

GLANDS AS CAUSE OF MANY CRIMES

By ELIZABETH M. HEATH.

WE have discovered our glands. For many years as many as 500,000 or 1,000,000, perhaps, our endocrine organs have been with us, unobserved except by certain patient scientists. At last they are coming into their own. Science has mastered their baffling complexities sufficiently to translate a few salient characteristics to the lay mind, and the lay mind, scenting delightful possibilities, has leaped upon them with whoops of joy. Led by their better-known member, thyroid, the whole endocrine family, pituitary, suprarenal et al., are marching into small talk.

In the last few months the hitherto unsuspected endocrines have answered to an appalling number of charges. A young hospital nurse declares that a malicious thyroid made her steal a friend's fur coat. It is claimed that the old can unmercifully regain their vigor by merely grafting on some new glands. A prominent scientist charges that their secretions are all that stand between our wearisome civilized state and the hairy coats, the charming facial contours, the prehensile toes, and, presumably, the simple customs of the apes. He adds to his indictment the supposition that the undeniable superiority of the masculine sex (hear! hear!) is due to the same cause.

Witty journals gloomily foretell the rejuvenation of old and rich uncles by glandular injection, and Bowery drug stores exhibit remedies guaranteed to jazz up your glands and so "give you new hope, inspire you to regain your self-respect and perhaps restore to you the loved ones you have forgot."

There seems to be something in these glands, however, something to engage the attention of plain and sober citizens, a solid foundation of fact under the extravagant superstructure raised by the catchword intellectuals. Even that yarn of Dr. Bolk's is probably true—the one about the dense hair that sprouted on his pituitary patient; and, going so far, it isn't hard to believe that we achieved our present intellectual pinnacle through the kind action of the thymus gland in retarding the growth of the human skull. But lest your ideas of Adam and Eve be disturbed, come a little closer to A. D. 1921, as close at least as Cain and Abel. It is possible that Cain's endocrine organs were functioning improperly, and that he was as much a victim as his brother.

Glands as Cause of Crime.

Murder, assault, arson, vandalism, theft, and a host of other crimes are often results of a disturbance in the ductless glands, says Dr. Max G. Schlapp, Professor of Neuropathology at the New York Post Graduate School and Hospital, Director of its Mental Clinic, and examiner for the Children's Court.

Love, hate and greed have hitherto been accepted as the motives that fill the criminal courts, but glands! This is something else again. Moreover, continues Dr. Schlapp, the condition, and with it the tendency to crime, can be completely cured in many cases.

For most people, the horror of crime lies in the intention of the criminal. Deliberate murder, unless to avenge an intolerable injury, arouses a storm of public hatred; but the automobile driver, whose nerve fails at a critical moment, incurs only censure and the loss of his license.

Some years ago a young man named Archie Daniels went out walking with a young lady. They had formerly been engaged, but the affair was broken off by the girl's parents in favor of a more prosperous suitor. After they had covered a few blocks in silence, Archie drew a pistol, apparently purchased for the purpose, and shot the girl down without a word.

The supposition is obvious. Rather than let her find contentment, perhaps even happiness, with another man, he sacrificed her to his jealousy. His sentence, life imprisonment, seemed light for such criminal egotism.

However, look behind this simple statement of fact to what was happening in Archie Daniels's head during the interminable six months between his dismissal as a suitor and his crime. Perhaps there are some facts even more significant. At least the Judge and the jury were strangely moved by them to give him the lightest sentence within their power, though the boy himself asked for the chair.

Archie was 22 that Spring, and "doing well." He was a likable, normal boy, already marked out for mild success. He had a good job downtown; not a bonanza, but one that indicated steady progress. He was very much in love, under conditions perfectly approved by society, and his love was returned. Archie was sitting on the top of his own particular world.

Then he ran headlong against that elderly disregard of the importance of true love that is so bitter and so engaging to youth. An older, a richer, a more safely established man declared himself, and the girl's parents decided to break off their daughter's "boy-and-girl-affair." They said, as so many have said and some few have proved, that they knew best how to provide for her future; perhaps they intimated that love is transitory, and that security is, after all, the thing.

