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MAN

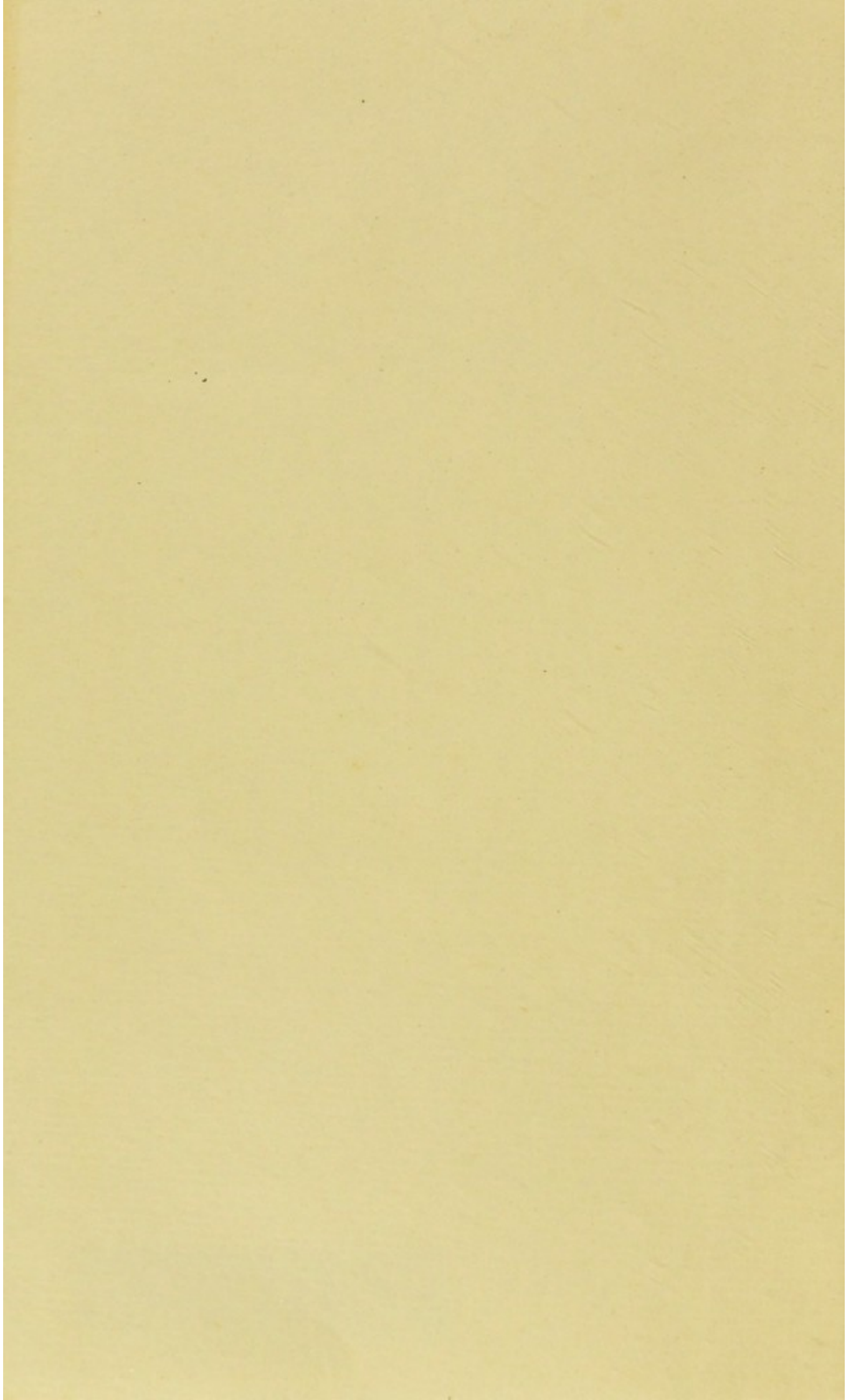
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BY THE SAME AUTHOR

EDUCATION, PERSONALITY
AND CRIME

Price . 7/6 net

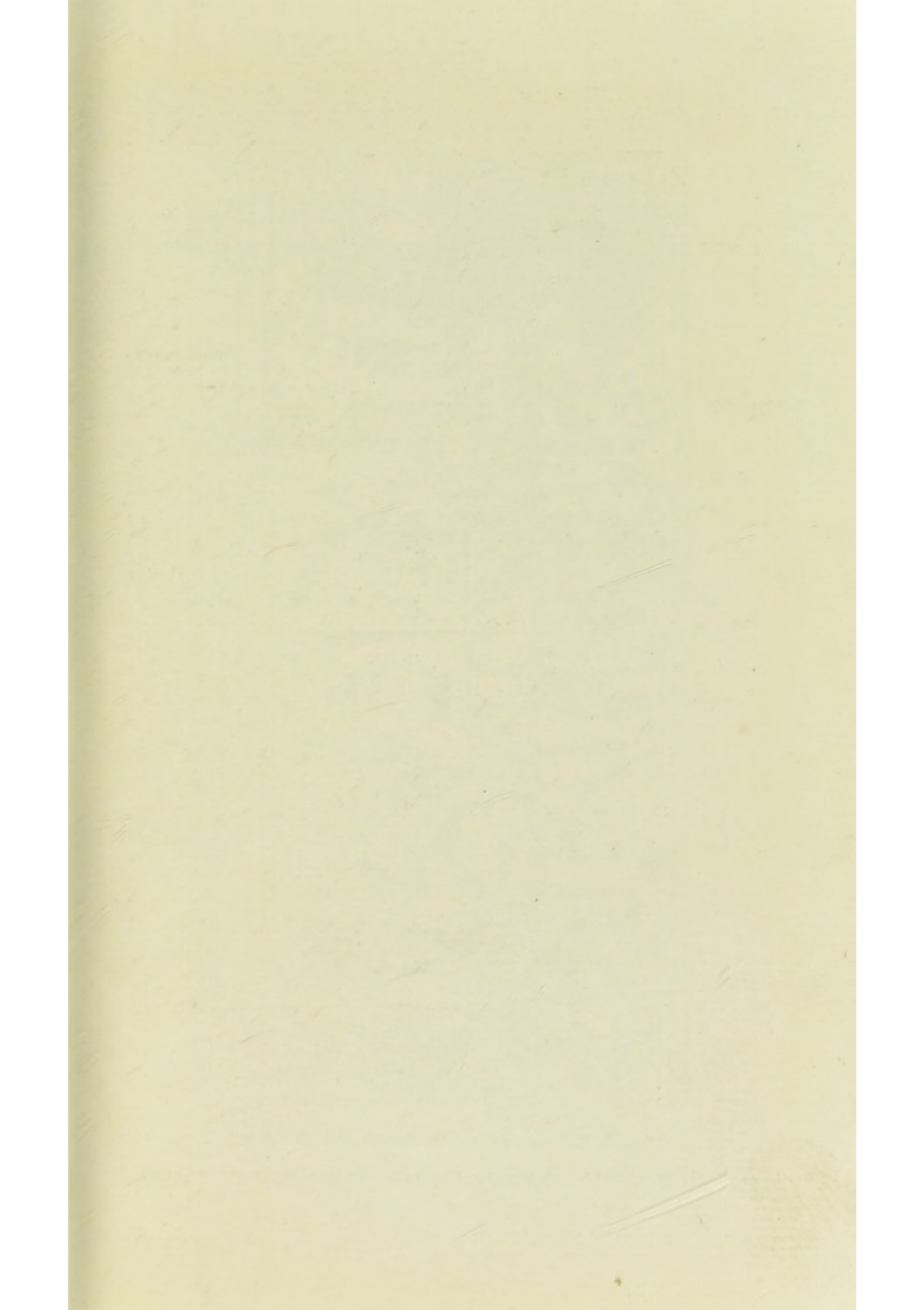
Truth: "The volume is one which should be of use to every sociologist who wishes to be conversant with the medical aspect of the problem."

