

PUZZLES

WE WALK UNDER THE LADDERS

TO mention only those whose letters come most handily out of the flotsam and jetsam of the puzzle desk this week, the following puzzlers inform us that the ladders problem is impossible, for the simple reason that the conditions as stated would permit the lane to be of any width, since the height of the intersection is constant: Sylvia, G. M. Williams, Kupe (in two letters), T.M.C., H. G. Lambert, S.T., R.W., W.H.P. (who retracts the answer he had sent earlier). The postmarks range from Whangarei to Bluff. So could the ladders.

Exasperating as this may seem, we have to admit that it confirms our own faint suspicions; but we are grateful to Mr. Chippindale for giving us all such very fine geometrical exercise.

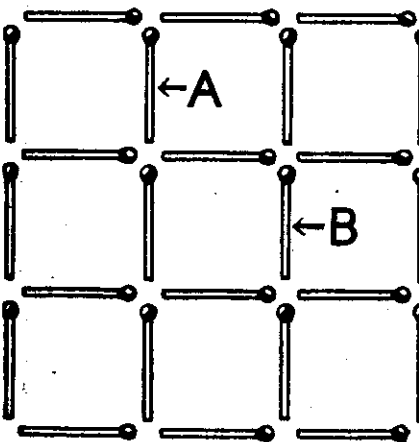
One other item of good news: repentant correspondents are beginning to acknowledge that the flange of the wheel does go backwards. In their shame they shall remain unnamed.

PROBLEMS

Match Squares

Here are 24 matches arranged to form squares.

(1) How many squares are there in the figure?



(2) How many squares will there be if you remove

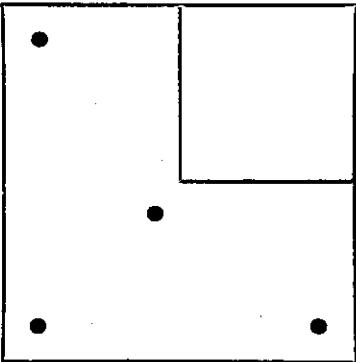
- (a) Match A
- (b) Match B
- (c) Matches A and B?

**NEXT WEEK**

The Entente Cordiale is this week so very cordiale we've had to put off the introduction of a crossword section. Puzzlers may confidently whet their appetites in anticipation of next week.

Kauris

A farmer owned a plot of land with a house section taking up one quarter of the square. There were four large kauris in certain parts of the rest of the square section, and he wished to divide that part among his four sons equally, giving each a plot containing a tree. He did not cut any trees. This is a diagram illustrating the layout of the farm:



More Cricket

Two bowlers have taken 30 wickets between them and their average is the same. In the next match Smith takes three for 24. Jones takes 2 for 26. Their averages are now four. What were their figures? (From Trier, Christchurch.)

When I am old as my father is now I shall be five times as old as my son is now. By then my son will be eight years older than I am now. How old is my son? (Trier.)

Figure Squares

We have all been very clever at making figure squares with an odd number of groups to each side; but here, from E.B. (Bluff) comes a square with an even number of groups, and with several other remarkable characteristics. It adds to 34 vertically, horizontally and diagonally. Each section of four squares adds to 34. The centre section of four squares adds to 34. And similar figure squares can be made by following a rule which should be evident from this reproduction:

1	15	14	4
8	10	11	5
12	6	7	9
13	3	2	16

The Donkey Knew

A donkey is tethered to a post on the boundary of a circular field four acres in area. What length must the rope be to allow the donkey to graze over one acre? (From H. G. Lambert, Taupo, who found it as a letter to the editor of "Picture Post." He has not worked it out and so far we have not the answer.)

The Hungry Sheep

If six sheep can eat a field of grass in three days, and three sheep can eat a field of grass in seven days, how long will it take one sheep to eat it? (From

G. F. Chippindale, who posed the ladders problem and is now trying to find the answer.)

ANSWERS

Pay Day Problem: £2 = 480 pence; 2s = 24 pence; 2d = 2 pence; total, 506 pence or a multiple of 506. 506 = 23 x 22. Therefore, we get 19 men and the captain.

In the Parlour: The answer is quoted exactly from W. Johnston's letter: "The spider ascends to the ceiling diagonally to a point 5 feet 3 inches from the corner (he has travelled 1 foot 3 inches). Then he travels over the ceiling diagonally to 7 feet from the same corner on the side wall (8 feet 9 inches); descends diagonally to the floor to a point 7 feet from the corner of the end wall opposite his starting point (20 feet). The remainder of the journey, along the floor to the fly, is similar to the first part. The length of this journey would be: 1.3 + 8.9 + 20 + 8.9 + 1.3 = 40 feet."

Curiously, if the spider climbs 1 foot up to the ceiling, travels 30 feet straight across the ceiling, and 11 feet down to the fly, he travels a total of 42 feet.

