Science—a Modern Sherlock Holmes

Exploits of Today's Police Detectives Surpass the Imagined Feats of Fiction in Tracing and Preventing Crime

By Richard E. Enright

Police Commissioner of New York City

RECENTLY the scientific detective, who previously existed only in books and on the stage, has become a real and potent figure in the endless war between the police and the criminal. More and more American police are employing science in the detection of crime, surpassing the imaginary exploits of Dupin and Sherlock Holmes, because when Poe and Doyle created their fictional heroes the extraordinary tools with which modern science today arms the law did not exist. Radio, the airplane, even the automobile, were unheard of, and hundreds of practical developments in psychology, physiology, chemistry, toxicology, and the other sciences which the police now use, either themselves or through experts, had not yet been achieved.

When a woman murderer escaped from a California prison a few months ago, she used a swift motor car and an airplane in her flight across the Mexican border. But the police called upon the possibilities of modern science far more prodigally in pursuing her. Motor cars, motor boats, radio, the telephone and telegraph and airplanes were pressed into service in spreading the net that eventually enmeshed her.

This instance illustrates a dramatic feature of the bitter warfare between the police and the criminal. For years the latter has made eager use of the new developments in science to further his depredations against society. The oxyacetylene torch, for example, by whose fierce heat the stoutest metals may be cut like butter, was quickly seized on by the safe-cracker, who has used as well the most violent explosives devised by the chemist. The automobile, the motor boat, and later the airplane, are used by the burglar, the bandit, and the drug runner.

It has been only by keeping several steps ahead of the criminal in the employment of scientific weapons that the police have been able to cope with him.

Nowadays the detection of crime has become an exact science, founded on very definite principles. Like all other sciences, it promptly applies new developments in other fields to its purpose.

A month or so ago a squad of police in New Jersey went to arrest a former convict wanted for bank robbery. He opened his door at their knock and turned an automatic pistol on them, killing two and mortally wounding two others. Then he fled to the attic, closing a trapdoor on his pursuers. There was no escape for him. But how was he to be captured? He was armed and had shown that he would not shrink from murder. Starving him out was likely to prove a long and dangerous process. But science gave the prisoner to the law.

A detective obtained several of the tear-gas grenades, kept for use against mobs. Cautiously the officer opened the trapdoor and tossed in a grenade. The fugitive began to cough painfully as the fumes spread through the attic. Then the trapdoor was slowly raised and the man descended to surrender.

Knowledge of anatomy, physics, and psychology, too, are vital to the law. Such knowledge enabled the authorities to bring to justice the murderers of "Honest John" Bruen, a wealthy New Jersey circus proprietor, about a year ago.

From a pair of footprints in the ground a few feet from the window through which Bruen was shot, detectives were able to describe the murderer as short and slight, facts read in the depth of the impressions and in their shape.

The job of finding the one short, slight man who might have shot Bruen among the many who answered that scanty description required long and patient work, but the detectives at last succeeded. Then, by adroitly questioning the man—that is, by the use of applied psychology—they drew from him a confession that proved him the murderer and the dead man's brother-in-law the instigator of the crime.

Fred Sandberg, of the Washington, D. C., Police Department, said to be the greatest finger print expert in America, reading the story of a print through a magnifying glass

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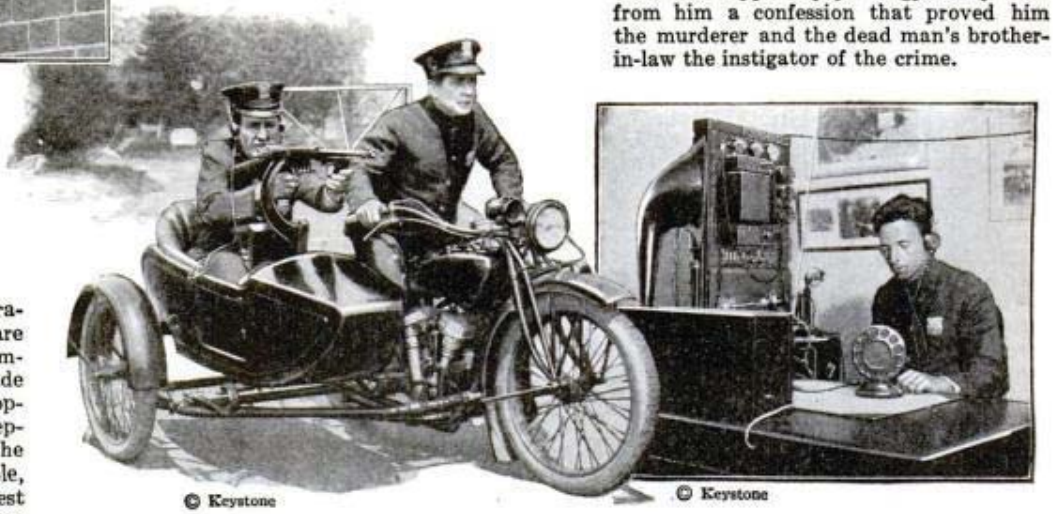
Chemically intensifying fingerprints on a window pane



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Radio, machine-gun, and motorcycle car combined is a swift and deadly pursuer of violators of the law

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Broadcasting a police alarm. This radio apparatus has a range of 30,000 square miles

This use of practical psychology—or, to call it by a simple name, keen understanding of human nature—is one of the most effective weapons of the modern detective.

Not long ago a New York detective was asked to find who had caused a package of valuable securities to disappear from the vault of a great banking institution. The four employees who had access to the vault were sent to him one at a time. Twenty minutes later one had confessed.

