

***GINA  
LOMBROSO***



***CRIMINAL MAN, ACCORDING  
TO THE CLASSIFICATION  
OF CESARE LOMBROSO***

***GINA  
LOMBROSO***



***CRIMINAL MAN, ACCORDING  
TO THE CLASSIFICATION  
OF CESARE LOMBROSO***

**Gina Lombroso**

# **Criminal Man, According to the Classification of Cesare Lombroso**

EAN 8596547015277

DigiCat, 2022

Contact: [DigiCat@okpublishing.info](mailto:DigiCat@okpublishing.info)



# TABLE OF CONTENTS

INTRODUCTION

BY CESARE LOMBROSO

PART I

THE CRIMINAL WORLD

CHAPTER I

THE BORN CRIMINAL

CHAPTER II

THE BORN CRIMINAL AND HIS RELATION TO MORAL  
INSANITY AND EPILEPSY

CHAPTER III

THE INSANE CRIMINAL

CHAPTER IV

CRIMINALOIDS

PART II

CRIME, ITS ORIGIN, CAUSE, AND CURE

CHAPTER I

ORIGIN AND CAUSES OF CRIME

CHAPTER II

THE PREVENTION OF CRIME

CHAPTER III

METHODS FOR THE CURE AND REPRESSION OF CRIME

PART III

CHARACTERS AND TYPES OF CRIMINALS

CHAPTER I

EXAMINATION OF CRIMINALS

CHAPTER II

SUMMARY OF THE CHIEF FORMS OF CRIMINALITY TO AID IN  
DISTINGUISHING BETWEEN CRIMINALS AND LUNATICS AND  
IN DETECTING SIMULATIONS OF INSANITY. A FEW CASES  
SHOWING THE PRACTICAL APPLICATION OF CRIMINAL  
ANTHROPOLOGY

APPENDIX

WORKS OF CESARE LOMBROSO (BRIEFLY SUMMARISED).

I

II

III

IV

V

VI

VII

VIII

IX

X

XI

BIBLIOGRAPHY OF THE CHIEF WORKS OF CESARE  
LOMBROSO

INDEX

THE SCIENCE SERIES

# INTRODUCTION

[Table of Contents](#)

## BY CESARE LOMBROSO

[Table of Contents](#)

[Professor Lombroso was able before his death to give his personal attention to the volume prepared by his daughter and collaborator, Gina Lombroso Ferrero (wife of the distinguished historian), in which is presented a summary of the conclusions reached in the great treatise by Lombroso on the causes of criminality and the treatment of criminals. The preparation of the introduction to this volume was the last literary work which the distinguished author found it possible to complete during his final illness.]

It will, perhaps, be of interest to American readers of this book, in which the ideas of the Modern Penal School, set forth in my work, *Criminal Man*, have been so pithily summed up by my daughter, to learn how the first outlines of this science arose in my mind and gradually took shape in a definite work—how, that is, combated by some, the object of almost fanatical adherence on the part of others, especially in America, where tradition has little hold, the Modern Penal School came into being.

On consulting my memory and the documents relating to my studies on this subject, I find that its two fundamental ideas—that, for instance, which claims as an essential point the study not of crime in the abstract, but of the criminal himself, in order adequately to deal with the evil effects of

his wrong-doing, and that which classifies the congenital criminal as an anomaly, partly pathological and partly atavistic, a revival of the primitive savage—did not suggest themselves to me instantaneously under the spell of a single deep impression, but were the offspring of a series of impressions. The slow and almost unconscious association of these first vague ideas resulted in a new system which, influenced by its origin, has preserved in all its subsequent developments the traces of doubt and indecision, the marks of the travail which attended its birth.

The first idea came to me in 1864, when, as an army doctor, I beguiled my ample leisure with a series of studies on the Italian soldier. From the very beginning I was struck by a characteristic that distinguished the honest soldier from his vicious comrade: the extent to which the latter was tattooed and the indecency of the designs that covered his body. This idea, however, bore no fruit.

