

COMPLICATIONS IN THE CELLAR

THERE is a good deal of hard work in store for puzzlers this week; but they may retire at odd moments, if they wish, into the cellar, where the complications are of a more convivial nature. D.P.'s measures problem seems to be just the thing for a wet week-end.

Here they are:

PROBLEMS

The Hole was Deep

A man was digging a hole when a friend came along and asked him how deep he proposed going. The man's peculiar reply was this: "I am five feet ten inches in height and I am going twice as deep and then my head will be twice as far below the ground, as it is now above the ground." How deep would the hole be when he had finished? —(Problem from R.C.J.M., Invercargill).

Brickbats

When a boy sits on the short side of a see-saw 16 bricks are required to balance him. When he sits on the long side, 11 bricks are required. If a brick weighs three-quarters of a pound and three-quarters of a pound, what is the weight of the boy? —(R.C.J.M. is also to blame for this one).

Rope

There are two posts, seven feet and five feet in height. A rope is tied to the top of each and each rope is tied diagonally across to the foot of the other. At what height above ground do the ropes intercept and how far apart are the posts? —(R.C.J.M.).

Measures

A man has two ten-quart vessels full of wine and a five-quart and a four-quart measure. How can he put exactly three quarts in each of the measures without wasting any wine? — (Problem from D.P., Gore).

More Geometry

A man was sent to measure a rectangular field, with sides AB, BC, CD, and DA. He measured every side carefully, and the diagonal AC as well. Then, to make additionally sure, he made a line BF at right angles through AC, measured BE, and EF, and to make quite sure, took the length of FC as well. After all this care, he was unlucky enough to lose his notes. He could remember only that the diagonal AC was 15,000 feet long, and that every measurement he had taken was an integral number of feet. This was still not enough; but he remembered also that BE was not more than 5000 feet. This was sufficient for him to work out the size of the field and to prove that there could be only one solution. Find the lengths of the sides and prove your method. —(From A.G., Palmerston North).

The Monkey and the Rope

This puzzle was one of the first used on The Page when it started last year. Since then we no doubt have many new

Oh, Law!

"Taranaki," of Taranaki, poses a problem for readers in the police force. He says it is a question put to entrants for the Metropolitan Police Service in London. A man was sentenced to be hanged for murder, but the sentence was changed on appeal to life imprisonment. He served 20 years and was released. Soon after he met the man whom he was supposed to have killed. He became so angry that he then killed him. Bearing in mind that no man can be charged twice for the same offence, what happens to him now?

readers. A.G. has sent it in and we are repeating just for the sake of seeing what happens: (This, by the way, is another problem that comes from Lewis Carroll):

A rope hangs over a pulley, with a weight on one end and a monkey on the other. The weight of the monkey exactly balances the weight. What happens to the weight when the monkey climbs up the rope?

Bad Boy

A boy multiplied a number by 467 and obtained the product 1925817. The figures 9 and 7 were wrong. What should the answer have been? —(From X.G.T., Kopuawhara).

Democracy

In a division in Parliament, if the number of members for the motion had been increased by 50 from the Opposition, the motion would have been carried by five to three; but if those against the motion had received 60 from the Government Party, the motion would have been lost by three to four. Did the motion succeed and how many members voted? —(X.G.T.).

Supply Department

Some of those others look easy and are hard. This one looks hard but is easy:

Eggs were needed for the men in camp and there were several poultry farms in

THE LISTENER CROSSWORD
Answer to (No. 33)

T	A	B	L	E	S	B	E	L	I	E	F
E	I	W		G							A
A	M	B	L	E	S	C	O	N	C	U	R
R	L	R	S	T	E						A
S	P	I	N		U	N	T	I	T	L	E
	O	O	E	S	E						A
I	M	P	E	R	C	E	P	T	I	B	L
M	H	N	R	S	R						
P	R	I	M	A	T	E	S	B	A	R	D
R	L	M	D	S	T						I
E	L	E	V	E	N		S	T	R	I	N
S		N		E	O						I
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the district. An officer wrote on a pad for a minute or two. "Here," he said to a man waiting with a car, "go to the farmers whose names I have written down and collect the number of eggs mentioned on the paper, from each. It is now 9.30 a.m. and I expect you back by 12.30 p.m." The man carried out his instructions and returned on time, with 1079 eggs. What was the number on the paper? —(From Rob, Ahipara).

ANSWERS

(Refer to issue of November 8)

Obscured Palindrome: DEIFIED.
—(From Rob).

More About Draughts: Several correct answers have arrived. Puzzlers should manage that one by themselves.

Tail Tally (see issues of November 8 and October 25): P. Mora says 5,291 cats killed 21 rats each. —(Problem from G.B., Mt. Eden).

