

MAINLY ABOUT LETTERS

AS we admitted last week, the correspondence has been getting a bit behind. So this week we give a few answers, a few puzzles to be going on with, and then dive into the files. To work!

ANSWERS

(Refer to issue of April 19)

Along and Down: COPY
COPY
COPY
COPY

(Puzzle and answer from E.H.C.)

The Fly Again: Five inches — the hypotenuse of a right-angled triangle with height 4in and base 3in. (Puzzle and answer from E.H.C.; but H.G.L., who has been staying in Tokaanu, disagrees, and says 3.60551in., the sq. rt. of 13).

The Carpenter: Cut the board diagonally, then slide the two pieces along their diagonals until the width is extended as required. The extra four inches makes this possible. (Puzzle from F. Lovell, first answer in from a station announcer, which almost persuades us to revise our opinion of station announcers).

Aeroplane: 3.08333 (repeater) hours. Puzzle from Beginner, answer from H.G.L.

Birdie: Four birds left. (Puzzle from G.F.C., answer from H.G.L.).

Adding to 100: We have several answers, all correct: Charley Miller (Timaru), says 46, 37, 15 and 0 add up to 98, and plus 2 this equals 100. That's a trick, really, but a clever one. These

Matters of Moment

We have not received a great deal of correspondence about the proposed general knowledge test. Two correspondents are enthusiastic, one very unenthusiastic, and the rest silent. The matter will be dropped unless there is a definite demand for such a feature. Those correspondents who have written with suggestions will please forgive us for suggesting that the type of question they sent was not very original, and we believe originality is essential in a feature which these days is common to most publications. Perhaps some school-teacher reader will send us a suggestion for intelligence tests, as opposed to knowledge tests. Most adults, we know, fail the test for a mental age around 12 or 13, and something of this sort might shock some people out of their common mental lethargy. Puzzlers, of course, may consider themselves superior people already.

authentic answers come from Nurse, and the Drama Department, which originally asked for an answer: 70 9/18, 24, 5 3/6; and 23, 67, 9 5/10, 4/8.

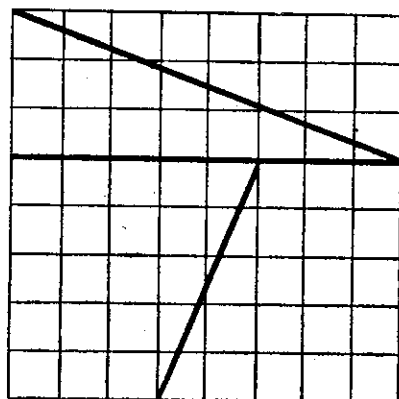
PROBLEMS

To and Fro

Two men, To and Fro, start the same journey from opposite ends. To starts at noon and Fro starts at 2 o'clock. They pass each other at five minutes past four and reach their destination at the same time. What time was that? — (From F. Lovell, Warkworth)

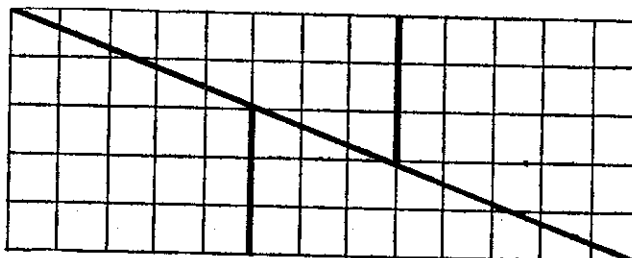
Ohm!

The edges of a cube are wired with a cable joined at each corner. Each edge has an electrical resistance of one



ohm. What is the total resistance of the circuit when a current is passed between any two extreme corners? — (From F. Lovell, who gives these for-

mulæ to assist the working: The sum of resistances in series is their arithmetical sum. The sum of resistances in parallel is the reciprocal of the sum of their reciprocal. The ohm is the unit of electrical resistance.



The Odd, Odd Square

There's an odd square concerned in this one, and it really is very odd. The drawings come from Puzzled, Cambridge, who wants to know where the extra square comes from in the oblong collection. We give it for consideration, and suggest that readers might also use the square of squares to confound their friends with the question: If you have 64 squares in a square, how can you divide it and put it together again to get 65? The diagrams appear above.

Double Acrostic

And here is another of L.C.T.'s home-made double acrostics:

"And all day long the noise of battle rolled. . ."