Psychology in Action

Assuming that the four employees, informed that they were to be questioned by a police officer, would expect to be treated more or less severely, the detective adopted an attitude anything but formidable.

The guilty man, prepared to offer defiant denial of any knowledge of anything connected with the theft, was disarmed by the detective's manner.

"If you know anything," the officer said, "I'd advise you to speak. There's ——," mentioning the name of one of the employees previously interviewed. "I hate to think he did it—a young man, married only a year, with a baby and a little home he's just bought."

He continued in similar vein, never once suggesting that he suspected the man before him, leading him to believe that the other members of the department, "——" particularly, were under suspicion.

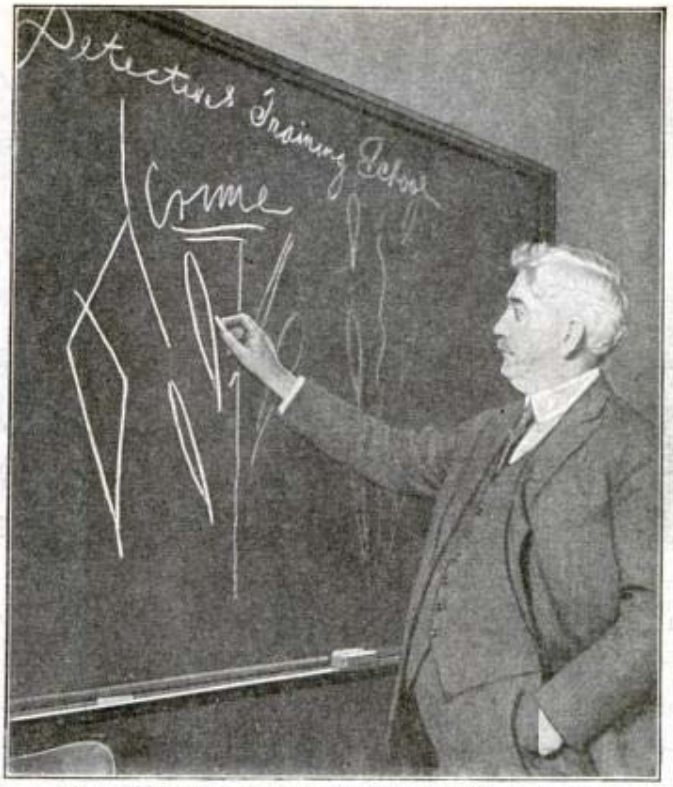
At last the clerk broke down and confessed. He wanted to escape suspicion and punishment, of course, but he was not able to see a man who had worked beside him suffer for his wrong.

The detective who understands practical psychology can vary his form of questioning to get the information he desires from habitual criminals and amateurs alike.

Psychology is a major subject in the school for detectives that we opened recently in the New York Police Department. Study of mental impulses, emotional stresses and motives is made. Members of the department are taught, too, to better their memories and sharpen their perceptions by the use of psychological principles.

Criminology also is studied, the policeman being taught to differentiate between the various criminal types and to use definite methods of approach and questioning in his investigations.

Practical details of police work, such as shadowing suspected persons, concealing identity, and using descriptions to pick persons from a crowd, are taught by means of clearly defined principles.



Richard Enright, Police Commissioner of New York City and author of this article, illustrating a lecture before that city's famous detective training school, which he founded

CRIME costs Americans unnumbered millions annually—more than enough to pay the nation's income tax. An impressive share of this is paid directly or indirectly by your pocket. Every advance of criminal science, by making crime more perilous and hence less attractive, saves you money and guards you from harm.

Commissioner Enright, one of the world's most distinguished authorities on crime and criminals, here outlines the scientific technique of the modern sleuth.

He goes farther, venturing this startling prophecy:

"In time science will cause premeditated crime virtually to vanish from the earth."

A man can lie, but science has shown that he cannot force his heart and lungs to lie also. A false answer accelerates their action and the apparatus shown above records these variations, revealing the probable falsehood they betray

Through finger-prints accidentally left at the scene of the crime, every one who reads the newspapers knows, the perpetrator is frequently discovered, scientific methods having been devised of intensifying prints left on doors, articles of furniture, weapons, and window-panes, so that they may be photographed. With the coming of radiophotography, these finger-prints, and in some cases actual photographs of the criminals, will be flashed all over the country within a few minutes after the discovery of a crime.

How Chemistry Helps

Chemistry and the microscope are additional scientific means frequently employed in investigating crime. In detecting bloodstains on clothing, studying inks and paper in forgeries and similar cases, investigating arson, narcotic and poisoning cases and in the performance of autopsies, chemistry is widely used, with the microscope as a valuable adjunct. More than once the analysis of mud on a prisoner's shoes or clothing has proved his presence at the scene of a crime. Under the microscope, typewriting done on different machines and by different persons has been shown to possess as many points of variance as the penmanship of individuals, a fact that has proved invaluable in the unraveling of many crimes in which typed documents were fundamental evidence.

The action of the heart is the basis of a number of methods for compelling prisoners to tell the truth. The heartbeat, the blood pressure, and the rate of breathing, medical men have found, vary considerably under stress of sudden excitement, such as might be occasioned by hearing a damaging question and endeavoring to supply an untruthful answer. Accordingly, there has been devised apparatus, which, when connected with the subject's body, records graphically the action of the heart and lungs and shows variations that may arise from the mental strain of fabricating an answer to a pointed question.

The recent remarkable development in radio communication already has been used by the police in their war against the criminal.

In time—although how soon I should not care to predict—science will cause premeditated crime virtually to vanish from the earth by making the hazards of wrongdoing too formidable to challenge. We shall then have to deal only with crimes committed in sudden passion.