

PUZZLES

AROUND THE CHESS BOARD

THIS week's award for distinguished service goes to another of those expert puzzlers from Motueka.

This one has answered the chess-board problem set two weeks ago by F. D. Blackburn. He was, in fact, the only correspondent to send an answer when the page was made up last week.

Other puzzles which seemed to reduce puzzlers to impotent silence were R.G.'s, also in that issue. His answers are given here:

ANSWERS

(See issue of June 28).

Toss-Up: Exactly 63 out of 256. (Problem and answer from H.G.L.).

House Numbers: Working with small numbers, it will quickly be found that the house whose number remains unchanged is always one less than a multiple of 4: i.e., of the form $4n-1$; and the number of houses on each side $3n-1$, or both sides, $6n-1$. Hence the number of houses in the street was 232. (Problem and answer from R.G.).

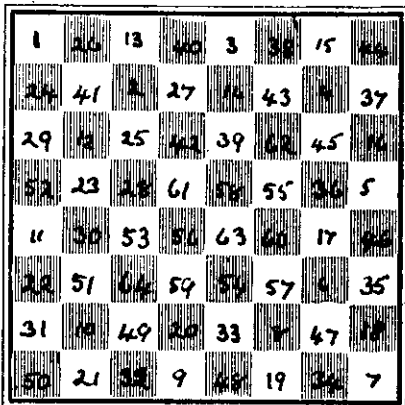
The Book: This is a question of Progression. To find the sum of any number of pages, add the first and last page numbers and multiply the result by half the number of pages. Apply this intelligently, and it will soon be found that the book contained 288 pages, and that Mr. Jones stopped at 203. (Problem and answer from R.G.).

The Chain: Instead of cutting additional links, the smith cut links in one of the five pieces of chain and used them to join the other four. (Problem from Jack May).

Cipher: He wrote to his sweetheart:

You sigh for a cipher but I sigh for you, any cipher you sigh for in envy I view. If you are serious why then I know, you'll emit sigh for sigh for I sigh for you so. (Problem and answer from P.J.G.).

With the Chess Board: With an answer to this problem, L.G.L. (Motueka), suggests the inclusion of real chess problems on The Page. Afraid we cannot be satisfied that the demand would justify this, but best thanks to the correspondent for his useful answer to the interesting problem set by F. D. Blackburn. It was required to move a knight over the board to cover all squares while retaining the limitations making the knight's progress, as usual, two squares at a time by one move horizontally or vertically and one move diagonally. This is the solution from Motueka:



Condensed Crossword (see issue of July 5):

GNUS
ROPE
ANON
BENT

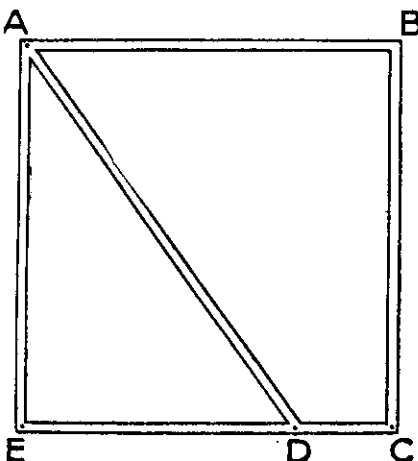
Match Game: Nobody wants to play. Why no answers to this?

PROBLEMS

Who Wins?

Sprinter challenged Flasher to a running match in the field represented by this diagram.

Flasher was to run direct from E to C and Sprinter along the path from A to D and thence to C. The field is



10 acres in extent, and the distance from D to C is 55 yards. Each runner ran at a uniform speed.

When the race took place, Flasher was 15 yards ahead of Sprinter when the latter reached D. Who won the race and by what distance?

Condensed Crossword

(All words are of four letters)

Clues Across:

First cousin to wear in the cliche.
First cousin to hounds.
A lady's name is part of an eye.
Children write on them but not with an E.

Clues Down:

First cousin to that.
A title which does not entitle a wrestler to lord it over lords.
Give an Italian the air.
Usually enjoyed in peace.

Cablegrams

All the words referred to below should end in the word "cable." For example, the "feasible cable" would be "practicable." What would these be?:

The mean cable.
The unalterable cable.
The friendly cable.
The faultless cable.
The inexorable cable.
The suitable cable.