Academy: "We cordially recommend the volume to be read."

Occult Review: "He has written a book which any one can read, and which is bound to alter the whole point of view of the reader who has hitherto looked upon these questions with the condescending eye of the man in the street."

Globe: "Dr. Wilson's book is a grave indictment of our social law, now obsolete and inadequate, and it ought to be read carefully by every citizen recognizing personal responsibility towards those handicapped by predisposition to vice or disease."

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Ra-Harmachis.

Temu.

Shu.

Tefnut.

Seb.

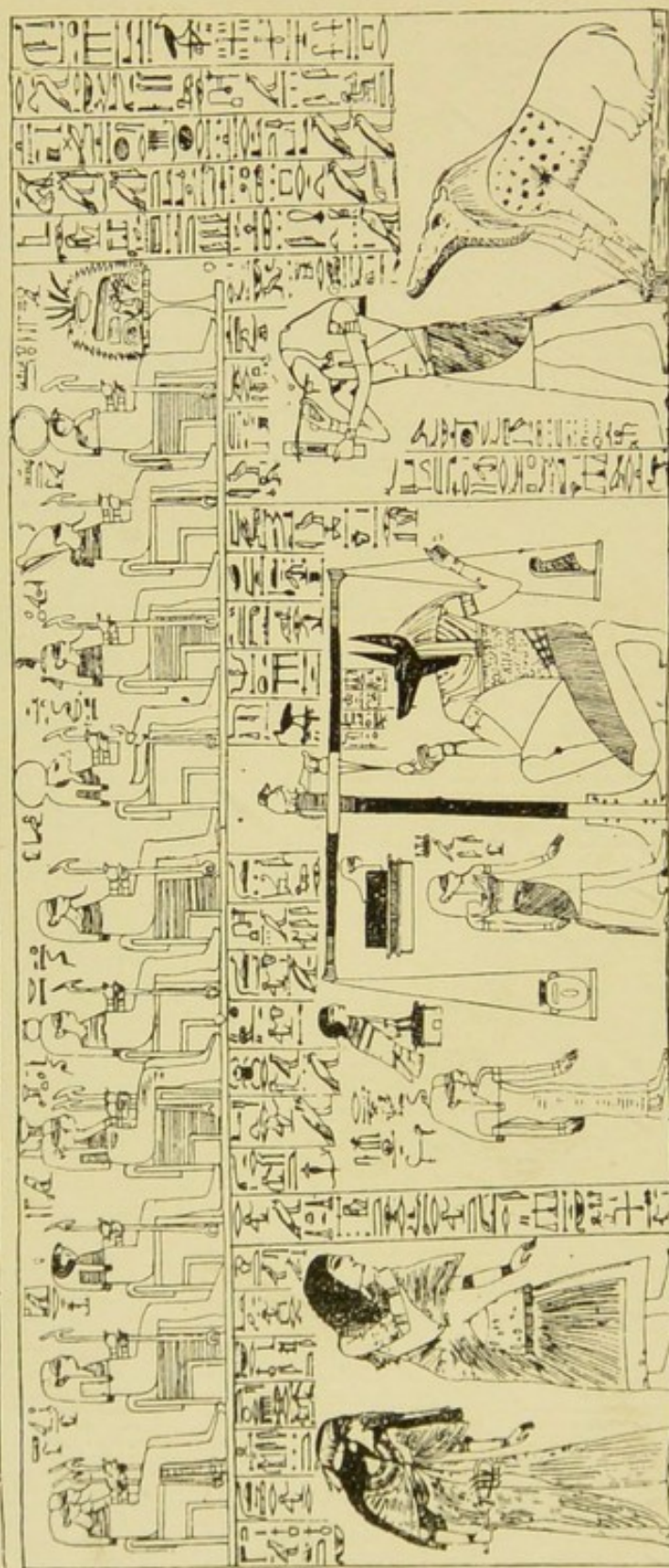
Nut.

Nephthys.
Isis.

Horus.

Hathor.

Hu.
Sa.



Amām, the
Devourer of the
unjustified.

Thoth recording
the result of the
weighing.

The Feather of
Maat.

Anubis testing
the tongue of
the balance.

Ani's Luck or
Destiny.

Ani's Embryo.

Ani's Soul or
Heart.

Cupid.

Renenet and
Meskhenet, the
goddesses of
birth.

Ani and his wife Thuthu
entering the Hall of Judg-
ment.

THE WEIGHING OF THE SOUL OF THE DEAD.

By the courtesy of Dr. E. A. Wallis Bridge, Litt.D. For full description see Chapter VII, page 120.

[Frontispiece.]

UNFINISHED MAN

A SCIENTIFIC ANALYSIS OF THE
PSYCHOPATH OR HUMAN
DEGENERATE

BY
ALBERT WILSON, M.D., Edin.

LONDON

*Author of "Education, Personality and
Crime"*



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INTRODUCTORY PREFACE

BY

MR. ARNOLD WHITE

DR. ALBERT WILSON constructs a gamut of humanity, consisting of *Homo sapiens*, *Homo domesticus*, sub-normal Degenerates and abnormal Aments. I should have thought that Dr. Wilson would have better served his purpose by selection of a specimen of the class *Homo sapiens* to write the preface to this deeply interesting book. As he has not done so, it is immaterial whether the writer belongs to the class of *Homo domesticus* or whether he is an aggressive and bloodthirsty Degenerate.

To speak frankly, part of this book is as clearly outside my ken as the technicalities of ballistics or the latest speculations on the force of the Greek particle. It would be presumption to express admiration or criticism of highly specialized treatment of medico-legal obscurities. From what one knows of the legal profession, it is safe to predict that so far as Dr. Wilson's theories and investigations on the subject of criminology promise to invade territory pegged out by them, the lawyers will not fail to make good their claim to its possession and any incorporeal hereditaments attached thereto.

While disclaiming, therefore, all title to praise or blame a book which treats largely of borderland subjects between Medicine and Law, I venture nevertheless to express as a layman sincere admiration for the interestingness and clarity of this work. It is to the Eugenist in a rut what a glove

stretcher is to a pair of gloves. If the nation reads *Unfinished Man*, Dr. Wilson will have made the nation think.

Forty years ago Educationists achieved what was then held to be a triumph. We were told of the harvest of well being and virtue of primary education which Mr. Forster's plan would bring to the United Kingdom. Forty years have passed away. The children have worse manners. Work is more slurred. Courtesy is rarer than in 1870. The clenched antagonisms of classes are more bitter and far more reaching than when the Compulsory Education Act was ushered in with a prophecy of Hyperborean warmth, happiness, wisdom and virtue. So far from being behind the north wind, the north wind is blowing full in our faces. If the certificated pilots, like Dr. Wilson, read the stars in their courses correctly, we are heading straight for the rocks. It is not too late to change our course. Any fool can be a pessimist. The laws of heredity present an unlimited field. One corner has been uncovered. The great outstanding feature of human beings is that, like other living beings, they are adaptations. Natural Selection, as Dr. Archdall Reid says in his *Laws of Heredity*, is concerned almost exclusively with progression. *Unfinished Man* is the book for the optimist. It tells him where we fall short, and suggests how the true remedies for individual, anti-social and collective misconduct or communal misunderstandings may be best applied.

I commend this book to every one who thinks that the proper study of mankind is man.

ARNOLD WHITE.

AUTHOR'S PREFACE

THERE are many useful works on the Criminal. Some study his face, some his skull or stature, some his environment ; others are more interested in him as a sportsman, a perverted hero, or a " motive " for artistic treatment. I have endeavoured to knit these aspects together, and to reduce the problem of his existence to its most elementary terms, and to trace its real origin—which I take to be an unfinished state of the higher brain architecture, affecting the personality or ego.