The second inspiration came to me when on one occasion, amid the laughter of my colleagues, I sought to base the study of psychiatry on experimental methods. When in '66, fresh from the atmosphere of clinical experiment, I had begun to study psychiatry, I realised how inadequate were the methods hitherto held in esteem, and how necessary it was, in studying the insane, to make the patient, not the disease, the object of attention. In homage to these ideas, I applied to the clinical examination of cases of mental alienation the study of the skull, with measurements and weights, by means of the esthesiometer and craniometer. Reassured by the result of these first steps, I sought to apply this method to the study of

criminals—that is, to the differentiation of criminals and lunatics, following the example of a few investigators, such as Thomson and Wilson; but as at that time I had neither criminals nor moral imbeciles available for observation (a remarkable circumstance since I was to make the criminal my starting-point), and as I was skeptical as to the existence of those "moral lunatics" so much insisted on by both French and English authors, whose demonstrations, however, showed a lamentable lack of precision, I was anxious to apply the experimental method to the study of the diversity, rather than the analogy, between lunatics, criminals, and normal individuals. Like him, however, whose lantern lights the road for others, while he himself stumbles in the darkness, this method proved useless for determining the differences between criminals and lunatics, but served instead to indicate a new method for the study of penal jurisprudence, a matter to which I had never given serious thought. I began dimly to realise that the *a priori* studies on crime in the abstract, hitherto pursued by jurists, especially in Italy, with singular acumen, should be superseded by the direct analytical study of the criminal, compared with normal individuals and the insane.

I, therefore, began to study criminals in the Italian prisons, and, amongst others, I made the acquaintance of the famous brigand Vilella. This man possessed such extraordinary agility, that he had been known to scale steep mountain heights bearing a sheep on his shoulders. His cynical effrontery was such that he openly boasted of his crimes. On his death one cold grey November morning, I was deputed to make the *post-mortem*, and on laying open



the skull I found on the occipital part, exactly on the spot where a spine is found in the normal skull, a distinct depression which I named *median occipital fossa*, because of its situation precisely in the middle of the occiput as in inferior animals, especially rodents. This depression, as in the case of animals, was correlated with the hypertrophy of the *vermis*, known in birds as the middle cerebellum.

This was not merely an idea, but a revelation. At the sight of that skull, I seemed to see all of a sudden, lighted up as a vast plain under a flaming sky, the problem of the nature of the criminal—an atavistic being who reproduces in his person the ferocious instincts of primitive humanity and the inferior animals. Thus were explained anatomically the enormous jaws, high cheek-bones, prominent superciliary arches, solitary lines in the palms, extreme size of the orbits, handle-shaped or sessile ears found in criminals, savages, and apes, insensibility to pain, extremely acute sight, tattooing, excessive idleness, love of orgies, and the irresistible craving for evil for its own sake, the desire not only to extinguish life in the victim, but to mutilate the corpse, tear its flesh, and drink its blood.

I was further encouraged in this bold hypothesis by the results of my studies on Verzeni, a criminal convicted of sadism and rape, who showed the cannibalistic instincts of primitive anthropophagists and the ferocity of beasts of prey.

The various parts of the extremely complex problem of criminality were, however, not all solved hereby. The final key was given by another case, that of Misdea, a young soldier of about twenty-one, unintelligent but not vicious.

Although subject to epileptic fits, he had served for some years in the army when suddenly, for some trivial cause, he attacked and killed eight of his superior officers and comrades. His horrible work accomplished, he fell into a deep slumber, which lasted twelve hours and on awaking appeared to have no recollection of what had happened. Misdeed, while representing the most ferocious type of animal, manifested, in addition, all the phenomena of epilepsy, which appeared to be hereditary in all the members of his family. It flashed across my mind that many criminal characteristics not attributable to atavism, such as facial asymmetry, cerebral sclerosis, impulsiveness, instantaneousness, the periodicity of criminal acts, the desire of evil for evil's sake, were morbid characteristics common to epilepsy, mingled with others due to atavism.

Thus were traced the first clinical outlines of my work which had hitherto been entirely anthropological. The clinical outlines confirmed the anthropological contours, and *vice versa*; for the greatest criminals showed themselves to be epileptics, and, on the other hand, epileptics manifested the same anomalies as criminals. Finally, it was shown that epilepsy frequently reproduced atavistic characteristics, including even those common to lower animals.

