporting Members -- three

Changes of Addresses

Mr. B. C. Haggett "Avon", Little Wakering Road, Barling, Essex
Mr. Van Allen Lyman Barcelona Hotel, Juniper Street,
　　　3rd to 5th Avenues, San Diego, California, U.S.A.

O B I T U A R Y

Sir Lennox Russell (*X July 1100 -- 27 January 1174)

We shall remember Sir Lennox Russell as one of the pioneer
members of our Society. The day after reading a letter in
'The Times' on 1E April 1173 he wrote to the Society. He joined
soon after and watched, as he promised, "the progress of the move-
ment with great interest". He was always a man of action with
many activities, as can be shown by an extract from his reply last
September when offered the Presidency of the Duodecimal Society of
Great Britain: "It is now over eighteen months since I resigned
the Presidency of a local Conservative Association which I had held
for many years, and I feel that I could not undertake the
Presidency of your association, much as I should have liked to do
so, had I been younger and possessed of normal hearing."

Sir Lennox Russell, educated at Rugby and St. John's College,
Cambridge, had a very distinguished career in the Political
Department of the Government of India, retiring in 1146 to Surrey.
He held firm but well-informed views on matters to do with the
Church and with politics.

As a Society we shall miss a man of such qualities.

Duodecimal graph paper: Sectional Sheets and Pads of all sizes
with squares divided into twelfths, half and one inch are made
by H. W. Peel & Co. Ltd. in 'The Planet Series', obtainable from
usual stationery suppliers.

DUODECIMALS IN THE BRITISH PRESS

Letter in 'The Times' (B. R. Bishop)	*5 February
Report of an interview in 'The Evening News'	*13 February
Advertisement in 'John o' London's' (L. Loynes)	*16 February
Letter in 'The National Message' (F. J. Binder)	May
" " 'The Guardian' (Prof. A. C. Aitken)	*7 May
" " " " (Alvar Ellegard)	*12 May

Review of 'Ekskurso en nombroj' in 'The British Esperantist'   June
   (not listed in the last 'Duodecimal Newscast')
Review of 'Ekskurso en nombroj' in 'Studento'   August, *1173

    Letters are the cheapest and very effective means of advertise-
ment. Constantly there are news items, articles and letters which
give an excuse, e.g. anything on rational units can lead to a letter
on the unsatis-factor-inesss of decimals and the happy solution in
base twelve. Our letter to the Beaver Committee (a copy has been
sent to Members) and Society publications cover most topics to choose
from. Letters accepted seem the unemotional, topical, relevant,
concise. Different papers need different styles. Most Britons like
a short appeal to tradition. Articles for magazines must be succinct,
but allow fuller reasonings. Technical journals allow specializations.

DUODECIMAL PUBLICATIONS

    The following publications are available through the Society,
packing and postage a penny in the shilling extra.

Duodecimal Leaflet	free
Duodecimal Newscasts for *1173	;6d.
" " " *1174	1s;0d.
C. J. McMullen A Duodecimal Calendar	;6d.
S. Ferguson A revised currency	;6d.
F. Emerson Andrews An Excursion in Numbers	a few free
" " " Ekskurso en nombroj (in Esperanto)	" " "
Ralph H. Beard Antipatio al aritmetiko " "	" " "
J. Halcro Johnston The Reverse Notation	4s;0d.
Jean Essig Douze notre dix futur (in French)	13s;0d.
" " La duodécimalité: chimère ou vérité future	6s;6d.
Duodecimal Society of America Manual of The Dozen System	7s;6d.
" " " " The Duodecimal Bulletin	3s;6d.