I have therefore considered the unit before its appearance in the outer world, probing deeply into the often obscure recesses of its prenatal surroundings and antecedents. In the effort to present the sad *tableau vivant* in as strong and clear a light as I can throw upon it, I have had to flit from sociology to anthropology, and from psychology to physiology. I have had to estimate carefully the preventive and remedial value of such factors as education, and even religion.

I am deeply honoured by having a preface written by Mr. Arnold White ; and I am indebted for valuable help and criticism to Professor Darbishire, to Mr. J. H. Orton, to Mr. M. Emley, Mr. H. W. O. Hagreen, Mr. Cloudesly Brereton, Mr. W. J. Attwater, Mr. Theodore Neild, J.P., Mr. Sidney Bowkett, and to M. Louis Stroobant.

But for the assistance of General Booth, and his officers in the Salvation Army, I never could have attempted this

work. Whilst giving me both information and material, they roused an intense sympathy and interest in their work. Long may they prosper.

I am greatly indebted to the directors of the different institutions I visited in Holland and Belgium, for the great amount of information they gave me. I made most searching inquiries into all their methods.

It must be clearly understood that those who have aided me with suggestions are not in any way responsible for the views expressed, or conclusions arrived at in this book.

It is not my desire to persuade, but to convince ; nor do I plead either for favour or sympathy ; but I demand justice—and give the reasons.

22, LANGHAM STREET,

PORTLAND PLACE,

W.

CONTENTS

CHAP.		PAGE
	THE ARGUMENT	1
I	HUMANITY, NORMAL AND ABNORMAL	9
	<i>Sections A.</i> General Remarks	9
	<i>B.</i> The Insane <i>versus</i> the Degenerate	11
	<i>C.</i> The Royal Commission on the Feeble-minded.	14
	<i>D.</i> Compulsory Education	17
II	THE DEGENERATE	31
	<i>Sections A.</i> The Literature	31
	<i>B.</i> The Qualities	33
	<i>C.</i> The Born Criminal	37
	<i>D.</i> Types and Cases	41
III	THE CRIMINAL	48
	<i>Sections A.</i> Criminals	48
	<i>B.</i> Classification	54
	<i>C.</i> Crime	56
	<i>D.</i> Punishment	57
IV	HOW CRIMINALS ARE MADE	63
	<i>Sections A.</i> The Prenatal History	63
	<i>B.</i> Post-natal Afflictions	66
V	RESPONSIBILITY	70
	<i>Sections A.</i> First Principles.	70
	<i>B.</i> Illustrations	72
	<i>C.</i> The Legal Aspect	79
	<i>D.</i> People who are not Responsible	88
	<i>E.</i> Emotional Irresponsibility	91
	<i>F.</i> St. Paul on Responsibility.	96
VI	SIN AND CRIME	100
	<i>Sections A.</i> The Present Confusion	100
	<i>B.</i> The Present Inconsistency	105
	<i>C.</i> Crime as a Disease	111
	<i>D.</i> Crime as a Drama	113
VII	BRITISH METHODS AND RESULTS.	116
	<i>Sections A.</i> The Theory of Justice	116
	<i>B.</i> The Attitude of Law	121
	<i>C.</i> The Inequalities of Law	129
	<i>D.</i> The Guilt of the Nation	140

CHAP.		PAGE
VIII	THE RELATION OF PHYSIOLOGY TO JUSTICE.	144
	<i>Sections A.</i> The Germinal Elements	144
	<i>B.</i> The Determination of Sex	148
	<i>C.</i> The Human Germinal Elements.	157
	<i>D.</i> Misfits in Marriage	161
IX	DEVELOPMENT AND ITS DANGERS	170
X	THE PROBLEM OF HEREDITY OR THE CONTINUITY OF DEGENERACY	184
	<i>Sections A.</i> Biology and Selection	184
	<i>B.</i> Mendelian Principles	195
	<i>C.</i> Degeneracy	203
	<i>D.</i> Nature and Nurture	209
	<i>E.</i> The Royal Commission on the Feeble- minded.	213
XI	THE PHYSIOLOGY OF THE BRAIN	221
	<i>Sections A.</i> Brain Structure	221
	<i>B.</i> Brain Functions	225
	<i>C.</i> The Microscopic Structure	228
	<i>D.</i> The Physical Basis of Degeneracy.	230
	<i>E.</i> The Stigmata of Physical Degeneration	237
XII	WHERE IS MIND ?	239
XIII	THE PHYSICAL BASIS OF MIND AND PERSONALITY	254
XIV	SOCIAL HYGIENE IN HOLLAND	278
	<i>Sections A.</i> Dutch Prisons	278
	<i>B.</i> Care of the Youth	279
	<i>C.</i> Treatment of Derelicts and Vagabonds	286
XV	THE TREATMENT OF VAGABONDAGE AND CRIME IN BELGIUM	294
	<i>Sections A.</i> The Colony at Merxplas	294
	<i>B.</i> The History of Repressive Measures	301
	<i>C.</i> The Treatment of Women	304
	<i>D.</i> The Treatment of Young Criminals in Prison	306
	<i>E.</i> Les Ecoles de Bienfaisance de l'Etat	308
XVI	TREATMENT	318
	<i>Sections A.</i> Classification with a View to Treatment.	318
	<i>B.</i> Treatment	326
	<i>C.</i> Reform	332
	<i>D.</i> The Criminal an Invalid	342
XVII	THE WAY OUT	347
	General Booth's Message to England	350
APPENDIX		363
	<i>A.</i> A Little about Tramps	363
	<i>B.</i> The Degenerates' Prayer	368
INDEX OF SUBJECTS		369
LIST OF AUTHORITIES		375

LIST OF ILLUSTRATIONS

FRONTISPIECE. The Scales of Justice ; the Weighing of the Soul
of the Dead.

THE ARGUMENT

FIG.	PAGE
1. The Gamut of Humanity	6

CHAPTER I

2. The Three Divisions of Humanity, represented in Circles	11
3. A Group of Weakminded Degenerates	14

CHAPTER VI

4. A Good Man, who had unfair Treatment, Thirty-four Years in Prison.	101
--	-----

CHAPTER VII

5. Williams the Second, an ex-Burglar, Forty Years in Prison	134
6. Williams the Second, with Brigadier Playle and the Author	136

CHAPTER VIII

7A. Chromatin Rods in a Lily Root	146
7B. The Same in a Bean Root	146
7C. The Ova of <i>Ascaris</i>	146
8. A Healthy Normal Infant	150
9. Ova and Sperms in a Limpet, <i>Crepidula fornicata</i>	153
10. The Accessory Chromosome in a Cricket, <i>Gryllus</i>	153
11. A Diagram to show the Production of Sex	155
12. Portraits of Chevalier d'Eon de Beaumont	158
13. An Hermaphrodite	160

CHAPTER X

14. Mendelian Factors in Barley	195
15. Mendelism Illustrated Diagrammatically	196
16. A Tabular History of a Family of Bleeders	198

FIG.		PAGE
17.	Farabee's Table of Brachydactyly	198
18.	Portrait of a Coiner	204
19.	A Pair of Kittens which are Sports	208
20.	Representation of a Normal and a Degenerate	219

CHAPTER XI

21.	Diagram of Lower Types of Brains	222
22.	The Brain Pattern	224
23.	A Diagram of the Human Brain, divided into Areas, by Dr. A. W. Campbell	225
24.	Photographs of the Brain Cortex of a Foetus	227
25.	A Sketch of a Murderer	228
26.	Photographs of the Cortex of the First Temporal Convolution of a Normal Brain	229
27.	Photographs of the Brain Cortex of the Same Area at Birth	230
28.	Photographs of the Same Cortex of a Child aged Five	231
29.	Photographs of the Same Cortex of a Degenerate	232
30.	Cortex of the same Degenerate from a Different Area, the Occipital	233
31.	Drawings of the Cortex	234
32.	A Diagrammatic Representation of Stock or Heredity, and the Development of the Personality	236
33.	Photograph to illustrate Physical Stigmata	238