CORRESPONDENCE

P. Mora (Tucatus): Is a new correspondent who arrives with topical aptness to present a problem about betting. Sorry its turn will not come until the Grand National is well and truly won.

Laurence Hayston (Christchurch): Have we had that one? Must check before using, but the PP hopes its eligible.

C.W.C. (Birkenhead): Answers More About Draughts and notes that this puzzle came out first about 40 years ago.

K. Newport (Kokere): Answers Tail Tally correctly and reports that "in dividing 1,111,111 by all odd numbers starting from 13 we missed very few until we reached 239."

G.B. (Mt. Eden): Answers Tail Tally, which he set himself on October 25. He says 239 cats killed 4649 rats each. If it would interest readers, G.B. says the number 999,919 substituted for 1,111,111 "is also a bit of a puzzler."

J.B. (Jackson's Bay): Reports that The Listener comes in handy in South Westland, where settlers have to amuse themselves. He sends the problem about the donkey in a circular paddock. Sorry, we've had it before. The calculus works it out, so J.B. should get a P.W.D. surveyor on the job. There were plenty down there the last time the PP was in the district.

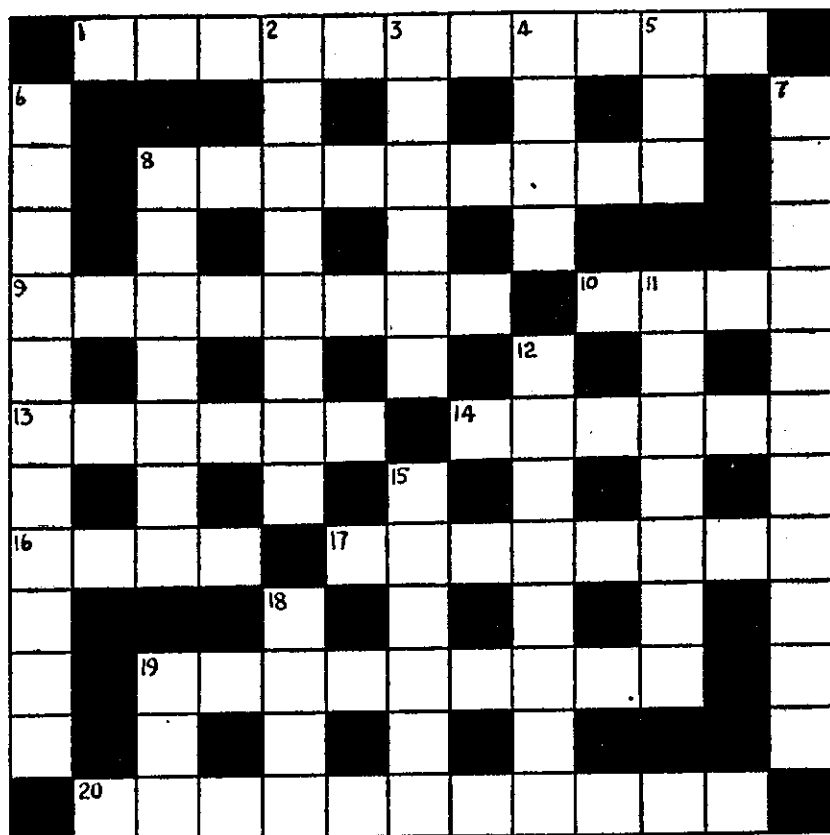
X.G.T. (Kopuawhara): Notes that the uncle concerned in Census was a man worth cultivating. "William and Jane are even now receiving useful presents of £45 and £43 and have to their credit £529 and £484."

L.W.R. (Nelson): Some of those you sent we have used before. If you like measures problems, try the one on The Page this week.

R.C.J.M. (Invercargill): Still swimming through your last lot.

D.P. (Gore): Answers the problems mentioned by Ajas (see correspondence section, October 11). "The mid-ordinate would be 32.14," says D.P., "and the dog's run was 353.01 yards."

The Listener Crossword (No. 34)



Clues Across

- I sang to ants. (anag.)
- Plundering from a medicinal pellet growing old.
- The gal drags out her best clothes.
- Part of a golfer's vocabulary.
- Consuming a mixture of the Cup that Cheers and Mother's Ruin.
- Stick these into your horse to make it go faster, but they themselves may become slower.
- Conduit.
- A long gin produces a knot on a nerve.
- An allotropic form of carbon.
- I resent a lid.

Clues Down

- Ian's role is to make aeroplane parts.
- Fruit from an ogre.
- Look anyone in the eye for this flower.
- Pull a violin string backwards.
- A girl sneer'd (anag.).
- Remote pains play the part.
- Easily moulded.
- Sob like a tapering stone shaft of rectangular section.
- Gin on tap—this is very moving.
- Riffraff.
- The beginning of ambition.
- Perversion of the truth.