The sweethearts met by stealth. They would walk together in the dusk or on Saturday afternoons. Archie wanted her to marry him immediately. But the girl would not. They were young; she owed her parents too much; they would come around in the end. He and she must wait. Surely he could trust her. When he was with her, yes; but between times he worried. There was that other man, always around the house; and her parents always dropping hints. Girls were funny; they changed.

He worried more and more. He would come home from work and sit hunched up, thinking. His mother heard him walking the floor at night. He lost his job. Every morning he started out to find another, but he rarely made an application. He would ride for hours on the elevated, up and down, up and down, thinking. Finally roused, he would get off and roam aimlessly from street to street, his mind moving mechanically along a few deep-worn paths.

About this time he stopped urging the girl to marry him. Instead he said: "I give up. Let's get out of it. Let's die together."

And the girl would brood upon the idea, but in the end she always counseled patience.

Archie went over to Jersey and bought a pistol, a .22. Later he bought a .38.

He carried it whenever he went to meet the girl.

That last day they were walking among the endless apartment houses of the Bronx. They stopped in a corner drug store for some ice cream. The girl ate hers; Archie's melted on the plate. Two blocks from the door he pulled out his pistol and shot her through the brain. Then he dropped the weapon, fell on his knees and, picking her body up in his arms, began to scream.

In Terms of Glands.

Archie did not kill his sweetheart in a passion of jealousy; nor because he loved her and wanted to save their love from the corrosion of living. He killed her because certain of his ductless glands had been disturbed by excessive worry. His crime was as involuntary as knee-jerk. It was the automatic result of a change in the chemical content in his blood. If he had received medical treatment in the early stages of his trouble, his crime would have been prevented.

To understand what happened to Archie it is necessary to know something about the machinery of the human mind.

Every muscular act, from the most simple to the most complex, is caused by an explosion or a series of explosions of unstable protoplasm in the motivating centres of the brain. These explosions release the commands, or outgoing impulses, that set the muscles in motion. The explosions themselves are caused by impulses coming in from either the intellectual or emotional centres of the brain.

Perhaps the most important single element in this process is the strength that must be developed by an incoming impulse to cause the explosion which releases an outgoing impulse. This is particularly important in its application to impulses from the emotional centre of the brain.

If the threshold of functional activity in the emotional centre is normal, a percept or concept passing from the perceptive or intellectual centre will not cause an emotional wave of sufficient intensity to overcome the inhibition which would naturally come to the motivating from the intellectual centre. If, however, the functional threshold in the emotional centre were low, the wave of feeling would release an impulse so strong that no inhibition of prudence would stop it, and all consideration of an intellectual character would be overwhelmed and the motivating centre would issue its commands to the muscles.

The range of normal explosions is fairly wide. Without emotions life would be colorless. Still, there are various types and temperaments, some phlegmatic, some more volatile, all of whom have feelings within the range of normal action. Beyond each extremity of this scale lies abnormality. Too high an explosion point has the effect of deadening all feeling. It produces dullness and inertia. Too low an explosion point produces the person who

goes off half-cocked, who yields to the slightest pressure on the trigger of his emotions.

It is with this latter class that we are mainly concerned, for they contribute heavily to the total of emotional crime.

At this point the ductless glands re-enter the discussion, for it is their behavior that pushes the explosion point up or down the scale of normality, according to the following laws:

The point at which the unstable protoplasm in the motivating centres of the brain will explode is determined by the chemical content of the blood.

If there is a disproportion of hormones, as the secretions of the ductless glands are called, there is a disturbance of the balance of the explosion thresholds in the groups of cells in the nervous system, the secretions acting selectively on such cells.

Under these circumstances it is important to know what causes variation in the secretion of hormones. It has been discovered that the glands are affected by foreign toxins introduced into the system, and that they are also affected by the patient's mental condition—such emotions as fear, anxiety, anger, pain, &c. Under repeated or continued nervous strain a vicious circle is established, the patient's emotionality increases the secretion of hormones, and these secretions make his emotions still more unstable. This process frequently continues until the explosion point is far below normal, and the patient is the helpless victim of his impulses.

Control of Emotions.