CHAPTER XIII

34.	Photographs of Calcarine Areas	254
35.	The Neuroblasts in the Fourth Month Foetus; and the Fibre Architecture of the Brain	255
36.	The Cortex to Show the Layers	256
37.	The Foetal Motor Cortex	256
38.	A Convolution at Time of Birth	257
39.	A Normal Cortex	258
40.	Six Microphotographs to illustrate the Normal Post-natal Layers	259
41.	Four Microphotographs to illustrate the Post-natal Layers at Birth	260
42.	Foetal Cortex at Birth	261
43.	Neuroblasts, highly Magnified	262
44.	Photographs of a Supra-normal Child's Brain	263
45.	Motor Cortex of an Intelligent Child	263
46.	Nine Microphotographs of the Post-natal Layer in a Child	264
47.	Cortex of the Orang	265
48.	The Brain of the Degenerate.	266
49.	The Degenerate's Cortex—Ascending Frontal	266
50.	The Degenerate's Cortex—Second Frontal	267
51.	The Ascending Parietal in the Degenerate	268
52.	The same in a "Normal" Female Lunatic	268
53.	The Degenerate's Cortex—Superior Parietal	269
54.	The Degenerate's Cortex—Pre-frontal	270
55.	The Degenerate's Cortex—Calcarine Area	271

LIST OF ILLUSTRATIONS

xiii

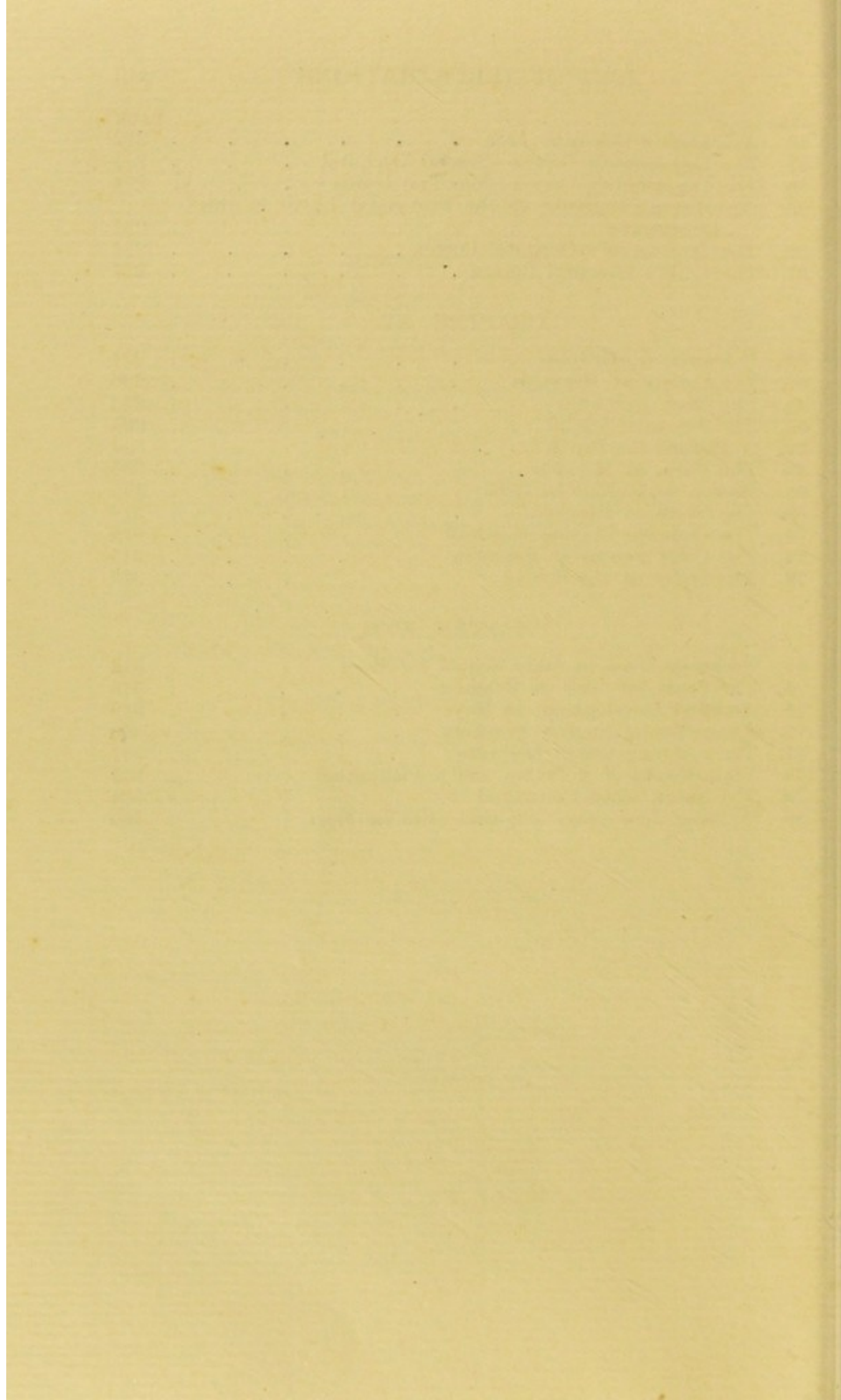
FIG.		PAGE
56.	A Lunatic's Calcarine Area	272
57.	The Degenerate's Cortex—Second Occipital	273
58.	The Degenerate's Cortex—Marginal Gyrus	274
59.	Six Microphotographs of the Post-natal Layer in the Degenerate	275
60.	The Degenerate's Occipital Cortex	276
61.	The Child's Occipital Cortex	277

CHAPTER XV

62.	Colonists at Merxplas	294
63.	The Colony at Merxplas	296
64.	The Main Buildings	296
65.	The Juvenile Adults	298
66.	A Picturesque Group	300
67.	The Farm at Merxplas	305
68.	Maison de Refuge for Girls	305
69.	The Farm at Ruysselede	314
70.	The Children Playing Football	314
71.	The Girls' School at Beernem	315
72.	The Dairy at the School	315

CHAPTER XVII

73.	Technical Class in State School for Boys	316
74.	The Same for Girls in Belgium	316
75.	Arrested Development in Boys	349
76.	Three Young English Derelicts	350
77.	Three Young Dutch Derelicts	351
78.	Photographs of a Tramp and a Pickpocket	352
79.	The Same, when Converted	354
80.	A Baby, four years old, that cries for Beer	359



THE ARGUMENT

IN olden days writers considered no book complete without an Argument, or prefatory synopsis, in order to define their position and to consolidate their subject. It implied that the authors of old were a strenuous folk, who knew that a book, to be worth producing, should maintain or attack a thesis—should, in fact, have a purpose and not a mere tendency.

This book is simply an Argument, in the modern sense, in favour of a theory and of the practical steps which should follow the acceptance of that theory.

The theory proposed is not only novel, but also affects the well being of mankind—in attempting to solve scientifically the problem of degeneracy, weak-mindedness and crime. Because the evidence to be adduced is peculiar, I wish to anticipate the criticism—reasonable and unreasonable—of the expert, as well as to deal frankly with the layman, by exposing fully what I think may be considered the weak points of my position.

It is as true, as it is painful, to admit, that medical critics or journalists are apt to be a little unfair to those who break new ground, or offend old traditions. This was specially evident in the seventies, when the antiseptic system of surgery was vigorously opposed by one of the leading medical papers. Though firmly rooted in Scotland and Germany, there was a decided risk that the progress of surgery in England would be held up for another 20 years. I do not place my small endeavour on the same platform as that gigantic discovery ; but it shows the extremely conservative policy of the medical press. It is, indeed, a pity that medical journalism occupies the rear instead of the vanguard. It is too cautious in matters of science ; and to the regret of many of us, too lavish in eulogizing patent drinks, infant foods, cosmetics and other articles.

