

PUZZLES

IN CASE IT IS WET

WE are hoping for the best. Christmas week will be fine and sunny everywhere except round the PP's desk, where clouds gather weekly with unflinching regularity. But . . . in case it is wet, some Christmas puzzles are offered. One correspondent remembered the festive season in time to post a bundle of suitable problems. Thank you, C.B., and an extra merry Christmas to you.

All puzzlers please accept best wishes and our kindest thoughts for plenty of headaches during 1941.

PROBLEMS

Carol

An observant Christmas shopper noticed that the registration letters on six cars formed the title of a well-known carol. They passed him in this order:

ANS 1920
TI 5139
AWA 1252
IS 2122
CHR 8151
KE 0155

He wrote down the index letters with the numbers, in the order in which the letters spelt the title of the carol. Then he noticed that, if he numbered the letters of the alphabet according to their position, A-1, B-2, etc., the car numbers, in the order he had written them, represented letters which spelt two things that add to the gaiety of Christmas. It will help (says C.B., of Oranga-pai) to know that the total value of the letters in one of the words was 72 and in the other 118. What is the title of the carol and what two things were represented by the numbers?

Simple

"Please tell readers," says R.G. (Waihi) of this problem, "that only simple arithmetic is required. Otherwise they will spend all night solving it." This is R.G.'s simple arithmetic problem:

Here are six numbers—
4,784,887
2,494,651
8,595,087
1,385,287
9,042,451
9,406,087

Three of these, added together, form a square number. Which three are they?

Mystery Sum

Harry Davey presents us with what looks like a mystery. He sends one of those Exercises in division we have been having, but adds to his note on it that "the whole clue to its restoration may be revealed if you look again—or you may have to work it out by other and obvious ways." Here it is.

XXXX)XXXXXX(XXX
8716

XXXX
4358

XXXXX
30506

A Christmas Recipe

Take two-fifths of Cheer, two-sixths of Trifle, half of Star, two-sixths of Cinema, a quarter of Cosy, two-fifths of Purse,

the middle of Riddle, two-sevenths of Raisins, and stir in one-sixth of Ginger. What is it? (asks C.B.).

Your Christmas Turkey

Want a Christmas turkey? You can get one from a hamper this way, C.B. suggests. All you have to do is change the word "Hamper" into the word "Turkey" by changing one letter at a time. Each letter so changed must occupy the same position in the word as the letter it replaces. Here are clues to the changes in order: hamper, tent-dweller, fault-finder, cutter, cut off, rounded, coiled, folded, some kettles are, roughened, charred, gas-jet, old Scots coin, old Irish coin, turkey.

The Knight's Tour

This problem is sent by R.C.J.M., who acknowledges it to the recently published Penguin book of puzzles. Although we do not like borrowing from other publications we feel that this example may attract readers to an excellent source of diversion. In that connection, would readers please note that puzzles they find in current publications cannot be reproduced here without proper acknowledgment. Some we have had recently we discover (with the assistance of E.H.C. and Rob) have already been published this year in "Esquire." We have to make this belated acknowledgment and ask puzzlers to take care to be clear on a point of decency.

R.C.J.M. explains that the problem from the Penguin book is a Knight's Tour, dealing colloquially with the financial affairs of Bob and Bill. The first word is *when*. To find the solution, proceed as for the knight's move in chess.

As the problem does not end with the tour, puzzlers who do not play chess will have the satisfaction of working out the problem created by the answer when we print it. The chessboard appears at the top of this page.

ANSWERS

Division: H.G.L.'s problem added to the interest in this week's mail. First came a wedding-cake sample tin, enclosing one cube, divided as required by

THE LISTENER CROSSWORD (Answer to No. 37)

M	A	N	I	F	O	L	D	S	L	A	P
O	A	R	A	C	E	R					
P	O	S	H	A	C	C	O	L	A	D	E
E	C	M	T	N	R	S					
R	E	M	I	N	I	S	C	E	N	C	E
D	N	N	C	E	N						
E	N	T	A	I	L	L	A	T	E	N	T
S			S	A	L	X	S				
C	O	N	S	T	I	T	U	E	N	C	Y
R	O	E	T	D	L	Y					
I	N	T	E	R	N	A	L	S	A	G	A
B	E	S	C	I	R						
E	L	S	E	C	H	A	I	R	M	A	N

