WHAT'S ON WEEK ENDING 22 FEBRUARY 1908

OUR NEW COMPETITION

THE MURDER IN X. STREET Chapter II

We continue our new competition, and offer a prize of \pounds 5 to the successful competitor, in addition to the regular weekly prize of 10s. 6d. What you have to do is read the story and send in your solution of the problems propounded in the course of the narrative.

To the competitor who sends each week the best and clearest solution we will award a sum of 10s. 6d. All entries for the competition will be kept by us, and when the series is concluded we will send to the competitor whose replies have won most marks during the series the sum of $\pounds 5$.

Some of the problems are very difficult, but competitors are not expected to solve them all. *Answers may be sent in at any time, not necessarily week by week.*

Rules—Competitors must attach to their replies the coupon to be found on the outside top corner of the front cover.

Note.—This coupon will only be found on purchased copies of WHAT'S ON, as it is purposely omitted from all copies suppled to hotels, restaurants, clubs, etc., to prevent mutilation.

Competitors should write as clearly as possible, and must send their full name and address with each reply.

The Editor's decision is final.

No employee of WHAT'S ON is allowed to compete.

Address your replies to Editor, WHAT'S ON, 32, Essex Street, Strand, W.C., and write "Competition" on the top left-hand corner of your envelope.

The competition for week ending February 8th was won by Mrs. F. R. Cox, 91, Merton Road, Wimbledon

THE MURDER IN X. STREET. Chapter II.

By this time there was quite a crowd. In fact, on looking round him, he saw no less than forty people who stood in a circle; one of them was his old friend Josephus Jones. "Somebody," he said, placing himself in the rank, "had better go for the police. I would suggest that we send every third man—starting with you, sir!" (addressing a stranger distinguished by his height)—"until all have gone but one, who shall stay and keep watch." They agreed.

(Of course his real intention was to secure a private interview with Josephus Jones. *How did he place himself and Jones so as to secure the result?*)

"Jones, old chap," he said, "while we are waiting, lend me a hundred pounds!"

"Gladly," replied his friend, "if, using the nine digits—1, 2, 3, 4, 5, 6, 7, 8, 9—each once and only once, you will mention four mathematical expressions whose sum is 100."

Lascelles complied and pocketed the money, just as the detective-inspector strolled up.

"You're drunk!" said the detective-inspector.

"I am," admitted Lascelles, "but you are more so." [Explain this allusion after solving 8.]

"You know me, then?" said the surprised official.

"I do," said Lascelles; "your name has six letters, but what value have they?"

"The usual values," returned the inspector. "A is 1, B is 2, and so on, up to Z is 26."

"Why, then, surely the sum total is equal to twice the square of the first added to twice the difference of the first and the fifth?"

The inspector admitted that it was so, and similarly added that the third and fourth were equal, and equal together alike to the sum of the first and last, and to the first multiplied by the square root of the difference of the second and the fifth, just as the second less the first was to the fifth as the last to the first.

For the benefit of this gentleman," said Lascelles, "Let us add that the sum of the second and the fifth exceeds the square root of the fifth by 1."

"I don't tumble," growled the dastard; who is he?"

They ignored him.

"But whom have we here?" asked the inspector. "I will proceed to seek for traces of the victim's identity."

In the old woman's card-case he found a visiting card on which were nine letters.

"Who is she?" asked Lascelles.

"I daresay you would like to know, young man. Here is a hint: if I place a suitable letter between the first and the sec-

ond letters on this card, I get a word of three letters meaning to spoil; between the second and third with an 'ound at its 'eels (for the inspector was a little slack with his aspirates) is to make a big noise; between third and the fourth, and I get a word meaning to droop heavily; between the fourth and the fifth, force. I place, as before, a letter between the fifth and sixth, add a barb thereto, and obtain a most valuable drug; a letter between the sixth and seventh, and I get a receptacle for human remains; between the seventh and eighth, to assent; between the eighth and ninth, a period of time."

"What!" said the thief; "all words of three letters?"

"Yes."

"Then I'll run and report the death and earn a "fiver." This murder is going to make a stir, I can tell you." And off he went.

He was rather hampered at first by his pet flying-pig. This animal—fast enough when he got going—could only move an inch in his first yard, two inches to his second yard, four inches to his third yard, and so on. It was exactly 200 yards to the newspaper office. On arrival he looked round for his pet, but could not see him. "Where in goodness," he exclaimed irritably, "is that pig got to?"

Where, I wonder? The readers of WHAT'S ON will tell us.

Another annoyance was the rudeness of the office-boy, who refused to receive him without these silly riddles being answered. What newspaper proprietors remind one of:—bloodmoney, the heir to a barony, Mary, expensive mud, the adverb fundamentally, reddish cindery-coloured?

Lascelles was, however, easily able to answer these questions. *Can you?*

The Editor was overjoyed to hear of the murder. "Just what we wanted to brighten us all up!" He smiled with all the innocent happiness of a readily-pleased child. "I only wish it were two!"

"It is two," said Lascelles. "You said 'one' just now!" "Two, I say—and I'll prove it." "What? Two is the same as one? "Yes. Let a = 2, b = 1, and $c = 1\frac{1}{2}$ "Then a + b = 2c (a + b (a - b) = 2c (a - b) $\therefore a^2 - b^2 = 2ac - 2bc$ $\therefore a^2 - 2ac = b^2 - 2bc$ $\therefore a^2 - 2ac + c^2 = b^2 - 2bc + c^2$

$$\therefore (a - c)^2 = (b - c)^2$$

$$\therefore a - c = b - c$$

$$\therefore a = b$$

(To be continued.)