That synthesis which mighty geniuses have often succeeded in creating by one inspiration (but at the risk of errors, for a genius is only human and in many cases more fallacious than his fellow-men) was deduced by me gradually from various sources—the study of the normal individual, the lunatic, the criminal, the savage, and finally the child. Thus, by reducing the penal problem to its

simplest expression, its solution was rendered easier, just as the study of embryology has in a great measure solved the apparently strange and mysterious riddle of teratology.

But these attempts would have been sterile, had not a solid phalanx of jurists, Russian, German, Hungarian, Italian, and American, fertilised the germ by correcting hasty and one-sided conclusions, suggesting opportune reforms and applications, and, most important of all, applying my ideas on the offender to his individual and social prophylaxis and cure.

Enrico Ferri was the first to perceive that the congenital epileptoid criminal did not form a single species, and that if this class was irretrievably doomed to perdition, crime in others was only a brief spell of insanity, determined by circumstances, passion, or illness. He established new types—the occasional criminal and the criminal by passion,—and transformed the basis of the penal code by asking if it were more just to make laws obey facts instead of altering facts to suit the laws, solely in order to avoid troubling the placidity of those who refused to consider this new element in the scientific field. Therefore, putting aside those abstract formulæ for which high talents have panted in vain, like the thirsty traveller at the sight of the desert mirage, the advocates of the Modern School came to the conclusion that sentences should show a decrease in infamy and ferocity proportionate to the increase in length and social safety. In lieu of infamy they substituted a longer period of segregation, and for cases in which alienists were unable to decide between criminality and insanity, they advocated an intermediate institution, in which merciful treatment and

social security were alike considered. They also emphasised the importance of certain measures which hitherto had been universally regarded as a pure abstraction or an unattainable desideratum—measures for the prevention of crime by tracing it to its source, divorce laws to diminish adultery, legislation of an anti-alcoholistic tendency to prevent crimes of violence, associations for destitute children, and co-operative associations to check the tendency to theft. Above all, they insisted on those regulations—unfortunately fallen into disuse—which indemnify the victim at the expense of the aggressor, in order that society, having suffered once for the crime, should not be obliged to suffer pecuniarily for the detention of the offender, solely in homage to a theoretical principle that no one believes in, according to which prison is a kind of baptismal font in whose waters sin of all kinds is washed away.

Thus the edifice of criminal anthropology, circumscribed at first, gradually extended its walls and embraced special studies on homicide, political crime, crimes connected with the banking world, crimes by women, etc.

But the first stone had been scarcely laid when from all quarters of Europe arose those calumnies and misrepresentations which always follow in the train of audacious innovations. We were accused of wishing to proclaim the impunity of crime, of demanding the release of all criminals, of refusing to take into account climatic and racial influences and of asserting that the criminal is a slave eternally chained to his instincts; whereas the Modern School, on the contrary, gave a powerful impetus to the

labors of statisticians and sociologists on these very matters. This is clearly shown in the third volume of *Criminal Man*, which contains a summary of the ideas of modern criminologists and my own.

One nation, however—America,—gave a warm and sympathetic reception to the ideas of the Modern School which they speedily put into practice, with the brilliant results shown by the Reformatory at Elmira, the Probation System, Juvenile Courts, and the George Junior Republic. They also initiated the practice, now in general use, of anthropological co-operation in every criminal trial of importance.

For this reason, and in view of the fact that America does not possess a complete translation of my works—*The Criminal, Male and Female*, and *Political Crime* (translation and distribution being alike difficult on account of the length of these volumes)—I welcome with pleasure this summary, in which the principal points are explained with precision and loving care by my daughter Gina, who has worked with me from childhood, has seen the edifice of my science rise stone upon stone, and has shared in my anxieties, insults, and triumphs; without whose help I might, perhaps, never have witnessed the completion of that edifice, nor the application of its fundamental principles.

