

# CEASE FIRE!

ON page 13 of *The Listener*, October 27, 1939, this page was born. It started as an article on competitions, and the element of chance in most of those run for money. Decorating the article were two or three problems remembered by the author from winter evenings in isolated parts of New Zealand.

The response astonished the staff of *The Listener*. All our readers seemed to want to write to the Puzzle Editor about puzzles. They sent new ones in and answered or argued about all that appeared. A good deal of the interest in the page was probably personal. The Puzzle Editor was himself such a complete dud at mathematics that he came to be called and addressed through the mails as "The Puzzle Puddler." He was, is, and will be; but after one or two more issues of *The Listener* readers will no longer have any opportunity to correct his idiosyncrasies in print.

Puzzles appearing on *The Page* today will be answered next week. If it is not possible then to clean up all the acknowledgments that may be necessary, the PP will leave them behind (when he goes into military camp) to be printed later.

This preliminary warning is given so that puzzlers may cease fire when the armistice is sounded.

The PP makes his farewell not without a suspicion of sentiment. His mentors have been throughout most considerate of his inability to appreciate their brain children. They have been enthusiastic in their support and kind in all their dealings with him. They have made his task relatively easy by supplying him with material and never demanding too insistently that he should personally digest it all. Once or twice, when the international situation has been black, they have neglected to write to him; but for the most part they have maintained a steady stream of correspondence through all those months. For many of them the effort required must have been very great indeed. They wrote page after interesting page, tirelessly; and it was always the PP's greatest regret that more space could not be given to their writings.

Perhaps *The Page* may shortly be revived in some other form. Perhaps not. Meanwhile, the PP hopes that enthusiasts will take what comfort they can from the thought that they created a feature which had no precedent and no equal in any publication we know of anywhere; and from the even more interesting thought that, in one case at least, it will be the Sergeant who doesn't know the answers, and not the rookie.

And so, as Pepys said, to bed: "I with my boots on."

## PROBLEMS

### The Monkey's Age

Although we do not want to start a long argument with the cease fire sounding, this problem, sent by R.C.J.M., is irresistible, in spite of the fact that it

has been used before. It was one of our first and we think it really is worth reproducing:

There was a rope hanging over a pulley with a weight on one end and a monkey of equal weight on the other. The rope weighed four ounces per foot. The age of the monkey and the age of the monkey's mother were together equal to four years. The weight of the monkey was as many pounds as its mother was years old. The mother was twice as old as the monkey was when the mother was half as old as the monkey will be when the monkey is three times as old as the mother was when the mother was three times as old as the monkey. The weight of the weight and the weight of the rope was half as much again as the difference between the weight of the weight and the weight of the monkey. What was the length of the rope?

### Wheels

The front wheel of a carriage makes six revolutions more than the back wheel in 120 yards. If, however, the circumference of the front wheel is increased one-fourth, and that of the back wheel one-fifth, the front wheel makes only four revolutions more. What is the circumference of the wheel? (Problem from C.B., *Orangapai*.)

### Tanks

Two tanks, of 60 gallons (A) and 30 gallons (B) capacity respectively, are connected by pipes. Both are closed at the top and empty. Water is pumped into A through a pipe entering it at the top and with a flow of 12 gallons per minute. From A the water runs out of the bottom to enter B half way up through a pipe that carries seven gallons per minute. From the bottom of B it flows out through a pipe carrying two gallons per minute. How long before both tanks are full? (C.B.)

## ANSWERS

(See Issue of December 13.)

**Rope Trick:** L. Wilson was clever enough to suggest that Goodshot's Code (November 15) meant "Dromedary"—a fact confirmed by T.M.C., of Mt. Albert—but he has not yet come around

## THE LISTENER CROSSWORD (Answer to No. 38)

B	E	R	C	H	T	E	S	G	A	D	E	N
A	I	O		O	E							
R	A	B	I	E	S		U	S	U	R	E	R
R		S	P	P	R	A						
E	L	B	A		B	E	C	O	M	I	N	G
L	O	S		N	D	N	G					
O	W	H	E	E	D	L	I	N	G	E		
R	L	N	A	N	E	D						
G	R	E	E	T	I	N	G		B	R	E	R
A	G	J	T	T								
N	U	G	G	E	T		H	U	B	B	U	B
	E	N			N	E						
M	E	D	I	T	E	R	R	A	N	E	A	N

to sending us the solution of this problem. It is expected that readers have not yet been able to assemble the necessary equipment. Meanwhile, C.C.H., Invercargill, suggests that the prisoners jumped overboard.

**Harvest:** Yes. 46,620 sq. rods. (Problem and answer from R.C.J.M., Invercargill.)

**Money Box:** 16. (Problem acknowledged to X.G.T., but our check discovers E.A.C. as the author. Apologies to both.)

**Sharpeners:** 39. 143. 100 bushels (Problems and answers from A.E.V.)

**Heads and Feet:** 22 birds and 14 animals. (Problem and answer from R.G., Waihi.)

Code:

HOWARD

JONES

MACGREGOR

MURPHY

SLDZIW

QLMVH

NZXTIVTLI

NFIKSE

The code was obtained by writing out the alphabet the proper way and then underneath it the alphabet in reverse. For their code, the members then used the reversed letters in the positions corresponding to the proper letters of their names. (Problem and answer from Harry Davey.)

## CORRESPONDENCE

C.M.C. (*Kawa Kaka*): Sends this word pyramid, which complies with the rules:

P  
Pa  
Pat  
Pate  
Plate  
Palate  
Palpate  
Palpates

We have already used the other problem sent by this correspondent; but thanks.

C.B. (*Orangapai*): As you have seen, your excellent puzzles have been appreciated. The fish pond poser we have had before, called "The Donkey and the Rope." It is solved by using the Differential Calculus.

T.M.C. (*Mt. Albert*): Another letter which is worth more space than we have at present. Its turn will come.

R.C. (*Christchurch*): Asks puzzlers to fill in the blanks: "The \_\_\_\_\_ surgeon was \_\_\_\_\_ to operate because he had \_\_\_\_\_." And asks us to endorse Thid's remarks on mountaineering and yachting if we ever come across the gentleman. We do, and shall.

P. Mora: With justice, still demands a reasoned explanation of the fallacy in the bar and totalisator problems. More about them next week.

The main body of December's correspondence will be covered in a general review before *The Page* dies finally. After that, readers may be able to persuade the Editor to print an occasional brief comment on matters logical and mathematical.

## The Listener Crossword (No. 39)

(Constructed by R.W.C.)

1			2	3				4		5		6
			7									
8								9				
							10					
		11								12		
13										14		
15								16				
								17				
18							19					
						20						21
22												
24												

### Clues Across

- Bid me shave (anag.).
- Rise round an M.P. with a silly smile.
- New ones sweep clean.
- Palings in an earlier guise.
- An exclusive fish?
- Value for taxation.
- Adheres.
- A singing Star in a whirlpool.
- Lies with limbs flung out.
- Be sure this is the region between Earth and Hades.
- Organised games suffer a reverse.
- Unseen cats provide food.

### Clues Down

- Domed recess.
- I'd a smile for this belief in perfection.
- Nothing less than a heron, but a heron none the less.
- Musical instruments from Lil's cool oven.
- Presides in a different form.
- Bars involved in a sad mess—but the proper place for this is an embassy.
- One or some taken at random.
- See, Carl's negligent.
- Second largest of the four great oceans.
- Pat may be quick to learn.
- A trick found in 22 across.
- Catch a glimpse of a twisted Gaelic river.