THE	AND	THAN.	THEN	OF	AND	BOB	BILL
HALF	PAID	PAID	WHICH	MORE	PAID	IF	SOME,
BILL	REST,	BILL	REST	BOB	THE	THEN	THREE
A	THE	PAID,	LESS	WAS	OF	PAID	BILL;
HOW	PAY?	WHEN	THE	LAST	THAN	FIVE	REST
BOB	BOB	THE	BILL	BOB	BILL,	WHAT	BOB
BILL	MUCH	THAN	BILL	TWICE	HAD	THE	A
MORE	AND	DID	OF	HALF	PAID	FIRST	BOB

the problem. The cube was a piece of potato, and smelt somewhat earthy, but the problem had been solved correctly. Sender, anonymous. Then H.G.L. telegraphed his answer, with apologies for lateness. He wires: DRAW ONE DIAGONAL IN EACH FACE SUCH THAT ALL ARE INTERCONNECTED THESE DETERMINE THE FOUR PLANES OF CLEAVAGE ALONG WHICH FOUR CORNERS ARE SLICED OFF LEAVING A REGULAR TETRAHEDRON AS FIFTH TRIANGULAR PYRAMID APOLOGISE DELAY DID YOU SOLVE

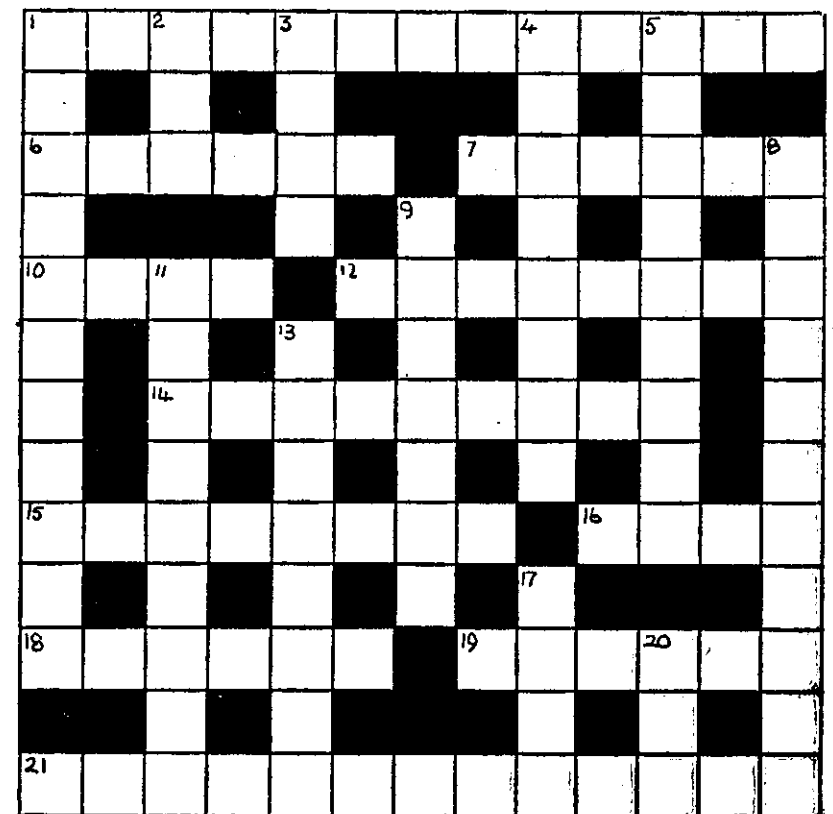
Yes, H.G.L., with our potato merchant.

For the Foreman: D.P.'s answer is that the marks should be 7' 8", 12' 7", 17' 10", 21' 25', 29' 33', 39' 3", and 42' 2' from the bottom.

CORRESPONDENCE

Letters are acknowledged from C.M.C. (Kawa Kawa Hospital), C.B. (Waipia), R.C.J.M. (Invercargill), L. Wilson (Christchurch), Harry Davey (St. Albans), P.J.Q. (Motueka), R.G. (Waihi), E.H.C. (Whatawhata), Tane (Whakatane), Sylvia (Wellington), H.G.L., and the potato grower. To make space for puzzles, full discussion must again be held over. They will be despatched before the New Year.

The Listener Crossword (No. 38)



Clues Across

- Band gets cheers in Hitler's mountain hideout.
- Braise (anag.)
- Moneylender.
- Able to show the reverse of an island.
- Come, Bing, this is quite suitable.
- Glide when coaxing.
- This salute may be a matter of tears in Scotland.
- Abbreviated relation—used in Negro animal tales.
- Get gun—it may be pure gold.
- Confused din from husband and child.
- A neat reminder of a famous sea.

Clues Down

- Larger baron (anag.)
- Adam lost one to get Eve.
- Garden tools out of a shoe.
- Do sing in the Post Office for a very strange word.
- Red Ringer produces a gun.
- Broad nigger (anag.).
- Hanging.
- We boggled at becoming bandy.
- Test nine (anag.).
- Fish from a nut.
- Traditionally busy.