

PUZZLES

MORE AND HARDER

LISTENERS who make no trouble about sending in four or five quarto pages of algebra to answer our more difficult puzzles have failed lamentably to respond to the simpler appeal of the puzzle page in the issue of February 2. We are unrelenting, however, and will resist the temptation to give the answers before readers do some work for themselves. But we might just say that the Horses problem *might* be impossible, that a butt smoked is still a butt, that a *caldron* or *chaldron* is a measure, and that our Nelson friend's thoughts of winter are most unseasonable.

The mail this week has been heavier than ever.

A good gloat to D. Young (Takapuna) who tried to put across the old one about the liars. We've had that one, good sir, and as punishment for not buying *The Listener* since it started will leave you to discover for yourself which issue contained that problem. Incidentally, our readers came pat with the answer.

Money for Drinks

J. C. Leslie (Auckland) is one among many with full marks for the word-sum and sends two interesting counter-blasts:

A man enters a pub with some money and says: "Give me as much money as I have in my hand and I'll buy a sixpenny drink." The man gets his drink and still has some money left. He asks the barman to do the same again—to give him as much as he has left. This done the man still has some money left. He repeats the performance but this time has none left. How much did he have when he went into the hotel?

Shuntings

The other is the first example we've had of the railway shunting type of problem. J.C.L. draws a main line with a loop. On the loop is a covered-in siding. Also on the loop are two trucks, A and B, A on one side of

Passing Trains

A train leaves Christchurch at the same time as a train leaves Ashburton. The Ashburton train travels at 40 m.p.h. The Christchurch train travels at 40 m.p.h.; that is, the train from Christchurch travels at 40 m.p.h. Which train will be the closer to Christchurch when they pass?

the siding and B on 'tother. Their positions have to be reversed, the motive power coming from an engine which is on the main line. The difficulty is that the engine is too large to get through the siding on the loop and therefore must work from either end.

"So get some matches and play trains," advises J.C.L.

Word-Sums

A crown of laurel to L. P. Lee for an excellent exposition of how to work out word-sums. The whole job is faultless. This corres-

pondent suspects trickery in the matter of the dog and the greyhound, but, as we've explained, it is all a matter of defining infinity—which is absurd. L.P.L. also saw which way the worm went, but some other correspondents missed seeing that the arrangement of the books would only give the worm a trip of one and a-half inches.

Home Made

From L.C.T. (Ettrick) come some home-made problems. He says that Mr. Semple had 499 carpenters building a new aerodrome and was nailing up the last piece of timber himself. The piece of wood was too short. "Oh, for another hand," he cried. How many employees were paid at the end of the day, not counting the Minister, and by how much was the last timber short?

Somehow, says L.C.T., they managed to finish the building, and on opening day Mr. Semple was tacking up some festive bunting in a spirit of co-operation. Here again he found himself short of material (import restrictions, we presume?) and cried out: "Oh, for another nail!" How short was the piece of cloth?

And we have one for Ettrick:

If there is a certain town in Otago with a population of 20 people, who would answer to the name of L.C.T. if it became known that

There And Back

A car leaves Wellington for Wanganui at 40 miles per hour and travels at that speed all the way. It returns at 30 m.p.h. over the 120-mile distance. What is its average speed?

one among them was an expert in complicated problems. Yes, L.C.T. also solved the drapery store poser, following his success with the bachelors and spinsters. He has manufactured another poser which will have to be held meanwhile.

Numbers

Commenting on J. A. Reid's proposition about £12/18/11, Ruth Collins says this is one of countless puzzles consisting of an apparently arbitrary series of operations chosen with the object of eliminating the number first thought of and giving a result known to the questioner, and always the same. Another common type is that involving a series of operations which gives a result which betrays to the questioner the number first thought of although this is not apparent to the victim.

Perhaps this will inspire some correspondents to invent and send in some examples which may be used by other readers for party entertainment.

Camels

Just to keep the roller rolling, Miss Collins asks: Two men had a wager as to whose camel was the slower, each allowing the doubtful distinction to his own beast. To settle the question they agreed to make a journey across the desert, the first to arrive at the destination losing the bet. After several weeks of dawdling both were tired of the arrangement, but determined still to be last to arrive. Fortunately, they encountered a wise man. They consulted him about speeding up the journey without prejudicing the result. His advice enabled them to finish the trip and decide the wager. What was this advice? Come on, you Aesops. . .

Green Cheese

Tom: The moon is made of green cheese.
Jon: Don't be silly.
Tom: The moon is either green cheese or it is not green cheese?
Jon: Yes. . .
Tom: You say it is not green cheese?
Jon: Yes. . .
Tom: That leaves only one possibility. It must be green cheese.

Bicycles

P. J. Quayle, of Motueka, remembers a racing cyclist who decided to try and establish a new road record over a certain distance. The course was a double journey over the same stretch of road. After starting, he met a strong head wind which held him back considerably so that he covered the outward journey at an average of 16 m.p.h. On the homeward stretch the wind was a great help, and he came home at 24 m.p.h. to average 20 m.p.h. for the whole distance. However, he had failed by five minutes to break the record. Some days later, when it was calm, he tried again, and managed to maintain the same speed outward and homeward. He covered the whole distance at 20 m.p.h. and broke the previous record by seven and a-half minutes. What was the distance?

Horses

From Nelson, F.W.K. writes to say that once upon a time a farmer died and left 17 horses to his sons Peter, James, John. John got one-half of the 17, Peter one-ninth, and James one-third. The lawyer gave each son his proper share without cutting up or removing any horse.

For talking about "our ridiculous puzzles," F.W.K. is summarily convicted of *lese majeste* and ordered to pay when the season permits the best apple he can find in Nelson, postage to be paid by himself. He will be permitted to ask Mr. Quayle's assistance if he can't find one good enough.

Every Mod. Con.

Putaruru has produced a prize puzzle from G.M.H. There are three houses, A, B and C. To each house must be supplied water, electricity, and telephone. All three services are carried by underground cable. The houses are side by side along a street frontage and the services come from the street. The contractor has agreed to tap the mains and carry the cables from all three services into all three houses without crossing one cable with another. How does he do it?

Up our sleeve for a later issue: one from W. R. Hamer about a reporter.

Get busy. . .

PROTEST FROM POONA

Puzzle-Puddler,
"The Listener,"

Sir,—J. B. Hogg is simply exploiting his nuisance value. We all know that space is infinitely subdivisible, but that isn't the problem in the case of the hare and the tortoise, or whatever it was. We are not concerned with the distance they travel unilaterally, but with their relative speeds. Put it this way. If there is a Messerschmidt bomber 10 miles away, flying at 190 m.p.h., and a Hawker Hurricane takes off and chases it at an average speed of 200 m.p.h. (oy, oy, Rule Britannia!), then the Messerschmidt, as even the daily papers can tell you, will be handing in its dinner pail in one hour.

Yours, etc.,
Poona.

P.S. I still don't think the flanges of the wheels raced back to Auckland. Try it out on the table with a penny and a piece of chalk.

TO CORRESPONDENTS

L.C.T.: Hope to be able to use the puzzles next week. Meanwhile, investigating.

"A Humble Boiler Attendant" (Westport): We begin to understand the significance of "wheels within wheels." Hope to blazon your communication on the page next week, when all engineers may be able to consider themselves rebuked.