- (1). Ambassador at St. James Rudeness, English blood inflames,

- (2). First letter may give you a clue,
The rest, of course, is up to you.
- (3). With a queenly carriage
She enters a carriage.
- (4). Extinct words are inapposite
This means exactly opposite.
- (5). A narrow cul-de-sac
You get the old car back.

Ten Units

While you are cutting up paper for Mr. Puzzled, try this one from J. B. Hogg: Draw a rectangle five by two. Cut it into five parts which put together form a square of the same area.

Trick

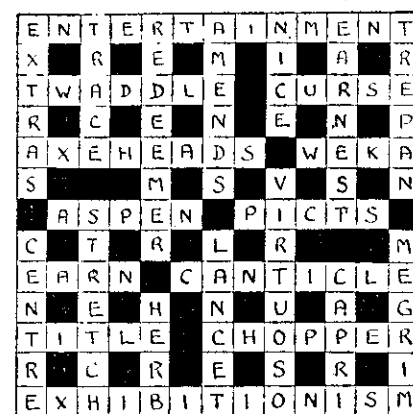
The heading warns you. J. B. Hogg says a man had to change a ten shilling note. He had silver coins in his pocket totalling in value 14/—, but he was unable to do so. What coins had he?

A Matter of Marriages

A clergyman said to a friend: "Some years ago three couples came to me to be married. The names of the brides were Phyllis, Bessie, and Vera. The bridegrooms were Charles, Albert, and William. But I have forgotten which man married which woman. Yet I remember that Albert's sister, who was one of the brides, was one year older than Phyllis. Vera was a blonde, and her brother, who was one of the bridegrooms, was a doctor by profession. It was he who examined Charles for a life insurance policy. Albert, who was a draper, married a brunette." Which man married which woman?—(Problem from R.G.)

The LISTENER CROSSWORD

(Answer to No. 4)



also answers the space ship problems, and asks if we have yet received the necessary six answers to Mr. Lambert's problem. We have. The Desk is deluged with Calculus workings, like a dredge's slag heap.

W. S. Tozer (Christchurch): Trusts our cross-words will continue and become no easier. They will, and they won't.

R.W.C. (Christchurch): Recognised the two pints as an old friend, and that we trust is no mistake in grammar. She says factorial 11 is 39916800, and agrees with H.G.L. about the number of combinations in the words "adolf hitler."

S.G.E. (Glenavy): Has been most shamefully neglected, especially since his several recent letters have been most useful. He says Tane's multiplication of 24694 by 362 to get 8445948 by the duo-decimal system was wrong. The answer should have been 8445968. He has compiled some interesting facts about magic squares. He starts with this one:

834
159
672

which adds every way to 15, and carries on with the next nine numbers, and the next, and so on up to 80. Then he takes the totals applying in each case and finds they, too, make a magic square, thus:

204 69 96
15 123 231
150 177 42

So that he can make a magic square of three sections to each side with each section containing a magic square in itself.

G. Tisbury (Invercargill): Has sent a new puzzle which will appear in due course, and **Shunter (Ngāruawahia)** writes to say that G.T.'s "slipping" solution of the shunting problem was ineligible according to the stated conditions of the puzzle. Naturally, Shunter sends his own solution, which seems to be a quite satisfactory sort of shunt for a shunter. He wishes us "a long and miserable life." Thank you kindly.

Q.E.D. (Henderson): Is a new correspondent. He says the same as S.G.E. about Tane's multiplication, and sends a problem which will take its chance with the rest.

L.C.T.: Has solved most of them lately, with spare time for acrostic construction.

Intelligentsia (Wellington): Says "the crossword puzzle could be made not so simple." But not without taking the dot out of this correspondent's eye. We recognise the writing.

Tane: Finds that H.G.L. was a bit out in his estimate of the acceleration of the space ship at 600 miles. Sorry we can't reproduce all the figures and signs used in the argument, but Tane says, in effect, that at 600 miles the ship would be accelerating 64,800,000,000 m.p.h. per second, which Tane suggests would push H.G.L. rather flatter than a pancake. The correct answer, says Tane, is that the acceleration would reach 200 m.p.h. per second at 11.91 miles. Since we suspect that for most readers, the differential calculus is much the same sort of thing as splitting the atom, we are sending Tane's letter to H.G.L., and they can fight it out by mail themselves.

That will have to do for this week. Next week the file shall be culled again, and winter should come upon us under a clean sheet.