

THE MAN WHO "READS BLOOD"

How New York's Chemical Detective, a Scientific Sherlock Holmes in Real Life, Ferrets Out Poisoners, Murderers and Other Criminals When the Only Clue He Has Is a Blood-Stained Garment, a Finger-Print or a Faint Trace of Poison.

When the detectives searched the room in which the murder had been committed they found one or two clues which may establish the identity of the mysterious murderer and lead to his arrest.

The first was a man's handkerchief of fine quality. In one corner were several tiny drops of blood, showing that the handkerchief had been used to staunch a very small wound, such as a pin-prick or a scratch or a pimple.

The most important find of all was on the inner side of the door panel where the bloody imprint of a thumb and three finger tips was visible. The portion of the door bearing the tell-tale finger-prints has been cut out and sent with the handkerchief to the laboratory of the chemical detective. An important arrest, it is announced, will follow the experts' analytical examination of the evidence now in his possession.

New York.—Here is a typical case for the chemical detective—the man who "reads blood." Substituting a test tube and powerful microscope for the ordinary detective's revolver and handcuffs, this scientific expert of the police department sets out to track down the murderer and the poisoner.

With a drop of blood, an empty poison bottle, a bloody finger mark or a hastily scrawled note as his only clue to work on, he exerts the whole force of his scientific knowledge as a probe to get to the bottom of the mystery or at least to find some slight clue which may eventually lead to a solution and to the arrest of the criminal. The chemical detective, owing to his success in solving many recent murder mysteries, is now regarded as a very important and necessary adjunct of the detective bureau in New York and other important cities. He is the man who reads that which to the average unscientific would be unintelligible.

He subjects the bloodstained handkerchiefs and other garments submitted to him by the police and detectives to certain microscopic and chemical tests, considers his findings in conjunction with every other scrap of information his expert chemical knowledge is able to develop about the case, and then he reports, advising the detectives to look for a consumptive-looking man about 28 years old, dark complexion, three gold teeth, the center one suspended from a bridge. Then follows a general description of the man, which in view of the facts the expert chemical detective has been able to deduce, may be considered fairly accurate.

Seldom Meet Failure.

As cunningly and carefully as the regular police detective follows the dark and winding alleys of the city in the search of a clue that will lead him to the culprit, just so carefully does the chemical detective follow the channels of the body in his search for a clue to the poison or other cause that led to the death of the victim. No subtlety, however cunning, can throw these unerring sleuths of the body off the trail, according to a writer in the New York World. The resources of latter-day chemistry, with patience and perseverance, can extort from the body of a man long dead and buried the secret which his destroyers vainly imagine went to the grave with him.

No more subtle crime exists than that of poisoning. Its detection is possible only to the acute analytical mind of the scientific man who has devoted the greater part of his life to the study of chemistry. Its victim is attacked without being given a chance to escape. The user of poison is a coward, but his cowardice is accompanied by a cunning that often proves more than a match for the keenest old-style detectives in the world.

Varying Detective Work.

It is with a convenient disguise—perhaps a false mustache or beard—and a revolver in his hip pocket that the detective starts out on his search for a criminal. It is with a test tube and a Bunsen lamp that the chemical detectives begin his search, perhaps for the same identical lawbreaker. Each is taking desperate chances. Death lurks behind every dark corner and in every cellarway for the first and in deadly gases and poisons for the latter. Yet by their widely divergent paths they often arrive at the same end.

The man who is following his clue through the alleys and the hallways of the tenements is at a great advantage, however, over his brother detective, the chemist. The former has rarely to start his investigation without a clue of some character; the latter must begin in complete darkness.

The detective who mingles daily with the men of crime must be keen of eye and ear, but in the end, if he excels in his profession, it is largely his instinct that tells him when he is close on the trail of a criminal. The chemical detective, on the contrary, must be and is equally as keen of eye and ear, but his instinct can avail him nothing. He can guess at nothing; he must know. He can take nothing for granted. Each and every clue must prove itself before he can place any estimate on its value.

Typical Poison Expert.