---

# **PART I**

## **THE CRIMINAL WORLD**

[Table of Contents](#)

---

### **CHAPTER I**

#### **THE BORN CRIMINAL**

[Table of Contents](#)

A criminal is a man who violates the laws decreed by the State to regulate the relations between its citizens, but the voluminous codes which in past times set forth these laws treat only of crime, never of the criminal. That ignoble multitude whom Dante relegated to the Infernal Regions were consigned by magistrates and judges to the care of gaolers and executioners, who alone deigned to deal with them. The judge, immovable in his doctrine, unshaken by doubts, solemn in all his inviolability and convinced of his wisdom, which no one dared to question, passed sentence without remission according to his whim, and both judge and culprit were equally ignorant of the ultimate effect of the penalties inflicted.

In 1764, the great Italian jurist and economist, Cesare Beccaria first called public attention to those wretched beings, whose confessions (if statements extorted by torture can thus be called) formed the sole foundation for the trial, the sole guide in the application of the punishment, which was bestowed blindly, without formality, without hearing the

defence, exactly as though sentence were being passed on abstract symbols, not on human souls and bodies.

The Classical School of Penal Jurisprudence, of which Beccaria was the founder and Francesco Carrara the greatest and most glorious disciple, aimed only at establishing sound judgments and fixed laws to guide capricious and often undiscerning judges in the application of penalties. In writing his great work, the founder of this School was inspired by the highest of all human sentiments—pity; but although the criminal incidentally receives notice, the writings of this School treat only of the application of the law, not of offenders themselves.

This is the difference between the Classical and the Modern School of Penal Jurisprudence. The Classical School based its doctrines on the assumption that all criminals, except in a few extreme cases, are endowed with intelligence and feelings like normal individuals, and that they commit misdeeds consciously, being prompted thereto by their unrestrained desire for evil. The offence alone was considered, and on it the whole existing penal system has been founded, the severity of the sentence meted out to the offender being regulated by the gravity of his misdeed.

The Modern, or Positive, School of Penal Jurisprudence, on the contrary, maintains that the anti-social tendencies of criminals are the result of their physical and psychic organisation, which differs essentially from that of normal individuals; and it aims at studying the morphology and various functional phenomena of the criminal with the object of curing, instead of punishing him. The Modern School is therefore founded on a new science, Criminal

Anthropology, which may be defined as the Natural History of the Criminal, because it embraces his organic and psychic constitution and social life, just as anthropology does in the case of normal human beings and the different races.

If we examine a number of criminals, we shall find that they exhibit numerous anomalies in the face, skeleton, and various psychic and sensitive functions, so that they strongly resemble primitive races. It was these anomalies that first drew my father's attention to the close relationship between the criminal and the savage and made him suspect that criminal tendencies are of atavistic origin.

When a young doctor at the Asylum in Pavia, he was requested to make a post-mortem examination on a criminal named Vilella, an Italian Jack the Ripper, who by atrocious crimes had spread terror in the Province of Lombardy. Scarcely had he laid open the skull, when he perceived at the base, on the spot where the internal occipital crest or ridge is found in normal individuals, a small hollow, which he called *median occipital fossa* (see [Fig. 1](#)). This abnormal character was correlated to a still greater anomaly in the cerebellum, the hypertrophy of the vermis, *i.e.*, the spinal cord which separates the cerebellar lobes lying underneath the cerebral hemispheres. This vermis was so enlarged in the case of Vilella, that it almost formed a small, intermediate cerebellum like that found in the lower types of apes, rodents, and birds. This anomaly is very rare among inferior races, with the exception of the South American Indian tribe of the Aymaras of Bolivia and Peru, in whom it is not infrequently found (40%). It is seldom met



with in the insane or other degenerates, but later investigations have shown it to be prevalent in criminals.

This discovery was like a flash of light. "At the sight of that skull," says my father, "I seemed to see all at once, standing out clearly illumined as in a vast plain under a flaming sky, the problem of the nature of the criminal, who reproduces in civilised times characteristics, not only of primitive savages, but of still lower types as far back as the carnivora."



