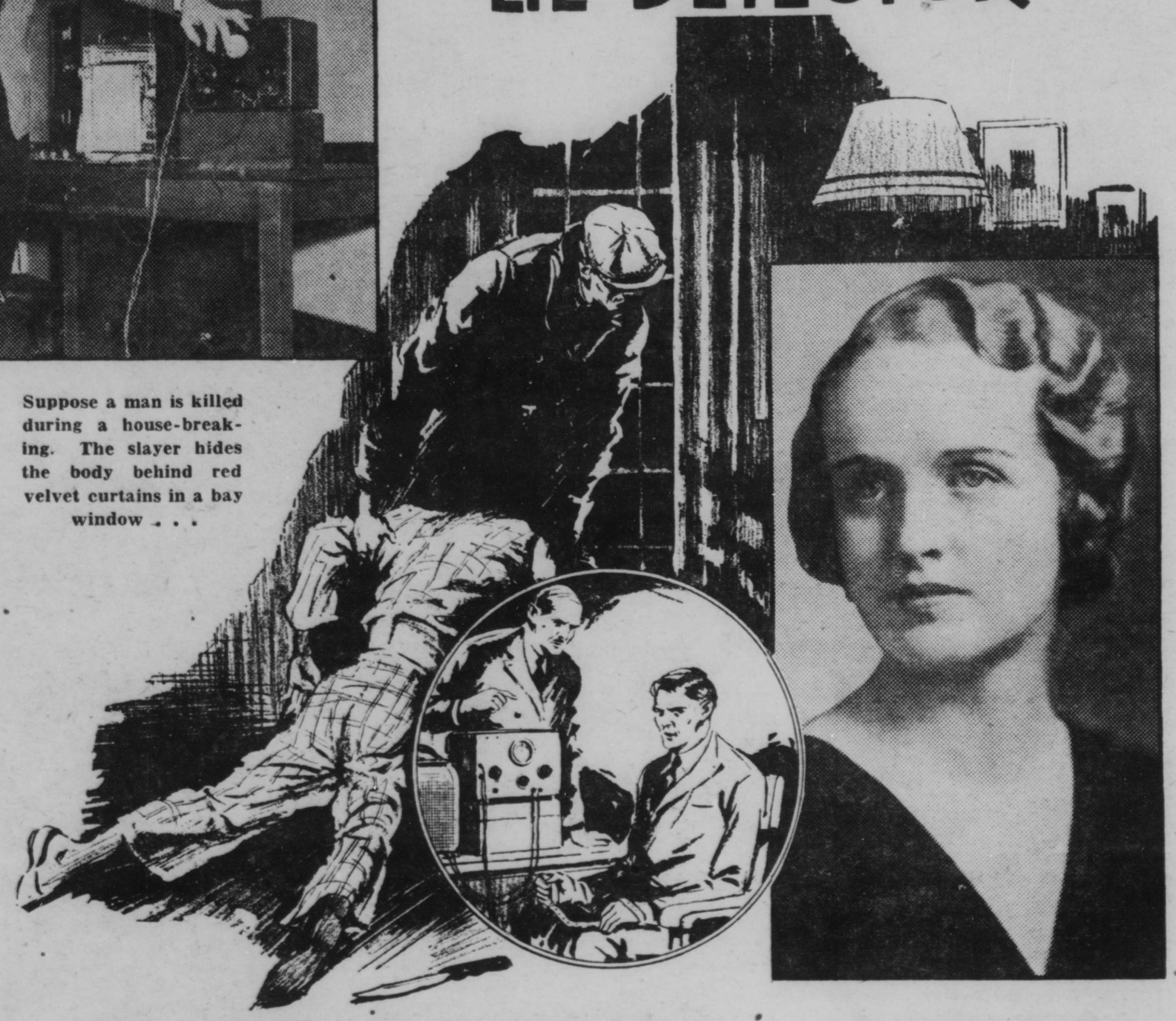
TELLING *the* TRUTH *about the* LIE DETECTOR

Father W. G. Summers of Fordham University manipulates the psychogalvanometer—and although the man being questioned maintains a blank expression, the machine probably will tell if he fibs.



Suppose a man is killed during a house-breaking. The slayer hides the body behind red velvet curtains in a bay window . . .

. . . If the examiner casually mentions "red curtains," an innocent suspect will not react—but the guilty one very probably will.

Mrs. Mary Case, whose murderer was brought to book through use of the lie detector.

By Marjorie Van de Water

A SCIENTIFIC instrument that would look behind the poker face of the criminal into his black heart and record on photographic film the secrets of his guilt!

That would indeed be a potent weapon for law-enforcement officials.

But scientists cannot lie about the lie detector. Lest they be trapped by their own invention, perhaps, they do not claim for it any such magic performance. The so-called lie detector is no infallible detector of lies. It is not a modern substitute for the ancient "trial by ordeal" in which the suspect submits to a painful test and by his performance is judged blameless or guilty.

G-Man and scientist agree in regarding the psychogalvanometer, as the lie-detector is technically termed, and also the various drugs used for "truth serums," as promising tools for scientific research, not as legal evidence to be presented in court as the basis for determining the guilt of the accused.