Perhaps most important of all discoveries about the ductless glands is that the amount of hormones in the blood can be controlled by means of therapeutics, and, while knowledge on this subject is by no means complete, remarkable results have been obtained, notably in connection with the thyroid gland.

However, popular ignorance disregards the great majority of these cases until an outbreak of violence occurs, and then those who are in reality invalids are condemned as criminals.

That is what happened to Archie Daniels. His long brooding over his unhappy love affair stimulated his ductless glands to increased secretion. His explosion point was lowered with increasing velocity, and he became not only more inclined to worry, but also more inclined to carry out the action suggested by the circumstances. His nerves put pressure upon him to end an unbearable situation by killing both himself and the girl, but the first shot relieved the tension, and the fact that he never completed the act proves that it was the result not of resolve, but of irresistible impulse. His wave of feeling wiped out all considerations of right and wrong, all inhibitions from the intellectual side of his brain, but when it had spent itself in action these reasserted their hold. His remorse was so deep that he wished to expiate his guilt in the electric chair.

Emotional instability results not only in isolated outbursts such as Archie's, but in established "criminal" tenden-

cies. Successive yieldings to one kind of impulse so weakens the patient's resistance that he loses intellectual control whenever that impulse comes to him. Kleptomania is a familiar form of this affliction. Its result may be seen in many a girl and boy who leave comfortable homes for the hardships of the "underworld."

It sometimes has results more ludicrous than criminal. There was a man recently living in the Bronx who could not pass a back yard full of drying clothes without wanting to tear them down and cut them to ribbons, and he frequently indulged this impulse to the discomfiture of housewives. This trend had been established so early in life that he could not recall the circumstances of its beginning.

Most cases of emotional instability can be relieved, many of them can be cured. This statement is made by Dr. Schlapp on the basis of results achieved in his own study and work upon these cases since 1912. As Director of the mental clinic of the New York Post-Graduate Hospital, and examiner for the Children's Court of New York City, a great number of cases have come under Dr. Schlapp's care.

After it has been established, from the history of the case and from mental tests, that the patient's abnormal conduct is the result of emotional instability and not the deliberate design of a normal mind, it becomes Dr. Schlapp's object to discover if there is any chemical disturbance in the patient's blood and to ascertain the exact nature of this disturbance. In an article printed in The Medical Record for April 3, 1920, Dr. Schlapp says:

"In many of the cases examined at the Post-Graduate Hospital, chemical disturbance was found, and in more than half of these cases the cause was traced directly to certain of the internal secretory glands."

"This has been accomplished through only a few blood tests which have been evolved. New tests are being worked on constantly, and the hope is to narrow the field until we can lay a finger on the seat of all emotional disturbances."

The treatment, of course, varies with the case, but its basic principles are the prevention of disproportionate secretion in the affected glands by the use of various remedies, and the neutralization of the abnormal secretions already in the blood by the introduction of counterbalancing substances. By these means the patient's explosion point can be raised to normal.

This was the treatment followed in the case of Austin Strong. This boy was the child of wealth. As his mother lamented, he had "always been used to cares and comforts above the average." There was nothing in his environment or his heredity to explain the alarming change that came over him in his fifteenth year.

"He became surly and insolent. * * * As time went on he became flagrantly disobedient. * * * When he was criticised or crossed in any way * * * he would fly into a tirade—his ungovernable temper increasing to a point that rendered him beside himself and quite irresponsible."

Thus Mrs. Strong rather mildly characterized a period during which Austin threatened his father with a pistol, threw various objects, including a kitchen knife, at his mother, and ran away from home with increasing frequency.

Dr. Schlapp discovered that the strains and changes of adolescence had been too

much for the boy's nervous system. His thyroid gland was overstimulated. He was given endocrine substance to inhibit thyroid, and sedatives. Within a few months a marked improvement was visible. His mother wrote that he was "quite amiable," and that Dr. Schlapp's treatment had saved him from the reformatory.