FIG. 1

FOSSETTE OCCIPITAL

(see [page 6](#))

Thus was explained the origin of the enormous jaws, strong canines, prominent zygomæ, and strongly developed orbital arches which he had so frequently remarked in criminals, for these peculiarities are common to carnivores and savages, who tear and devour raw flesh. Thus also it was easy to understand why the span of the arms in criminals so often exceeds the height, for this is a characteristic of apes, whose fore-limbs are used in walking and climbing. The other anomalies exhibited by criminals—the scanty beard as opposed to the general hairiness of the body, prehensile foot, diminished number of lines in the palm of the hand, cheek-pouches, enormous development

of the middle incisors and frequent absence of the lateral ones, flattened nose and angular or sugar-loaf form of the skull, common to criminals and apes; the excessive size of the orbits, which, combined with the hooked nose, so often imparts to criminals the aspect of birds of prey, the projection of the lower part of the face and jaws (prognathism) found in negroes and animals, and supernumerary teeth (amounting in some cases to a double row as in snakes) and cranial bones (epactal bone as in the Peruvian Indians): all these characteristics pointed to one conclusion, the atavistic origin of the criminal, who reproduces physical, psychic, and functional qualities of remote ancestors.

Subsequent research on the part of my father and his disciples showed that other factors besides atavism come into play in determining the criminal type. These are: disease and environment. Later on, the study of innumerable offenders led them to the conclusion that all law-breakers cannot be classed in a single species, for their ranks include very diversified types, who differ not only in their bent towards a particular form of crime, but also in the degree of tenacity and intensity displayed by them in their perverse propensities, so that, in reality, they form a graduated scale leading from the born criminal to the normal individual.

Born criminals form about one third of the mass of offenders, but, though inferior in numbers, they constitute the most important part of the whole criminal army, partly because they are constantly appearing before the public and also because the crimes committed by them are of a

peculiarly monstrous character; the other two thirds are composed of criminaloids (minor offenders), occasional and habitual criminals, etc., who do not show such a marked degree of diversity from normal persons.

Let us commence with the born criminal, who as principal nucleus of the wretched army of law-breakers, naturally manifests the most numerous and salient anomalies.

The median occipital fossa and other abnormal features just enumerated are not the only peculiarities exhibited by this aggravated type of offender. By careful research, my father and others of his School have brought to light many anomalies in bodily organs, and functions both physical and mental, all of which serve to indicate the atavistic and pathological origin of the instinctive criminal.

It would be incompatible with the scope of this summary, were I to give a minute description of the innumerable anomalies discovered in criminals by the Modern School, to attempt to trace such abnormal traits back to their source, or to demonstrate their effect on the organism. This has been done in a very minute fashion in the three volumes of my father's work *Criminal Man* and his subsequent writings on the same subject, *Modern Forms of Crime*, *Recent Research in Criminal Anthropology*, *Prison Palimpsests*, etc., etc., to which readers desirous of obtaining a more thorough knowledge of the subject should refer.

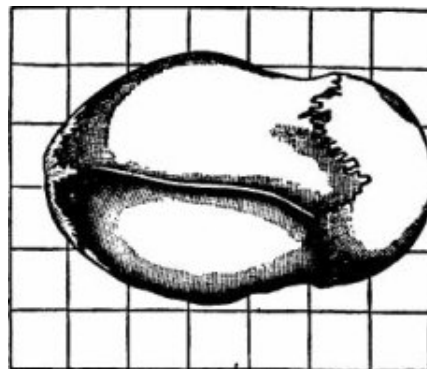
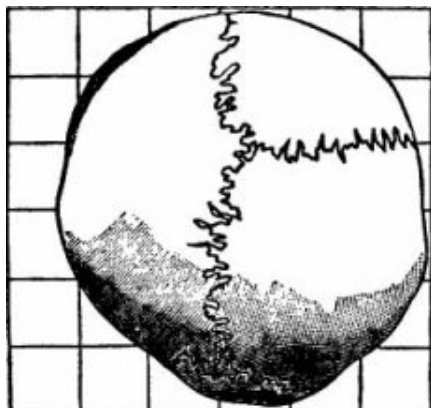
The present volume will only touch briefly on the principal characteristics of criminals, with the object of presenting a general outline of the studies of criminologists.

## **PHYSICAL ANOMALIES OF THE BORN CRIMINAL**

*The Head.* As the seat of all the greatest disturbances, this part naturally manifests the greatest number of anomalies, which extend from the external conformation of the brain-case to the composition of its contents.

