

## PUZZLES

# WHEN GOODSHOT USED A CODE

THIS week a frightening supply of puzzles has arrived. Old correspondents, and some new ones, have sent in sheet after sheet of material for headaches. Evidently Mussolini does not matter so much after all. However, these will be acknowledged and used as opportunity offers. Before that, consider the case of Colonel Goodshot, and His Code:

## PUZZLES

### Goodshot and His Code

Colonel Goodshot was a big-game hunter, known, respected, and feared throughout the jungle by all its inhabitants, not so much because of the accuracy of his shooting, but because his fiery breath shrivelled the vegetation, and thus reduced available food supplies. Goodshot, in fact, was worse than a blockade, especially when his gout bothered him. More fortunate than usual, on one of his expeditions, he captured a creature which he decided to present to the zoo. Before this event Goodshot had always stalked his prey, and come upon them unseen. Their first warning would be a shell zipping through the branches some feet away from them. Goodshot quite failed to realise that this was the wrong method. On the day this beast was captured he stubbed his gouty toe on the dummy egg of a buzzard's nest, swore loudly, and was seen in full view by the beast. That was sufficient: paralysed, the creature was captured easily by Goodshot himself. With his genius excited by this event, Goodshot decided to cable the zoo in code, thus:

:3 9 :2 :4 :2 :3 :6 9 2

This caused the zoologists no end of trouble, until one old fellow found the key to the code. What animal was it? —(Problem from R.G., Waihi).

### Trucks

Two men are sent out gravelling with trucks. Arthur takes five minutes to fill a truck. George takes ten minutes to fill a truck. How long does it take the two men to fill three trucks? —(Problem from L.W.R., Nelson).

### Digits

Find a number, the last two digits of which, when doubled, are equal to the square root of the number. —(Problem from R.C.J.M., Invercargill).

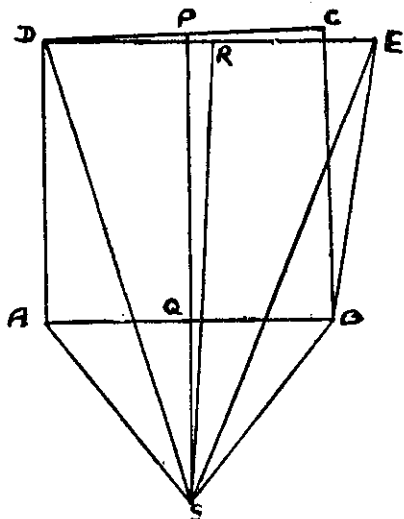
### Spiral

A shaft, or column, 200 feet high, with a circumference of 16 feet 8 inches, is wreathed in a spiral garland which passes round the column five times. What is the length of the garland? —(Problem from R.C.J.M.).

### Geometry for Alice

D.P., of Gore, sends this sample of the work of Lewis Carroll, famous as a mathematician as well as the author of the Alice stories and others. When Queen Victoria read Alice she asked to be given his next book. It happened to be a mathematical treatise. However, here is the problem:

ABCD is a square and BE equals BC. PS and RS are perpendicular bisectors



of DC and DE, meeting at S. Join S to A, D, E and B. In the triangles AQS and BQS, AQ equals BQ and QS is common; and the right angle AQS equals the right angle BQS. Therefore AS equals BS.

Similarly in the triangles DRS and ERS, DS equals ES.

Therefore, in the triangles ADS and BES, AD equals BE, DS equals ES. AS equals BS. Therefore the triangles are congruent. Therefore angle DAS equals angle EBS. But angle QAS equals QBS, therefore, by subtraction, DAQ equals EBQ, or a right angle equals an acute angle.

Readers are required to find the fallacy, if any, in that proof.

## ANSWERS

(See issue of November 1)

Census: As Ajas did not send an answer, we use XGT's, for which no responsibility is accepted, although we must admit that this correspondent has the knack of driving the nail:

(A) William 23 years old, Jan. 22.

(B) John 9, Mary 6.

(C) Frank 7, Agnes 2.

Sylvia agrees with that.

For Golfers: Idolatry, Dilatory, Adroitly. —(Problem and answer from L.W.J.S., who is actually G.W.G.S., when you have looked at it several times. He comes from Tauranga, where the lemons grow).

## THE LISTENER CROSSWORD

### Answer to (No. 32)



X Marks the Spot:

1011.1008  
625)631938  
625  
693  
625  
688  
625  
630  
625  
5000  
5000  
....

(Problem and answer from R.G., Waihi)  
Bacchus in Boloria: XGT says 9.97 per cent. D.P. says 9.96 per cent. Rob says 10 per cent. There's boloney somewhere. —(Problem from R.G.).