Egg: From D.H.M. (Waipu) came the egg problem, which was printed with a misleading omission of the word "second" in front of the word "last" applied to the fifth sale. This was mentioned in our last issue. Now, from D.M.H. (Seddon) comes a working of the problem as it stood. He started Mrs. Brown off with 269 eggs, and reduced her in the stages to 135 eggs, 45 eggs, 22½ eggs, 13½ eggs, and 9 eggs. He secured this answer algebraically, starting with the equation A over 2 plus one-half equals A plus one over two.

And that, surely, will be found very annoying. D.M.H. notes: "The sale of half an egg is unusual."

Quite.

We just adore the furious letters readers write about this sort of thing.

Weights: He divided the bar into four pieces weighing 27 pounds, 9 pounds, 3 pounds, and 1 pound. This combination in various permutations would balance any weight up to 40 pounds.

Word Sum: Glenorchy.

The Cards: J. A. Reid (Glenorchy) supplies the answers:

JH	KD	QC	AS
KC	JS	AH	QD
QS	AC	JD	KH
AD	QH	KS	JC
and			
KC	QD	JH	AS
JS	AH	KD	QC
AD	JC	QS	KH
QH	KS	AC	JD

On the March: 24.02 miles

Market: 19 bulls at £5; 1 sheep at £1; 80 geese at 1/-.

Live Stock: Pigs 42/-; geese 7/-; ducks 3/6.

Anagrams on Hitler

To L.C.T.'s appeal for anagrams on Adolf's name, came the following responses:

O Hell Adrift  
A Dirt of Hell  
Dollar Thief  
A Droll Thief  
Filth Loader

(from Mac, Whangarei)

The Fair Doll    If All Red Hot  
If The Dollar    All Fired Hot  
Allied Froth    Doth Fill Ear  
Heard to Fill    Doth Fire All  
O It Fell Hard    Old Hair Left  
Hide, Fat, Roll    Let Hair Fold  
If He'd All Rot    Rill of Death  
Do Their Fall    Death or Fill  
Ride Tho' Fall    All Fried Hot

(from Jaya, Cobden)

The gentleman does not seem to be popular.

CORRESPONDENCE

J. Geddes (Temuka): You have made amends.

Beginner (Temuka): Eight smart ships? Marion and Lal (Cambridge): Reconciliation? I.E. (Hawera): Even miracles are possible on this puzzle page.

Nan: Your municipal engineer will tell you. Affection reciprocated.

Melchior (Tahunanui): Lauritz himself could do no better.

D.M.H. (Seddon): Perhaps Alice was easy, but you swallowed a pip.

T.M.C. (Mt. Albert): Next week the roses and the wine.

R.W.C. (and Melchior): Afraid we played an unkind trick on L.E. by omitting to mention that he quoted a small boy.

X.Y.Z. (Homeless): To-day would be dull if we knew what would happen to-morrow. Can't behave all the time.

Goldie (Nelson): Every answer correct.

H. G. Lambert (Taupo): Like Mr. Menzies and Australian Labour, we're not sure whether we're in front or you're behind. But we're suspicious, and require answers to be sure.

S.J.S. (Spreydon): Overjoyed.

S.T. (Timaru): It was A B H. Thank you.

R.W. (Homeless): Sorry, we've already killed the hare. As for the rest, we do readers the honour of allowing them the same powers of discrimination as ourselves.

L.J.M. (Timaru): Asks all those who tried the shunting problem (February 16) to try it after making a rule that the trucks may not be moved uncoupled.

A.H.B.A. (Westport): Blessed are the humble.

D.McD. (Timaru): It was.

R.D.J. (Ranfurly): The eggs were rather scrambled.

G. M. Williams (Kaiapoi): Afraid now that you are right. We were looking for some solution after the style of 1=0. Hope you enjoyed it.

L.C.T.: As an old customer, thanks all the same.

W. Johnstone (Morrinsville): Says "My mother has a daughter but I have no sister" would hold if the mother had been married twice and the statement was made by the son or daughter of her husband's first marriage. And, about passing trains, he contends that they have not passed until they have passed completely, so that their distance from a given point would not be the same.

E.J. alias F.J.F., alias MxZE (Napier): We have altered your dossier. May we have your finger prints?

(For an anagram "suitable to the times," this correspondent suggests making "New Zealand Listener" into "Eternalise New Lands.")

The Mac Skooshook (Ohura): We'll be havin' a speir at that for a wee bit first.

W. E. Body (Timaru): Lemons are too sweet. G. Collins (Morrinsville): G. Whiz! Answer perfect.

E.W.M. (Kati Kati): Our typewriter does better. Yours has been the most lucid debunk of the ladders.

J. Isaacson (Hikihiki): Pretty good. E.H.C. (Tokaanu): Apology accepted. Would like to see your new-old puzzles, but be kind.