There is no keener tracer of poison in this city than Prof. Charles A. Doremus. More than six feet in height, as straight as a gun barrel, with gray eyes that peer out keenly from beneath heavy brows, he is a typical chemical detective. His powerful, vigorous frame bespeaks the physical endurance necessary to pursue to the very end a trying and difficult test.

In his connection with famous poisoning cases in New York Prof. Doremus has demonstrated great keenness and a ability. He detected antimony and arsenic in the body of Gustav H. Baum. Dr. Henry Meyer was convicted of having administered the poison. Without the assistance of the chemical detective it is possible that this mystery would never have been solved.

A man and a woman applied one morning at the office of a large insurance company to collect the insurance of a man, said to be the husband of the woman. In answering the questions of the insurance officials the couple became somewhat evasive and embarrassed. Their confusion led to a



Prof. Charles A. Doremus, One of the Greatest of Chemical Detectives.

more thorough investigation. The body of the dead man was exhumed.

In the presence of Prof. Doremus and score of prominent physicians no trace of anything unusual was found on the body. A most careful examination failed to reveal anything that would even prompt a suspicion of poison. The circumstances of the man's death and the character of his companions, however, made the insurance company persist in its investigations.

Long and Careful Search.

The heart, lungs, liver, kidneys, brain and, in fact, nearly every internal organ of the dead man were taken from the body, hermetically sealed in jars and taken to the laboratory of Prof. Doremus. Then began a persistent search for poison.

There was no clue. There was nothing to aid the chemical detective in his search. The entire case was a negative one. The only course open to him was by a process of elimination to seek the poison, if a poison it was, that caused the death of the man.

First he searched for the volatile poisons, such as chloroform, ether and prussic acid. Patiently he sat for hours at a time watching one test after another, waiting for a precipitate that would show him a trace of the poison he was seeking. None came.

Then he tested for vegetable poisons, such as morphine, strychnine, atropine and the alkaloid poisons. The same tedious process through which he had gone once had to be gone through again. And still there was no trace of poison.

There still remained the mineral poisons, such as lead, copper, arsenic and antimony. And in the tests for these was there at last a reward for the persistency of the detective. He found arsenic in large quantities, and

what was far more rare, distinct traces of antimony.

Proved Three Murders.

It was the persistency of Prof. Doremus, the chemical detective in that case, which sent Dr. Meyer to prison for life. It was through the persistency and skill of the same detective that the conviction of Dr. Buchanan, accused of murdering his wife with morphine, was secured. It was through the skill of chemical detectives that the conviction of Carlyle Harris, accused of poisoning his wife with morphine, was secured. It was the chemical detectives that furnished the strongest evidence for the prosecution of Albert T. Patrick and many others.

The chemical detective's work in blood-reading tests requires a most extensive knowledge of the actions of various kinds of poisons on the human body. By carefully testing the blood he is often able to tell the exact cause of death, the kind of poison used and how it was administered. The importance of this in cases where the most careful autopsy reveals practically nothing will be readily understood.

In handwriting tests the chemical detective, who in this way has come to be identified as a handwriting expert, will often spend long hours studying one insignificant little letter "a" under his microscope and comparing it with other samples of handwriting. It is in this way that tiny clues have been found leading on to other and



Tracing a Murderer by Means of a Blood-Stained Garment.

stronger clues and from there to complete solutions of some of the most complicated crimes on record.

Perils That Beset the Path of the Chemical Detective.

By Prof. Charles A. Doremus.

The value of the expert analytical chemist, now known as the chemical detective, through his cooperation with the New York police department and detective bureaus, is greater than is indicated merely by his work in ferreting out poison mysteries. His field of usefulness is by no means limited to that one class of crime. Many cases are on record where the chemical detective alone has been able to unmask the most ingenious forgeries of wills, deeds and other papers. His expert knowledge of the composition, the ingredients and the nature of explosives is relied upon to solve explosion mysteries, particularly bomb explosions, and to furnish clues, based on his investigations, without which it would often be next to impossible to make an arrest or secure a conviction.