On more than one occasion, when presenting types of criminals before some of the ablest of brain specialists in the Kingdom, I have offered the theory that degenerate, or degraded conduct might be due to the arrested development of the brain, especially in the intellectual or psychic areas. The criminals are, therefore, out of focus with their surroundings.

One of the group,¹ a degraded murderer, died; and the microscopical examination of his brain exactly confirmed my contention. Murderers, who are at the same time degenerate, are sufficiently uncommon to render their brains rarely accessible for examination; but when a phenomenon, which has been prophesied by inference from the laws of cause and effect, is found to occur in the first case available for examination, we may confidently expect that it will happen again. Indeed, many negative cases would be required to neutralize the effect of this one positive case.

But I am not alone in basing a thesis on limited evidence—in fact, I am in very good company. Broca's classical discovery, locating the speech centre in the brain, rested on one case.

In the year 1861, Broca described the lesion and its site, which now bears his name.²

The case, which he first described, referred to a patient who had been affected for 10 years, "having lost the power to articulate words, whilst retaining intact all his other intellectual faculties, sensory or motor."

Broca writes: "I was led to think that the loss of speech had been the consequence of a primary circumscribed lesion, and that the central organ of articulate language was probably that in which this lesion had begun; to discover this organ, among those which were affected at the time of death, I sought for the point at which the change appeared the oldest, and I found that, according to all probability, the third frontal convolution, perhaps also the second, must have been the point where the softening began."

He then described a second case, which occurred some

¹ See Fig. 25, Chapter XI, page 229.

² "Nouvelle observation d'aphémie produite par une lésion de la moitié postérieure des deuxième et troisième circonvolutions frontales," par M. Paul Broca, chirurgien de l'hôpital de Bicêtre. *Bull. de la Soc. Anat.*, 1861, xxxvi.

months later. The patient died $1\frac{1}{2}$ years after the attack, and the perfectly circumscribed lesion confirmed his first observation.

Dr. Bolton defined the visuo-sensory area from five cases ; while Dr. A. W. Campbell described the cortical defects of deaf-mutism in one case alone.¹

This murderer's brain has only revealed exactly what common sense, applied to our technical knowledge, would have expected, and moreover what was suggested about him individually when he was alive.

It is, of course, a very slow process to examine the cortex of the human brain thoroughly ; and as it would be futile to expect from even the greatest expert enough cases for statistical inquiry, we must depend on a few cases thoroughly done.

Dr. Bolton, who is one of the pioneers in this work, gives the results of 30 cases in his Goulstonian Lectures (1910). Some are of minor importance and some of major, but one problem of decidedly major importance rests on one case alone. It was to illustrate that in a normal person, when dementia occurs, the highest psychic area (the prefrontal) is more affected or destroyed than the lower psychic—the visuo-psychic ; while the still lower sensory area, the visuo-sensory, is least affected of any. It was a foregone conclusion, *à priori*, arguing from numerous living examples of mental decay, but it had not been demonstrated pathologically.

We are obliged in work of this character to build on isolated cases, simply because they demonstrate relations which have not been anticipated ; in fact, they have not been understood.

There are, as is well known, a large number of expert criminals, who are very intelligent men. These are not specially dealt with in this treatise. The type of criminal whose position I wish to make clear, and whom I call degenerate, is allied to that class called feeble-minded by the Royal Commission and the College of Physicians.

We have been for years in a state of helpless confusion concerning the weak-minded. We have not decided whether this condition is due to heredity or environment. We do

¹ See Chapter XI, page 230.

not yet know whether the child is condemned at birth, or before, or not until a later period of childhood. This is the most stirring sociological problem that has ever been brought forward, and yet we are only approaching it from the theoretical or experimental side.

It would seem as if we never can understand this question until we get down to bedrock; until we study the minute structure of the brain; and realize how far mental functions are associated with the pyramidal cell layers of the brain. If function follows structure, then defective structure means impaired function. I have concentrated my attention on this aspect, and find in the criminal that there is an arrest of structure, due to interference with the stimulus which leads to normal development.

I believe this condition of arrested brain development, which I describe,¹ will be recognized in future years, so that a weak-minded or degenerate person will be dealt with socially on more intelligent lines.

If this is quite a new doctrine, it is startling not because of its novelty, but because of its omission by neurologists, who have assumed that a child's brain at birth had all its brain cells developed, or ready made "from the start, only waiting their turn" for the current to be switched on.²

All the evidence confirms what I said a year before I examined this brain—that the criminal has only the intelligence and control of a child.

Here is the pith of the argument in very simple language.

The nervous system may be likened to an ordinary electrical apparatus, in which impulses are received by electrical cells, which in their turn engender motion. Such is the principle of ringing an electric bell; you send an impulse from the bell push and the cell evolves motion, which rings the bell. The brain is made up of nerve cells which receive impulses and evolve motion.

There are millions of these cells, each of which has its own special function allotted. If one cell goes wrong, it must affect others which depend upon it. If many cells, or a group

¹ These matters are very fully treated in Chapters XI, XII and XIII.

² The quotations are the words of an eminent neurologist.

of cells, be out of gear, no one can tell how far reaching the effects may be.

There are two conditions of cells at birth.

1. Those which are laid down and prepared for action before birth, and are perfectly formed before the child sees daylight, just waiting, as it were, for the current to be switched on.

2. The undeveloped cells, which are represented at birth by their nuclei. Every cell has a round, central nucleus, from which it has developed. These are called neuroblasts, or cell nuclei. At birth, on the outer surface of the aforementioned strata of well developed cells, there are layers or bands of these undeveloped nuclei, which develop slowly in infancy. If they do not receive the proper stimuli they never develop at all, or develop imperfectly. This damaged condition of brain represents the feeble-minded.

It is therefore quite apparent that at birth there are two stages or types of brain cells :—

(a) Developed cells, ready for action, which being prepared before birth, I have called Prenatal ; and

(b) Undeveloped cell-nuclei, or neuroblasts, which develop after the child is born, during infancy and childhood ; which I have called Post-natal.

I shall endeavour to show that the prenatal structures represent the racial mean, what we might describe as the *genus Homo*. Whereas the post-natal structures stand for the individual, who indeed shows many varieties. We have the very wise, clever man, *Homo sapiens*, which term is applied to mankind as opposed to the lower animals. I, however, demur and describe the average man as *Homo domesticus* ; while the man, who has never risen to this level, the feeble-minded yet not imbecile—in fact, the criminal—might be termed *Homo simplex*.

We get a side light on this complex subject, when we observe the results of philanthropic institutions which take charge of the children of the poor. The same class of children outside grow up into criminals and degenerates, and those who engage in this work tell us that the younger they get these children the better are the results. This is obviously a question of the early nutrition of the brain.

The brain-nuclei alluded to, which are for post-natal development, may be said to represent the educatability of the individual. Two factors are, however, necessary, first the facilities for proper education, but far more important the suitable nutrition to build up the bodies of the growing nerve cells. In the life history of the degenerate we find both these factors are wanting.

Finally, is there not such a thing as the Gamut of Humanity?

First, a broad, middle average of intellect and morality, which we all hope to be included in. Above this is an area of super-intellect, in which we find the names of great thinkers and workers. There is below a vast area where we find those who are unable to be classified as normals. They are weak in will, poor in memory, and devoid of control—degenerates. Their brain architecture is unfinished, as I hope to show later, so that they are prevented from rising to the normal level. Below occur those who have been wrecked before birth, idiots and imbeciles.

I have endeavoured to represent this diagrammatically (Fig. 1). I describe the broad section of average humanity as *Homo domesticus*. Above is a narrow band, *Homo sapiens*, composed of super-mentation. Below is a broader band, representing that dead weight of human degeneracy, *Homo simplex*.