Correspondence

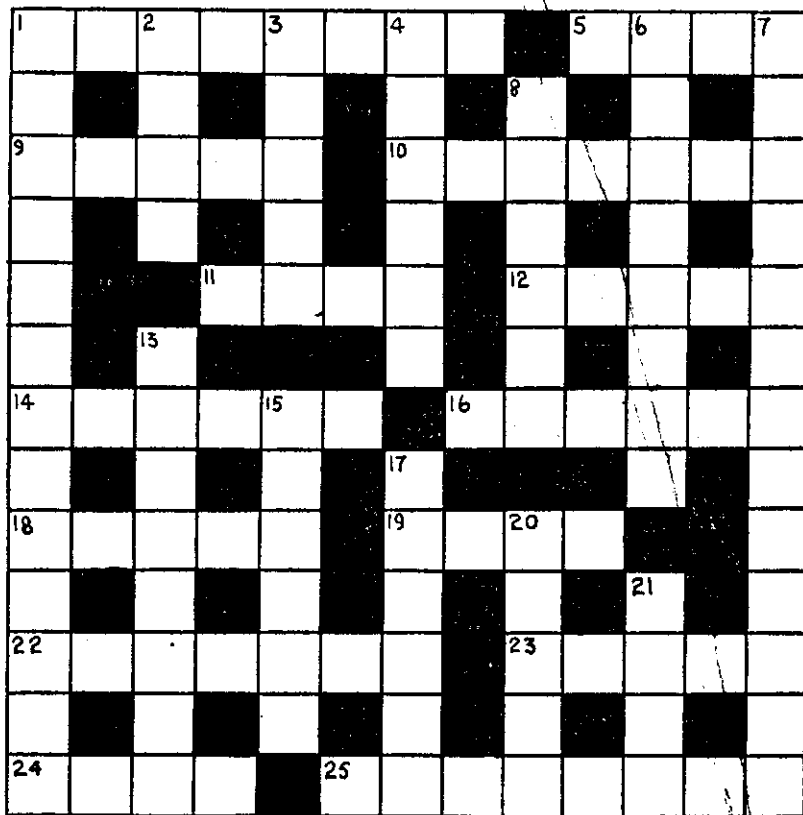
Prime Numbers

S.G.E. (Glenavy): Says that H.G.L.'s formula (see issue June 28) was quite correct. However, he was not so much interested in H.G.L.'s knowing how to use it as in knowing how he got it. Did he discover it himself, or did he consult a text-book of Higher Algebra? If he really worked it out himself, then he should try Fermat's Theorem: If n and p are any two integers, then the number given by n squared by p minus n is always an exact multiple of p , if, and only if, p is prime. Let him concentrate on this, says S.G.E., for six hours without looking at any book. "I would be very interested to learn how far he managed to get in that time."

The LISTENER CROSSWORD (Answer to No. 14)



The Listener Crossword (No. 15)



Clues Across

- For his treachery he was recently removed from the Order of the British Empire.
- The name of Scarlett's home in "Gone With the Wind."
- "This — bird beguiling My sad fancy into smiling." (Poe).
- "Come the three — of the world in arms, And we shall shock them." (King John).
- One of Epstein's statues changes into the villainess of the Bulldog Drummond stories.
- Minute particles in defensive ditches.
- This is longer than it is broad.
- Te Ari and I, very wet, come from near Dunedin.
- A wanderer from the reverse of the first name of the author of "My Wife Ethel."
- Friends are to be found in these mountains.
- No dirge for this although it is disregarded.

- Useful when 7 down has been committed.
- Turn a garment for a pen-name sometimes found on the Children's Page.
- Just the thing for me in camp.

Clues Down

- A queer nation is involved in this inquiry.
- Money is made into an object of worship.
- Relay in a stratum.
- Recant in confusion; the result is drink for the gods.
- Eat scone. (Anag.).
- At Assisi Nona gives rise to a murder.
- A drama of the seas.
- A young horse and a Chinese dynasty combine in this bird.
- Drains give you the lowest points.
- The game may not be worth it.
- "They do no more adhere and keep pace together than the hundredth — to the tune of 'Green Sleeves.'" (Merry Wives of Windsor).
- The beginning of discord.