Tremendous risks must be taken by the chemist employed to fathom an explosion mystery. The loss of a limb, an eye, disfigurement for life, or even death, may follow the slightest mishap while he is making his tests. Yet it is a risk which must often be taken in order to throw every possible light on the case and to develop every clue, no matter how



The Chemical Detective's Testimony in the Baum Poisoning Mystery Alone Convicted Dr. Henry Meyer of Having Administered the Poison.

slight, that may lead to the detection of a criminal.

Real Value of Chemist.

The chemist's value is undoubtedly greatest in homicide cases. Where a life has been taken no effort must be spared to bring the culprit to justice. It is often, however, long and tedious

work. The poisoner is cunning. He rarely uses poisons without informing himself of their action, and the subsequent traces of them that may be found in the body. He often learns of other poisons that will counteract the effect of the first poison.

One of the first signs of morphine poisoning is a contraction of the pupils of the eye. Yet one murderer was shrewd enough to use belladonna in the eyes of his victims to offset the contraction caused by the first poison he administered.

It is tricks of that character that the chemical detective must constantly guard against. When he begins his analysis he matches his brains against those of a cunning, desperate man who has taken every precaution he can think of to hide traces of his crime. That the chemist is successful as often as he is, is a tribute to science and a positive proof of the value and need of a chemical department to work in constant cooperation with the detective bureau in solving crimes which, too often, are allowed to go on record as unsolved mysteries.

SHE PAID HER FARE.

Moral: Never Go on the Car with Your Money Hidden.

The pretty woman got in, walked the length of the car and took a seat by the plain woman. The car started, and the conductor, his lips puckered in an inaudible whistle, started slowly down the middle of the car in the trail of the pretty woman.

"My goodness!" whispered the pretty woman to the woman who was an utter stranger to her then, "every cent of money I've got with me is in my stocking!"

A whisper carries a long way sometimes.

Two young men right across the car perked up their ears. So also did an old man whose head would have been bald if he had taken his hat off, because there was a little white rim all round just under his hat. A man who was sitting with a woman who appeared to be his wife tried not to listen, while a few half-grown boys about frying size giggled outright.

"What in the world am I going to do?" whispered the pretty woman in a tone that would have been audible on the corner if the car had stopped.

Now the plain woman might have said to her: "Why, here is my purse. Help yourself to a nickel," but she didn't. Instead she said:

"Don't you suppose you can get it?"

At that the two young men right across from them opened their eyes wide and the small boys giggled some more.

"How can I, right here in front of everybody?" asked the pretty woman.

"You can't—er, very well," said the plain woman.

Then with a firm, transfixing and hypnotic eye on the young men directly in front of them and eventually taking in the small giggling ones, the plain woman said: "I'll stand up in front of you and surround you the best way I can while you take it out."

And that was what the plain woman did.

The pretty woman was a long time getting the money, so long that the two young men got fidgety, the bald-headed man's bald head blushed and the man with his wife had to look sadly the other way out of another window because his wife made him.

At last, however, the wad was drawn forth, and the pretty woman, very red in the face, paid her fare. Then all the men sighed.

Boxwood Birds Roost in Halls.

When the first box tree bird was put in the hall of a house by an inventive hostess visitors disputed politely as to the nature of the bird. "It's an eagle," asseverated many. "It's an English sparrow," was the expressed conviction of many more. Really, it didn't matter much what bird was in the florist's eye when he clipped the green boxwood; he considered he had achieved an artistic triumph when he scissored out some-

Two Paris Models



The beautiful creation at the left is of figured violet tulle, made up over white satin. It is really very simple, but therein is its elegance.

All the trimming consists of beautiful applique guipure, colored a deeper shade of violet than the tulle, and a drapery of panne of the same shade around the neck, which is fastened in front with a magnificent clasp of diamonds.

The girle and the narrow band at the bottom of the skirt are of this panne; the little chemisette or tucker is of white mousseline de sole and lace.