The criminal skull does not exhibit any marked characteristics of size and shape. Generally speaking, it tends to be larger or smaller than the average skull common to the region or country from which the criminal hails. It varies between 1200 and 1600 c.c.; *i.e.*, between 73 and 100 cubic inches, the normal average being 92. This applies also to the cephalic index; that is, the ratio of the maximum width to the maximum length of the skull<sup>[1]</sup> multiplied by 100, which serves to give a concrete idea of the form of the skull, because the higher the index, the nearer the skull approaches a spherical form, and the lower the index, the more elongated it becomes. The skulls of criminals have no characteristic cephalic index, but tend to an exaggeration of the ethnical type prevalent in their native countries. In regions where dolichocephaly (index less than 80) abounds, the skulls of criminals show a very low index; if, on the contrary, they are natives of districts where brachycephaly (index 80 or more) prevails, they exhibit a very high index.

#### SKULL FORMATION



## FIG. 2

## FIG. 3

In 15.5% we find trochocephalous or abnormally round heads (index 91). A very high percentage (nearly double that of normal individuals) have submicrocephalous or small skulls. In other cases the skull is excessively large (macrocephaly) or abnormally small and ill-shaped with a narrow, receding forehead (microcephaly, 0.2%). More rarely the skull is of normal size, but shaped like the keel of a boat (scaphocephaly, 0.1% and subscaphocephaly 6%). (See [Fig. 2](#).) Sometimes the anomalies are still more serious and we find wholly asymmetrical skulls with protuberances on either side (plagiocephaly 10.9%, see [Fig. 3](#)), or terminating in a peak on the bregma or anterior fontanel (acrocephaly, see [Fig. 4](#)), or depressed in the middle (cymbocephaly, sphenoccephaly). At times, there are crests or grooves along the sutures (11.9%) or the cranial bones are abnormally thick, a characteristic of savage peoples (36.6%) or abnormally thin (8.10%). Other anomalies of importance are the presence of Wormian bones in the sutures of the skull (21.22%), the bone of the Incas already alluded to (4%), and above all, the median occipital fossa. Of great importance also are the prominent frontal sinuses found in 25% (double that of normal individuals), the semicircular line of the temples, which is sometimes so exaggerated that it forms a ridge and is correlated to an excessive development of the temporal muscles, a common characteristic of primates and carnivores. Sometimes the forehead is receding, as in apes (19%), or low and narrow (10%).

*The Face.* In striking contrast to the narrow forehead and low vault of the skull, the face of the criminal, like those of most animals, is of disproportionate size, a phenomenon intimately connected with the greater development of the senses as compared with that of the nervous centres. Prognathism, the projection of the lower portion of the face beyond the forehead, is found in 45.7% of criminals. Progeneismus, the projection of the lower teeth and jaw beyond the upper, is found in 38%, whereas among normal persons the proportion is barely 28%. As a natural consequence of this predominance of the lower portion of the face, the orbital arches and zygomæ show a corresponding development (35%) and the size of the jaws is naturally increased, the mean diameter being 103.9 mm. (4.09 inches) as against 93 mm. (3.66 inches) in normal persons. Among criminals 29% have voluminous jaws.

The excessive dimensions of the jaws and cheek-bones admit of other explanations besides the atavistic one of a greater development of the masticatory system. They may have been influenced by the habit of certain gestures, the setting of the teeth or tension of the muscles of the mouth, which accompany violent muscular efforts and are natural to men who form energetic or violent resolves and meditate plans of revenge.

Asymmetry is a common characteristic of the criminal physiognomy. The eyes and ears are frequently situated at different levels and are of unequal size, the nose slants towards one side, etc. This asymmetry, as we shall see later, is connected with marked irregularities in the senses and functions.

*The Eye.* This window, through which the mind opens to the outer world, is naturally the centre of many anomalies of a psychic character, hard expression, shifty glance, which are difficult to describe but are, nevertheless, apparent to all observers (see [Fig. 4](#)). Side by side with peculiarities of expression, we find many physical anomalies—ptosis, a drooping of the upper eyelid, which gives the eye a half-closed appearance and is frequently unilateral; and strabismus, a want of parallelism between the visual axes, which is insignificant if it arises from errors of refraction, but is very serious if it betokens progressive or congenital diseases of the brain or its membranous coverings. Other anomalies are asymmetry of the iris, which frequently differs in colour from its fellow; oblique eyelids, a Mongolian characteristic, with the edge of the upper eyelid folding inward or a prolongation of the internal fold of the eyelid, which Metchnikoff regards as a persistence of embryonic characters.