Shoe Swindle: As many shoes as there were people in the town. The one-legged people required one shoe each. One half the remainder went barefoot; so that all the remainder would need one shoe each for the remainder to have two shoes each, so to speak. —(Problem and answer from Rob, who is safely out of the way at Ahipara).

Another Train: Four-and-a-half m.p.h. and six-and-three-quarters m.p.h. —(Problem and answer from A.G.T. Picton).

Filling the Cistern: 15 and 12 minutes —(Problem and answer from E.A.C.).

## CORRESPONDENCE

So that there might be plenty of space for puzzles on The Page this week, to make up for last week's enforced scarcity, the PP has to make briefer acknowledgments than he would like to. Next week he will endeavour to cover all the points raised.

X.G.T. (Kopuawhara): Sent two foolscap feet of puzzles and another letter carrying answers up to his usual standard.

L.W.R. (Nelson): Is still finding time before the raspberries ripen to help things along.

R.C.J.M. (Invercargill): Has sent some crackers. Readers will be given every chance to explode them in due course.

Taranaki: Talks about murder and in the same letter says he has no fault to find with the programmes. That's tolerance.

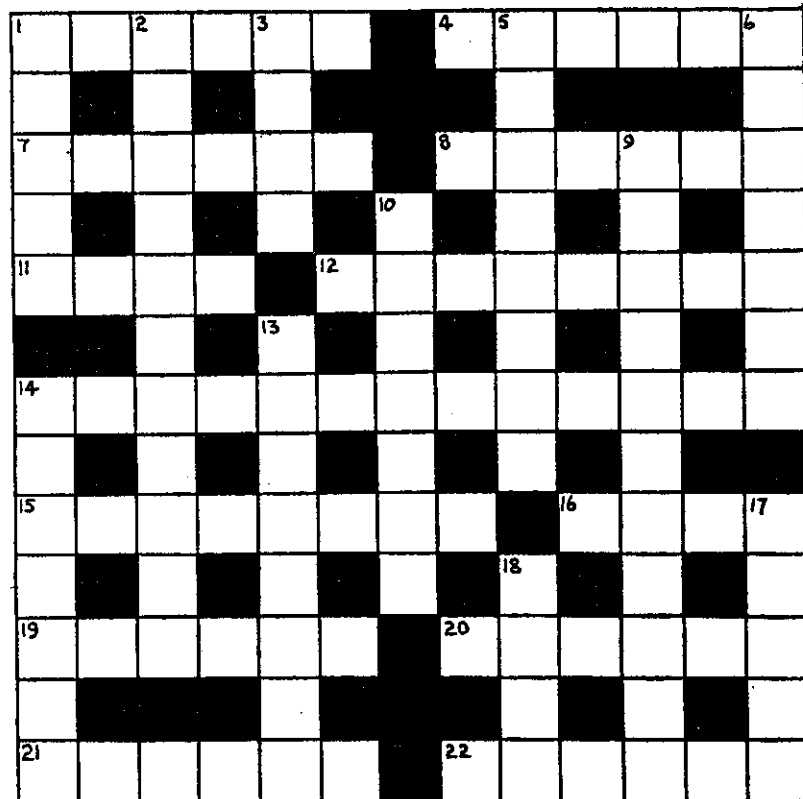
D.P. (Gore): Is a new correspondent whose screed was as interesting as it was welcome.

A.G. (Palmerston North): Has sent a very neat problem in maths, and another in relationships. You shall see.

Rob (Ahipara): The usual cheery letter. We particularly liked the bit about the boy who came to borrow Rob's old pants on November 5 because they looked more like Hitler than his father's. Good answers also, and a good puzzle. Thanks.

Sylvia (Wellington): Has her mind on elections these days and the result will surprise readers shortly.

## The Listener Crossword (No. 33)



### Clues Across

- May be turned as a means of discomfiting an opponent.
- The B.E.F. is disrupted by a falsehood but the result is confidence.
- Blames, in a way.
- Study a mongrel in order to come to an agreement.
- To go for one is not to attack one.
- A dint in the lute?
- Cripple by time (anag).
- Trim peas for Archbishops.
- A drab poet?
- They may all go in, but one at least is not out.
- Thread.
- Shanks.
- I spent in order to get this.

### Clues Down

- A wet form of aster.
- Book lover.
- Were changed into a pitcher.
- It gets so confused in megalomaniacs.
- A day with the R.A.F. produces a notable physicist.
- Bit no cereal (anag).
- Perhaps you did this because you had seen red.
- Men on tar as a decoration.
- One thousand spires have an effect.
- A finger or a toe.
- This may be a pest, even if in the right direction.