The negroids and primitive races do not come into this discussion, beyond suggesting the possibility of a degenerate being a reversion to that type. Though we find some highly developed negro brains, yet as a race, especially when we approach the pigmies, they are much inferior to the civilized races.

It will be seen in the diagram that C, D and E attain different levels in the broad average of normal intelligence, according to their varying intellectual endowments; while F and G represent great intelligence and personality.

Below we find A and B in the area of degeneracy because they are unfinished. They can never rise to the normal level. It does not follow that they are evil minded; B may be simply weak-minded; but deeper down in the mire, we find degraded criminals, as where A is placed.

Homo sapiens
(Super-normal).
1 in 5000 - Galton.

Homo domesticus
(Normal).

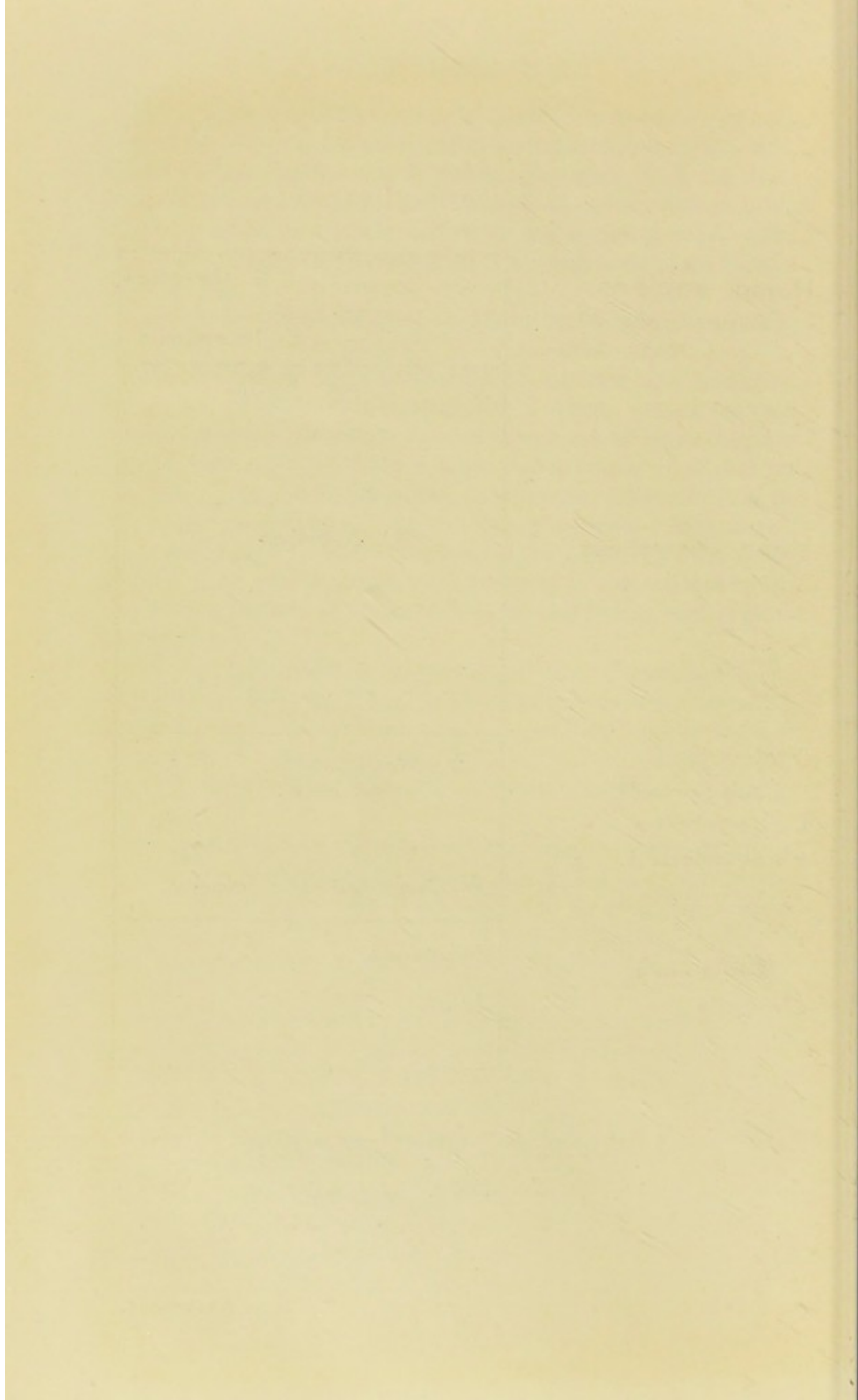
(Sub-normal)
Degenerates.
Weak-minded.

(Abnormal).
Aments

G. Geniuses
F. Exceptional
E. Clever
D. Average
C. Dull
B. Weak-minded, but moral.
A. Degraded and immoral.
Imbeciles. Idiots

The Gamut of Humanity.

FIG. 1.



Lower down is the region of Amentia, which includes idiots and imbeciles.

I am quite aware that some of my medical critics will argue that feeble-mindedness is an advanced form of imbecility, commonly called the high grade imbecile. In fact, some people go so far as to regard all criminals as madmen, which is equivalent to classing geniuses as insane.

The imbeciles and idiots are termed Aments by some writers, which name implies that they are without minds.

The idiots show the grossest amentia; often blind, deaf and dumb, and entirely cut off from the outer world.

The imbeciles have a wider range of diminishing intelligence. Some may be little above the idiots and may call for asylum care; but a certain number live freely in our midst. These show deficiencies of intelligence in many ways. They are much behind at school; in manhood they are still childish; and their moral control is often nil. Many, especially those who are assisted by wealth or position, get through the world in a muddling fashion, too often placed by their friends in easy-going appointments, to the detriment of the service that employs them.

Under these circumstances, it will be seen that the term, Ament, is decidedly too inclusive. With a more careful investigation it will be found that many, now regarded as high grade imbeciles, are really what in this treatise are described as degenerate or "unfinished."

The examination of the brains of this class shows that some imbeciles have come into life with fairly well equipped brains, but the post-natal development is supposed to have been completely arrested. On the other hand, the idiots and lower imbeciles are affected structurally throughout their brains. They are hopeless, as there is nothing to work upon. These are born so; whereas the high grade imbecile, often just a shade below normal, is made rather than born, and so far corresponds with the degenerate, to the elucidation of whom this treatise is devoted. It behoves us to examine these cases more carefully, to determine whether they are not degenerates rather than imbeciles. Very little pathological work has been done in this direction; the records are chiefly clinical, so we are not able to be dogmatic or assertive.

The degenerate, on the other hand, may, and probably does, arrive in the world properly equipped, and if he had a favourable environment, without much stress, would be able to take care of himself.

Given a fair start and chance, he would be as other men. He has been deprived of his due, as a rule, after birth, and therefore the term "unfinished" is very appropriate. The degenerate, in most cases, is made—not born, and the responsibility of this calamity rests upon the community.

It is my object to prove this thesis and to show where the fault lies, and what the remedy is to be.

CHAPTER I

HUMANITY, NORMAL AND ABNORMAL

SECTION A. GENERAL REMARKS : A general level of intelligence demanded—The curse of civilization—Eugenics—Our duty.—SECTION B. THE INSANE VERSUS THE DEGENERATE : Abnormal humanity—The insane and the degenerate overlap—The insane criminal—The insanities of intellect—The degenerate does not receive justice—The degenerate is weak-minded.—SECTION C. THE ROYAL COMMISSION ON THE FEEBLE-MINDED.—SECTION D. COMPULSORY EDUCATION : The failure of compulsory education—British and Church schools—The earliest Government support—Robert Lowe's pernicious test system—The sample system—These pernicious systems abolished in 1898—The two ideals in education—Council schools of to-day—Proper methods of teaching—Defective children—My code of education.