*The Ear.* The external ear is often of large size; occasionally also it is smaller than the ears of normal individuals. Twenty-eight per cent. of criminals have handle-shaped ears standing out from the face as in the chimpanzee: in other cases they are placed at different levels. Frequently too, we find misshapen, flattened ears, devoid of helix, tragus, and anti-tragus, and with a protuberance on the upper part of the posterior margin (Darwin's tubercle), a relic of the pointed ear characteristic of apes. Anomalies are also found in the lobe, which in some cases adheres too closely to the face, or is of huge size as in the ancient Egyptians; in other cases, the lobe is entirely



absent, or is atrophied till the ear assumes a form like that common to apes.

*The Nose.* This is frequently twisted, up-turned or of a flattened, negroid character in thieves; in murderers, on the contrary, it is often aquiline like the beak of a bird of prey. Not infrequently we meet with the trilobate nose, its tip rising like an isolated peak from the swollen nostrils, a form found among the Akkas, a tribe of pygmies of Central Africa. All these peculiarities have given rise to popular saws, of a character more or less prevalent everywhere.

*The Mouth.* This part shows perhaps a greater number of anomalies than any other facial organ. We have already alluded to the excessive development of the jaws in criminals. They are sometimes the seat of other abnormal characters,—the lemurine apophysis, a bony elevation at the angle of the jaw, which may easily be recognised externally by passing the hand over the skin; and the canine fossa, a depression in the upper jaw for the attachment of the canine muscle. This muscle, which is strongly developed in the dog, serves when contracted to draw back the lip leaving the canines exposed.

The lips of violators of women and murderers are fleshy, swollen and protruding, as in negroes. Swindlers have thin, straight lips. Hare-lip is more common in criminals than in normal persons.

*The Cheek-pouches.* Folds in the flesh of the cheek which recall the pouches of certain species of mammals, are not uncommon in criminals.

*The Palate.* A central ridge (*torus palatinus*), more easily felt than seen, may sometimes be found on the palate, or

this part may exhibit other peculiarities, a series of cavities and protuberances corresponding to the palatal teeth of reptiles. Another frequent abnormality is cleft palate, a fissure in the palate, due to defective development.

*The Teeth.* These are specially important, for criminals rarely have normal dentition. The incisors show the greatest number of anomalies. Sometimes both the lateral incisors are absent and the middle ones are of excessive size, a peculiarity which recalls the incisors of rodents. The teeth are frequently striated transversely or set very wide apart (diastema) with gaps on either side of the upper canines into which the lower ones fit, a simian characteristic. In some cases, these spaces occur between the middle incisors or between these and the lateral ones.

**FIG. 4**



**HEAD OF CRIMINAL**  
(see [page 14](#))

**FIG. 5**



**HEAD OF CRIMINAL**  
(see [page 18](#))

Very often the teeth show a strange uniformity, which recalls the homodontism of the lower vertebrates. In some cases, however, this uniformity is limited to the premolars, which are furnished with tubercles like the molars, a peculiarity of gorillas and orang-outangs. In 4% the canines are very strongly developed, long, sharp, and curving inwardly as in carnivores. Premature caries is common.

*The Chin.* Generally speaking, this part of the face projects moderately in Europeans. In criminals it is often small and receding, as in children, or else excessively long, short or flat, as in apes.

*Wrinkles.* Although common to normal individuals, the abundance, variety, and precocity of wrinkles almost invariably manifested by criminals, cannot fail to strike the observer. The following are the most common: horizontal and vertical lines on the forehead, horizontal and circumflex lines at the root of the nose, the so-called crow's-feet on the temple at the outer corners of the eyes, naso-labial wrinkles around the region of the mouth and nose.