Another boy exhibited symptoms very like Austin's, but his trouble had a different root and required a different treatment. This was Michael Krapp, the child of a factory worker. When he reached his eleventh year Michael suddenly became a cause of consternation both at home and at school. Some of the activities listed by his teacher were indeed alarming: Threw butcher knife at mother; threw chair at father; threw stove lid at mother; repeated "I'll kill some one! I'll kill some one!" chased sister into corner, stuck her with pins, knocked her down and threw her against wall; when given the simplest arithmetical problem would appear excited and say, "I can't do it. I knew how once, but I've forgotten. Oh, my head!" was quarrelsome and mean to children near him; would walk madly around room six or seven times, then take his seat.

When he was brought to Dr. Schlapp his teachers were convinced that the boy was developing a homicidal mania, and this was probably the case. Dr. Schlapp

found an abscess in his frontal sinus. The poisons from this abscess, added to the effects of the pain he suffered, had disturbed the ductless glands, and the boy's explosion point was abnormally low. Fortunately the abscess was removed before the condition became permanent, and Michael has now progressed through a successful school career to the predestined glory of a thirty-dollar-a-week job in the tire factory.

Although science has thus underscored the fact that there are crimes committed because the perpetrator's mental processes have set up neural stimuli beyond the individual's power to con-

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trol, the law so far, except in well-defined cases of insanity and feeble-mindedness, does not recognize the difference between the pathological, involuntary criminal and the person who for profit or pleasure violates the Penal Code.

There is a danger in this that a way is opened for a fraudulent defense of those accused of crimes. However, all the recourse that shrewd lawyers can devise to various mental ailment defenses is now utilized, and there is no way in which the Court can determine for itself through medical examination the truth or falsity of the contention that a defendant is a victim of disease.

Why? Because of the lack of facilities to intensively study in the individual the underlying causes of the criminal act. Without all procurable information as to the person's family and individual history, supplemented by psychological, physiological and chemical tests, these causes cannot be disclosed. There are hundreds, even thousands, of men and women today in prisons and reformatories who belong in hospitals. Punishment cannot prevent a repetition of their criminal acts, because they themselves have no control over their behavior.

The thing to do, according to Dr. Schlapp, is to establish a Detention Hospital, where persons suspected of low explosion points and other forms of mental defectiveness can be thoroughly examined—a process which requires quiet, periods of fasting and close observation—and their cases diagnosed.

This hospital should be closely related to the courts. On the basis of its findings, hospitals would often be substituted for prisons and treatment for punishment.

Such an adjunct to our court system would cost a great deal of money, yet, as Dr. Schlapp points out, this would amount to the smallest fraction of the sums now spent in the well-intended but misdirected efforts made by society to cope with the situation. It would, on the other hand, offer "a real chance to combat the problem of crime . . . to separate those who are not responsible for their misdeeds from those who . . . use a perfectly ordered mind to prey upon society."

Such a hospital would be a more effective protection to society than half a

thousand policemen, because it would prevent crimes by normalizing criminals. It need not be built for sentimental or even for ethical reasons, but as a hard-headed matter of economy. Crime costs the country more every year than the navy, the army, the whole Government budget. Perhaps the biggest problem before our economists is reducing the crime bill. The detention hospital will prove one of the effective instruments to this end.

CERULEAN-FACED WOMEN.

MAKING the punishment fit the crime is forgotten in the latest effort in France to make the face fit the frock. Englishwomen visiting French watering places are being persuaded to follow the fashion initiated by their more artistic sisters. A beauty expert recently returned to England from Deauville has disclosed to a Daily Chronicle reporter that the recent popularity of scarlet hats and gowns had accounted for the new color scheme for faces.

She declares it to be obvious that the mauve face powder, which many women cling to through thick and thin, looks dreadful with a red dress. A clever woman, who liked red frocks, must have experimented with her powders and found how very much better powder with a red tinge looked than a neutral or mauve-tinted one.

Smart women are overhauling their toilet-tables and ordering powder with a peculiar mauve tint for their dresses of the fashionable mauve colorines, red-shaded powders for their red dresses and blue powder for use with blue dresses.

Blue powder does not give an effect of the user suffering from the cold. The result with all these colored powders is a strangely harmonious one. But the question of the lips has to be considered. Red lips with a mauve skin would be quite as bad as mauve skin with a red dress.

"If you 'make-up' white," said the same authority, "you can leave your lips the same old scarlet." But with most other shades a pale coral-pink is the best."