SECTION A.—GENERAL REMARKS

HUMANITY, apart from caste or colour, and principally the decadent section of it, is the object of this inquiry. We glory in genius and the super-intellectual beings around us, but we must recognize that there is a general level of intelligence, below which it is a misfortune to fall. A large proportion of normal beings, through the stress and diseases of civilization, fail to rise above this standard ; yet they are normal, and that is a very important point in investigating any social problem allied to this subject. A normal of low average must not be confused with the abnormal¹ ; that is to say, with the insane or the degenerate, who form the two groups of which abnormal humanity is composed. It may seem a paradox that the march of civilization increases the vast number of low averages, instead of elevating to a higher standard of excellence. It is the pace that kills. Terrible are the effects of the strenuous efforts for wealth, fame, position, knowledge, influence and power. Nature and civilization stand at two opposite poles. Her sacred laws are constantly violated, and she places a very heavy toll on offenders against her

A general level of intelligence demanded.

The curse of civilization.

¹ Subnormal is the more scientific expression.

canons. City life is a condition of continual stress. As a result there is every diversity from strength to weakness, from health to disease, and from honour to depravity. Civilization in its progress casts down the weak and afflicted, and strains the strong almost to breaking point.

The stress of civilization is evident amongst the wealthy, when weakened by ease, luxurious living and in-breeding; and among the poor, who exist rather than live. In each class there is an increase of the "born tired" or unfit, and of those with criminal tendencies.

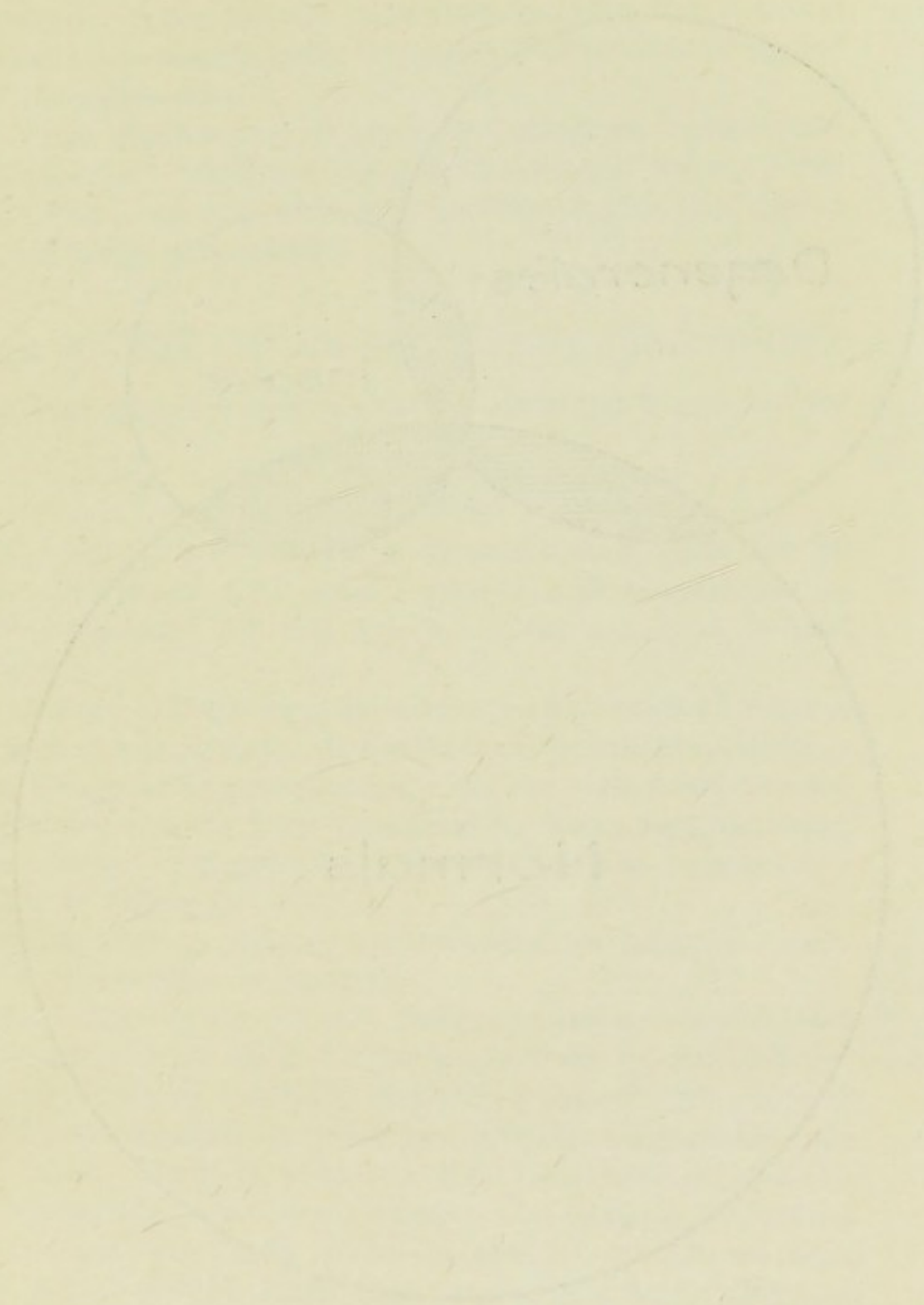
Eugenics. These facts are at the moment so seriously engaging attention that a new study, termed Eugenics, is being pursued with a view to restore the race. This can only be done by pruning out the unfit, whereas modern socialism and charity are now almost entirely devoted to their welfare and preservation. This is obviously a very mistaken policy, for if this class predominate the race becomes less virile and must tend towards extinction, in the same way as the Persians, Greeks and Romans.

As the resisting power of a nation decreases, disease and a higher infant mortality thin its numbers; while the lowered moral and religious codes, which always accompany social decay and degeneracy, facilitate the final overthrow by younger competing Powers.

Our duty. It is our duty to attack this problem from every available point. We must promote social reform; improve hygiene, both physical and mental; sternly oppose class legislation—especially when directed against thrift—and uphold the cause of religion and morals. We must not yield to the false sentimentalism which makes pets of the "unfit."

When a nation is overburdened with subjects of low average, it has received its last and most emphatic warning in the clearest of language. Delay is fatal.

We must bring to bear all the knowledge we possess on this problem of subnormal humanity. Just as it is often difficult to say where sanity ends and insanity commences, so we often find that normals shade into abnormals. Nevertheless they form two distinct and separate groups, requiring the closest investigation; while the genius soars high above the average man, yet some dullards may still be normal.



