

In Which The Critics Are Defied

TAKE one good quality pot. Remove the lid. Discard the pot. Retain the lid. Secure the uninterrupted use of one square table with a straight edge of good thickness. Be ready with a copy of a good dictionary, and one 2B pencil.

Place the lid on the edge of the table. Study the dictionary. Secure an adequate definition of the word "flange." Decide from this which part of the lid may be taken to correspond with the flange of a wheel. Define the word "rim." Decide from this which part of the lid may be taken to correspond with the rim of a wheel, or the running surface of a wheel. Place the running surface on the edge of the table with the flange over the edge. Drill a hole through the flange near the outer circumference. Through the hole place the point of the pencil. Turn the entire lid through two complete revolutions, taking care that the pencil marks the edge of the table as it comes round into contact.

Then write in and apologise

The flange of the wheel does go backwards, and we defy readers to make it go otherwise, unless they make the train go backwards, in which case the flange of the wheel would go forwards. And vice versa.

Two other items before we really get to work. To Sylvia, our thanks for the omitted address. When her

LIVE STOCK

A man buys pigs, geese, and ducks. If the geese had cost one shilling less one pig would have been worth as many geese as each goose is actually worth in shillings. A goose is worth as much as two ducks and 14 ducks are worth seven shillings more than a pig. And what does that matter?

— "C.K." (Homeless).

letter came we mantled rosily. To P.J.Q., our sincere hope that in Motueka they can grow Cox's Orange as sweet and golden and firm and melting and as unutter-

ably mouth-watering as they can in Central Otago. (That, readers, is a private matter, so excuse the mystery).

Now then . . .

ANSWERS

Refer to your filed copy of the issue dated March 1:

Down our Street: 72 yards.

One Was a Magnet: Place pieces of steel in water, floating on sticks. One will swing north and south, or place ends to sides alternately. Cut section of round peg as long as the square hole is wide. Fit in sideways.

Mr. Blimp: Intended to draw £7/12/6.

Six Smart Men: Thompson was pianist, Jones was architect, Harvey was lawyer, Babeson was engineer, Fish was author, Brewster was doctor.

MARKET

A man went to a fair to buy 100 animals with £100. Bullocks were £5 each, sheep £1, and geese 1/-. How many of each did he buy?—"Sunding" (Tohunanui).

The Green Funnels: Fifteen, or our ruler has not eleven one-inch markings and two ends.

Now then. . .

PROBLEMS

Pay Day Problem

The prince ordered his treasurer to pay his bodyguard. The treasurer opened the treasure-chest and found inside some sovereigns, shillings, and pence—a like number of each coin. No coins of other values than the three named were there.

The treasurer hesitated as though calculating, observing which, the prince demanded to know the cause of the delay.

"Well, sire, the money may not go round, and besides, the captain of the guard generally gets the pay of three men."

"Nonsense," said the prince. "The money will exactly serve, whether the captain gets the pay of three men or four men."

How many men, including the captain, were there in the prince's bodyguard? Our Own.

Diamonds

According to C.N.G. (Gisborne) a woman sent a diamond cross to a jeweller to be repaired. She noted that the number of diamonds counting from the bottom of the cross to the top, or from the bottom to the end of each cross piece, was nine. The jeweller retained two diamonds but the numbers by the same methods of counting were still 9. How was this done?

Word Sum

This one comes from J. A. Reid:

HEN
GOY
RCL

These letters represent the figures one to nine inclusive. They add up to 15 every way, horizontally, vertically, and diagonally. If they are placed in numerical order they spell a place name.

The Cards

From the same source, this one: Take the 16 court cards from a pack and arrange them in four lines of four each so that in each line, vertically and horizontally, there is the ace, king, queen, jack sequence with only one card of each suit in any line.

When you've managed this, rearrange the cards so that the diagonal lines will also conform to the rules.

In the Parlour

In a room 30 feet by 12 feet with walls 12 feet high is a spider, in the centre of one end wall, one foot below the ceiling. In the centre of the opposite end wall there is a fly one foot above the floor. What course will the spider travel to reach the fly, covering just 40 feet? He must keep on the wood surface all the way? — W. Johnstone (Morrinsville).

Weights

Smith (dear old ubiquitous Smith!) took over a country store but found there were no weights. He found a bar of iron which intuition or something else suitable told him weighted 40 pounds. He took it to the local blacksmith and

ON THE MARCH

A great army makes a train 10 miles long. A runner goes to the head of the army and back to the cook's wagon at a constant speed. But as he starts the army also starts, at a constant speed. By the time he gets back to the stew the army has travelled 10 miles forward. How far did he run?

"E.B." (Bluff).

had it cut into four pieces with which he could weigh any number of pounds up to 40. What were the weights of the pieces? — Trier (Christchurch).

CORRESPONDENCE

A. Smither (Christchurch): Your elucidation is expert.

Hugh F. Bradley (Kati Kati): Correct, correct.

Sunding (Tohunanui): Says the answer to the ladders-angles problem was 400 feet. Was that an extra nought, or does Tohunanui have wide streets. Other answers accurate.

P.J.Q. (Motueka): Provided our answers to Magnets and Mr. Blimp, and scored 100% in several others to make up for what he now admits was an error in stating the cyclist's average.

C.K. (Homeless): Writing this on 5/3/40, in eager anticipation of 6/3/40.

V.C.R. (Gisborne): Is also concerned about the Alfa Romeo, and asks us to inform J. B. Hogg that the dog will overtake the hare in 3.9/22 seconds, when the hare has travelled only 25 yards. So that's finally disposed of a very troublesome hare.

R.D.J. (Randurly): Wants to know (1) if a bullet is fired from a moving train what difference does the speed of the train make to the speed of the bullet; and (2) what happens when a railway trolley (supposedly impervious to destruction) strikes head on against a moving train? Does the trolley stop momentarily, he asks, and is the train therefore also momentarily stationary?

S.J.S. (Spreydon): The cricket club is in good hands, but you crock on the curtail cycle.

Gerald M. Williams (Kaiaipo): Says the problem about the ladders and angles is impossible. He supplies an argument, but we hold it until satisfied that the relationship of AX to AD is necessarily constant. We find it could vary a lot, but we're human, too.

A. H. Johnstone (Morrinsville): Appreciation reciprocated. The parlour problem will spin a web of worry in their brains.

Kupe (Glen Massey): Still in seclusion over the ladders, and Mr. Williams is making it more complicated.

Trier (Christchurch): Cricket and ages later. Thanks for the other.

W. G. Wareham (Dannevirke): The point on the flange can never touch the rail. If it did the train would go off the line. We are still defiant.

L.C.T.: This just to say we have not forgotten you.

Sylvia: It is framed.

A.M. (Sandringham): Afraid we never use books, but understand there are numerous publications. You should write to a good bookseller and so save us the delicate task of discriminating between publishers.

S.G.E. (Glenavy): We plead guilty, on both counts. You have been too persistent. Shall pass on the problems.

R.D.J. (Randurly): Only sixty-six and one-third per cent.

R.W.C. (Sumner): Not bad.

Schoolboy, aged 14 (Waimate): Matriculation this year? Good.

Marion and Lal (Cambridge): Wife right, husband wrong. Tut, tut! See above for bullets and trains.

L.C.T.: In a later letter, he solves his own problem about Mr. Blimp, but misses on the Green Funnels.

W.H.P. (Whangarei): Eight butts, but more boats. Legacy later.