*The Hair.* The hair of the scalp, cheeks and chin, eyebrows, and other parts of the body, shows a number of anomalies. In general it may be said that in the distribution of hair, criminals of both sexes tend to exhibit characteristics of the opposite sex. Dark hair prevails especially in murderers, and curly and woolly hair in swindlers. Both grey hair and baldness are rare and when found make their appearance later in life than in the case of normal individuals. The beard is scanty and frequently missing altogether. On the other hand, the forehead is often covered with down. The eyebrows are bushy and tend to

meet across the nose. Sometimes they grow in a slanting direction and give the face a satyr-like expression (see [Fig. 5](#)).

The blemishes peculiar to the delinquent are not only confined to the face and head, but are found in the trunk and limbs.

*The Thorax.* An increase or decrease in the number of ribs is found in 12% of criminals. This is an atavistic character common to animals and lower or prehistoric human races and contrasts with the numerical uniformity characteristic of civilised mankind.

Polymastia, or the presence of supernumerary nipples (which are generally placed symmetrically below the normal ones as in many mammals) is not an uncommon anomaly. Gynecomastia or hypertrophy of the mammæ is still more frequent in male criminals. In female criminals, on the contrary, we often find imperfect development or absence of the nipples, a characteristic of monotremata or lowest order of the mammals; or the breasts are flabby and pendent like those of Hottentot women.

The chest is often covered with hair which gives the subject the appearance of an animal.

*The Pelvis and Abdomen.* The abdomen, pelvis, and reproductive organs sometimes show an inversion of sex-characters. In 42% the sacral canal is uncovered, and in some cases there is a prolongation of the coccyx, which resembles the stump of a tail, sometimes tufted with hair.

*The Upper Limbs.* One of the most striking and frequent anomalies exhibited by criminals is the excessive length of the arms as compared with the lower limbs, owing to which

the span of the arms exceeds the total height, an ape-like character.

Six per cent. exhibit an anomaly which is extremely rare among normal individuals—the olecranon foramen, a perforation in the head of the humerus where it articulates with the ulna. This is normal in the ape and dog and is frequently found in the bones of prehistoric man and in some of the existing inferior races of mankind.

Several abnormal characters, which point to an atavistic origin, are found in the palm and fingers. Supernumerary fingers (polydactylism) or a reduction in the usual number are not uncommon. Sometimes we find syndactylism, or palmate fingers, a continuation of the interdigital skin to the second phalanx. The length of the fingers varies according to the type of crime to which the individual is addicted. Those guilty of crimes against the person have short, clumsy fingers and especially short thumbs. Long fingers are common to swindlers, thieves, sexual offenders, and pickpockets. The lines on the palmar surfaces of the fingertips are often of a simple nature as in the anthropoids. The principal lines on the palm are of special significance. Normal persons possess three, two horizontal and one vertical, but in criminals these lines are often reduced to one or two of horizontal or transverse direction, as in apes.

*The Lower Limbs.* Of a number of criminals examined, 16% showed an unusual development of the third trochanter, a protuberance on the head of the femur where it articulates with the pelvis. This distinctly atavistic character is connected with the position of the hind-limb in quadrupeds.

*The Feet.* Spaces between the toes like the interdigital spaces of the hand are very common, and in conjunction with the greater mobility of the toes and greater length of the big-toe, produce the prehensile foot, of the quadrumana, which is used for grasping. The foot is often flat, as in negroes. In the feet, as in the hands, there is frequently a tendency to greater strength or dexterity on the left side, contrary to what happens in normal persons, and this tendency is manifested in many cases where there is no trace of functional and motorial left-handedness.

*The Cerebrum and the Cerebellum.* The chief and most common anomaly is the prevalence of macroscopic anomalies in the left hemisphere, which are correlated to the sensory and functional left-handedness common to criminals and acquired through illness. The most notable anomaly of the cerebellum is the hypertrophy of the vermis, which represents the middle lobe found in the lower mammals. Anomalies in the cerebral convolutions consist principally of anastomotic folds, the doubling of the fissure of Rolando, the frequent existence of a fourth frontal convolution, the imperfect development of the precuneus (as in many types of apes), etc. Anomalies of a purely pathological character are still more common. These are: adhesions of the meninges, thickening of the pia mater, congestion of the meninges, partial atrophy, centres of softening, seaming of the optic thalami, atrophy of the corpus callosum, etc.

Of great importance, too, are the histological anomalies discovered by Roncoroni in the brains of criminals and