Although no magic properties are claimed for the psychogalvanometer, the things it can do are interesting enough.

It is actually being used in increasing numbers of criminal cases. It has in some cases led investigators to the guilty person in an almost uncanny fashion. It has betrayed the guilt of some, and confirmed the innocence of others.

Recently it gained prominence in the use on a Negro charged with the murder of a woman in New York City. This was the murder of Mrs. Mary Case. The murderer, Major Green, was given the death penalty.

Rev. Walter G. Summers, professor of psychology at Fordham University, who is one of the leaders in research on this instrument, examined the accused with his psychogalvanometer at the request of the New York authorities. The information disclosed by the instrument was a great aid in investigating the case.

STRIPPED of superstitious notions about its omniscient powers, the psychogalvanometer is a simple instrument designed to measure and record photographically, or in wavy lines drawn on paper, the tiny electric currents present in the human skin.

All the processes of life, physiologists have found, are accompanied by electric impulses. Each message sent along the nerves of the body is accompanied by a minute electric impulse. Muscle action has its parallel in the tiny current. And the complex activity of the brain takes place to the accompaniment of electric signals beating out a characteristic rhythm which can be tapped and measured.

It is not the brain waves that are measured by the psychogalvanometer. It is the much more easily studied currents taken from the skin. These skin currents are a clew to the hidden emotion going on beneath the surface.

How? Because emotion is all tied up with the action of the autonomic nervous system. When a danger signal sounds alarm, the body's emergency system goes instantly to work.

The hard-boiled criminal who comes before the police for examination may long ago have learned to keep a poker face, to hide his alarms behind a veil of apparent calm. He holds his breathing steady and appears to be unmoved.

But few have ever learned any way to control the beating of the heart and fewer still know any means to keep steady those tell-tale electric currents that go pulsing through their flesh.

When the police officer strikes home with his question, the criminal may not wince, but the jump of the needle in the "lie-detector" shows that the arrow has hit its mark. It is this sort of situation where the lie detector aids.

Suppose a man has been killed during a house-breaking and robbery. He was stabbed with a kitchen knife, and an attempt was made to delay discovery of the crime by hiding the body behind red velvet curtains in a bay window.

HALF a dozen suspects are picked up. Each is asked a series of questions. After routine queries as to name, address, occupation, the suspects are asked whether they live in a second-floor apartment; whether the house has red velvet curtains; whether the house has a bay window; whether the kitchen knives are sharp. Other questions mention details present at the scene of the crime, but no clew is given to indicate that they are significant.

To the innocent man who was not at the scene of the crime the questions must seem trivial, meaningless, stupid. But the guilty man sees the point. He may bluster and hold his innocent pose, but his mouth becomes dry, the palms of his hands grow moist and clammy, and the electrodes he is holding send their damning message to recording apparatus.

Most courts refuse to accept the evidence of the machine as legally acceptable. It does not prove the man to be guilty, just because he is emotionally stirred by the questioning. Perhaps he is a nervous man anyway. Who would not be scared by such an ordeal?

Nevertheless, though the evidence of the machine may never go to court, it has served some useful purpose in narrowing for the police their field of investigation.

A striking example of the use made of the machine came recently at Chicago, where Joseph Rappaport occupied a condemned cell awaiting execution for a murder of which, he insisted, he was innocent. His sister made a frantic appeal to Governor Horner for clemency, just seven hours before the time set for her brother's electrocution.

Governor Horner explained that he had already postponed her brother's death six times, and that he could not find it in his conscience to do it again. He added, however, that he had great faith in the lie detector.

THE girl immediately set to work to have her brother given a test by the machine. Accompanied by lawyers and officers of the law, Prof. Leonard Keeler of Northwestern University, inventor of the apparatus, took the machine to Rappaport's cell.

But alas! The machine gave Rappaport a highly unfavorable verdict. After more than an hour's testing, Professor Keeler called Governor Horner.

"On the basis of my findings," he said, "Rappaport is guilty."

The difficulty in using the psychogalvanometer as an instrument for crime detection is not that it fails to show up the emotion of the guilty person, but rather that it shows too much. Only the expert can sort out those wavy lines and read the story written there.

And so Rappaport was executed. The machine showed only a suspicious rise in his blood pressure while he denied his guilt. But this evidence, added to what convicted him, reassured the governor.

Somewhat discouraging to those who would use the psychogalvanometer for crime detection was one of the results of these experiments by Dr. T. W. Forbes, formerly of the New York Psychiatric Institute. He found that some individuals seem to be lacking in emotion, at least as far as it is revealed by this device. Only very intense startle, as when a gun is fired unexpectedly, will cause a flicker in the instrument's recording on these persons.

On the other hand, those who do respond in a way that makes its mark on the psychogalvanometer record sheets respond to every sort of excitement. When these people lie, the emotion connected with the effort to keep the story straight makes a change in the normal rhythm of the electric response. But so also does embarrassment due to some other cause than guilt.

Balanced against the discouraging findings is the latest research of Father Summers, of Fordham, who has been stepping up the sensitiveness of his apparatus until he believes it is delicate enough to distinguish between the person who is guilty and the one who merely has guilty knowledge of a crime