The other gown is of pale green satin. The long, half-empire skirt is finished at the bottom with two box-plated flounces, and under the platts of the upper one is run a gold ribbon. Above these is a wide puff of brussels lace, finished at the top by a band of pink roses and at the bottom by a band of guipure with crenellated edge.

The Japanese corsage is made and trimmed in the same way. The girle is of chine silk.

Easy Method of Dyeing Finery That Has Faded

This, the fag end of the season, is the time when white dresses or suits of serge, henrietta and panama present, from frequent cleanings, a yellowed and woe-begone appearance which, if not remedied, consigns them forthwith to the "give-away" pile. The remedy lies in dyeing them, and the following recipe will be found very satisfactory:

To one tube of oil paint add enough gasoline to dissolve it completely. The best way to obtain this result is to squeeze the paint into a small bottle partly filled with gasoline; let it dissolve and shake it well. Then into the basin pour enough gasoline to cover entirely the article to be dyed. Add to this enough of the mixture in the bottle to color it the desired tint—more for darker shades, less for lighter. Dip the article repeatedly, allowing it to dry each time until the required tint is obtained.

To select the right colored paint is an important item. For pinks and reds, carmine is best, for blues madder blue is most satisfactory, and burnt sepia produces a beautiful woody brown.

Not only for woolen and mixed goods is this recipe practicable. Laces, net waists, hose, canvas shoes and lace hats can all be created by the same method. Thus at very small outlay an entire costume, shoes, hose, suit, hat and waist, can be transformed from dingy white to some dark shade.

Various Devices Used for Preservation of Beauty

Madame Vestris, the celebrated French beauty, slept every night with her face plastered in a paste made of milk, oxide of zinc and corn starch, in order to drive back the wrinkles and keep her complexion fresh and fair.

During the reign of Empress Eugenie, bathing in milk was practiced by every fashionable beauty who could afford the luxury. This custom was carried to such an extent that there became a great scarcity of milk for domestic purposes until at length the police discovered that the vendors were in the habit of buying back the milk which had been used in the bath and selling it over again to their tea and coffee drinking customers.

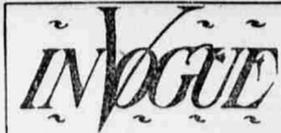
Lola Montez said the secret of preserving beauty lay in three simple things, temperance, exercise and cleanliness.

A small round bath tub, invented for the use of Marie Antoinette still bears her name. The Dauphinesse used in her baths a decoction of wild thyme and marjoram, to which was added sea salt.

Anne Boleyn was the first of the English queens to indulge in the luxury of bathing and cleanliness as we know it, and ended the thousand years without baths, which constitutes one of the misfortunes of the middle age.

Mme. de la Valliere retained the beauty of her golden hair by washing it in rum, into which was put an infusion of bitter apples (colocynthis).

CHILD'S TWEED COAT.



Golden yellow is one of the new hues.

For young girls a nun-like simplicity is encouraged, both in material and style.

There is an exquisite shimmering gold-colored messaline for a gown, and to match it are dainty little cloth of gold slippers.

In the Brussels mesh there is a rich gold net for gowns, and laces for flouncing have the design and edging worked in gold thread.

Women's black chevrot walking suits have full platted skirts and double-breasted half-fitting coats with side pockets.

Ermine and white fox will be much used for evening and for carriage wear on the cold days of the coming season, no furs outranking them in this.

The new yellow known as topaz is very fashionable, and is very effective in crepe de chine.

The best gown makers are much at variance over the wide sleeve; several houses are still using it on several of their models.

A handsome tailored costume made for an autumn bride is of soft cloth. The skirt fits closely over the hips and trails a little.

A particularly lovely dance frock for a young girl was of mauve silk muslin trimmed with silver pompadour embroidery.



More Stripes.

The return of stripes in the choicest fabrics prepared for winter was a surprise to many who had looked for a reign of plain materials after the long use of checked, plaided and striped ones. Even the broadcloths are outcrossed by lines or checks or plaids, and from them through the whole range of fine weaves to chiffon and other transparent textures striped affects are apparent.