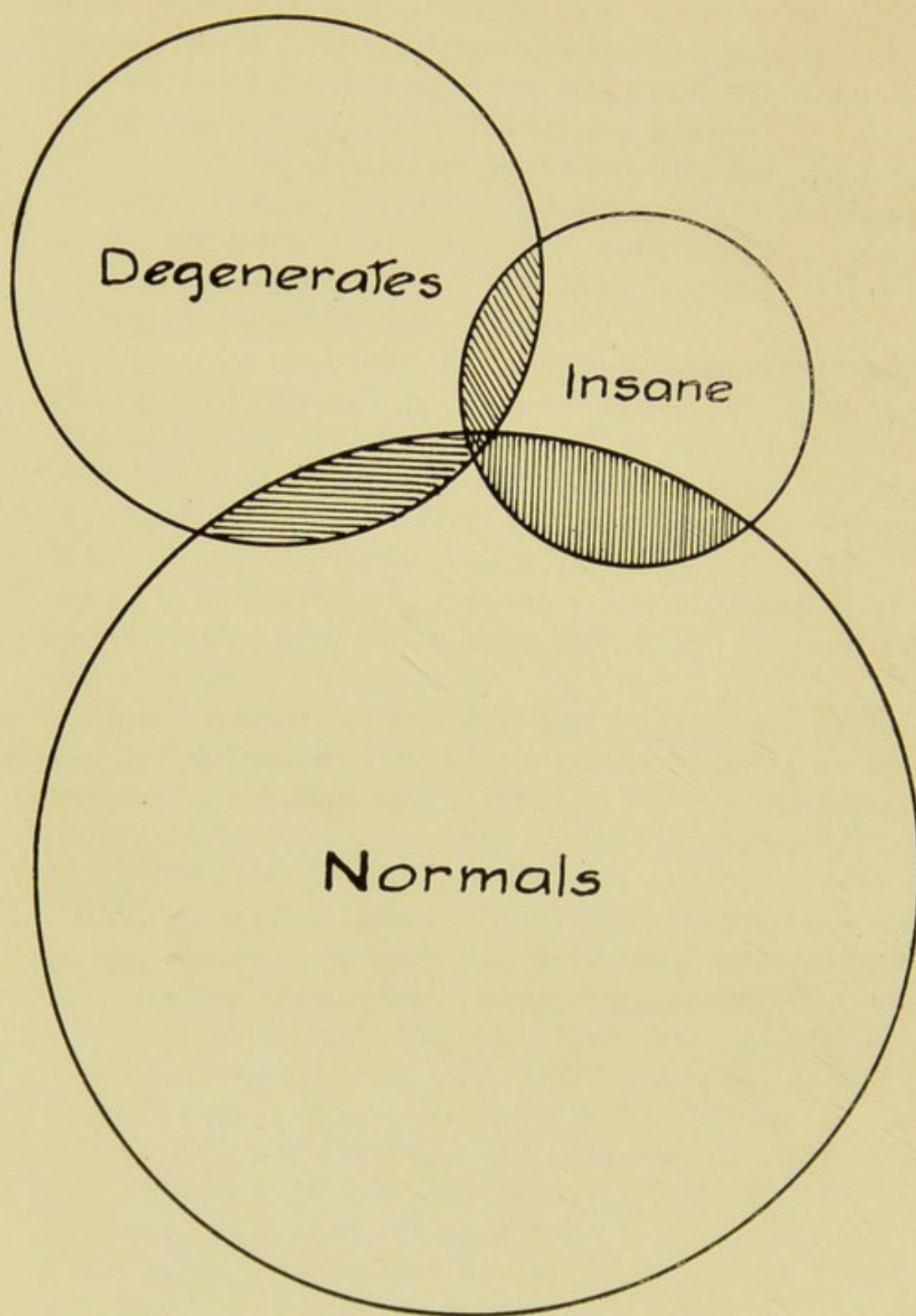


FIG. 2.

To show that the three classes are not sharply defined, but fuse into each other. Some degenerates are insane, and some insane are degenerates; while a few normals of low grade are on the border line of either class. The size of the circles is suggestive of the numerical proportion of the three classes.

Intellect alone cannot be the test. Personality has been overlooked. It is when the dullard shows deficiency in moral sense and the personality is of low grade, that he must be classed with the degenerates.

We must discriminate between the damaged normal and the degenerate. External stigmata have their value, which is but little; we can only pick out the degenerate after a more extensive examination.

SECTION B.—THE INSANE *VERSUS* THE DEGENERATE

The two groups which constitute abnormal humanity are

The Insane and
The Degenerate.

Abnor-
mal Hu-
manity.

The Insane have only been treated scientifically for 80 years. Previously they were regarded with superstition as witches, possessed by evil spirits, or demons, and treated accordingly.

The science of Degeneracy is as important as that of Insanity, but much more complex. It has its laws, its symptomatology, its pathology and its treatment. We are now being pressed by the laity and the legal profession for some enlightenment on the subject of degeneracy. Do we intend to respond and lead, or to follow?

Alienists have to a large extent defined the limits of sanity and the boundaries of insanity.

The question arises whether these two states, insanity and degeneracy, are so distinct that they could be enclosed by imaginary lines in mutually exclusive circles? The answer must for the present be in the negative, for they shade into each other. Many of those on the borderland of insanity are degenerates, while many degenerates seem to be insane. But normals also shade off into these two groups, so that there is no absolute delimitation to any one group (Fig. 2).

The degenerate differs from the insane in many ways. The insane has, after recovery, remorse for any wrongful action, but the degenerate has no remorse. The insane usually prefer solitude and do not conspire, as in the case of degenerates. The insane may have a good past, which but seldom is even

The in-
sane and
the dege-
nerate
overlap.

possible to the degenerate. The insane are liable to be distressed at their surroundings and anxious about the future; the degenerate only lives for to-day and heeds not the future, while the past is forgotten. The degenerate has no foresight, hence he is in criminal parlance "a mug"; nor has he any thrift, nor sense of providence for the future.

The in-
sane
criminal.

It is of great importance to continue investigation in this direction, for to this day many of unsound mind suffer the full penalties of the law.¹ If a man be insane, he is according to many authorities insane throughout. Hence if a man be a known epileptic or has undergone asylum treatment, even if a clear interval of many years occur, still he may be insane and, therefore, is not answerable for any crime he may commit. He should not be treated as if he were normal. This is rather heterodox to the general opinion of the profession; but they will, I am sure, agree that these cases are examples of degeneracy in its broader sense. I am not advocating either pardon or acquittal, but a reform in treatment, recognizing that the crime is complicated with disease. About this there will be great difference of opinion. The violent unrestrained act of a latent epileptic might only result in a short term of imprisonment, according to our present administration. This is neither cure nor treatment. The same cause—latent epilepsy—might, at some future time, or in another case, lead to a murder.

The in-
sanities
of intel-
lect.

Amongst apparent normals we find intellectual persons, often men of genius, who are peculiar—sufficient to support the saying that every one is mad on some point. Some speak of the insanity of genius as if it were a freak. It is undoubtedly a fact that many great intellects suffer from melancholia, mania, or slighter but distinct degrees of insanity, as kleptomania or perversion. Many of these undoubtedly live on the borderland of insanity. On the other hand, it does not follow that every insane person is so brimful of insanity, as to be entirely devoid of all intellect or of intelligence, a fact too often overlooked by specialists.

Clearly there is urgent need for a scientific exposition of these problems; so that we may treat disease as disease

¹ See the case of hanging a lunatic, Chapter V, Section C.

and not merely as crime. We should anticipate the grosser crime from the symptoms observed at the time of the minor offence. In such cases permanent isolation, after the style of asylum treatment, is the correct course to pursue. It is more scientific to isolate before the murder than to execute afterwards. The thirst for blood can in many cases be anticipated. The fetish of the liberty of the subject is a great obstacle to progress and has no place in a highly cultured community. There are many whose liberty ought to be curtailed, not because of direct criminal acts, but because they are not able to live up to the common standard of life. Their own lives then become a danger and burden to others. The liberty of the subject is a fictitious term.

The degenerate is indeed related to the insane ; but the specialist separates them, because he finds in the former none of the grosser symptoms of insanity and actually declares the degenerate responsible. The degenerate is at present quite outside the sphere of the alienist.

The degenerate does not receive justice.

The position of the jury is often very difficult, where the opinion of a specialist is in direct opposition to what might be termed common knowledge. If there are two specialists holding opposite views, the embarrassment of the jury must be very considerable. It brings the question of responsibility down to the level of opinion rather than of fact—a situation which is accompanied by great loss of dignity to our profession. It is plainly our duty to remove this *grande impasse* ; to define degeneracy and indicate the irresponsibility attached to it ; still further to lay down a line of treatment, even of preventive treatment.

When the degenerate is sent to prison, the prison doctor, a physician of the highest importance to the community, puts a label on his cell door bearing the magic letters "W.M." The degenerate is now recognized for the first time as weak-minded. Every day of his prison life he may break the rules ; he may be vicious and unmanageable ; lazy or silly ; in all things inconsistent ; but the physician stands between him and disciplinary punishments. The physician insists on justice.

The degenerate is weak minded.

The degenerates differ from all other people, sane or insane, in that they are unstable and can only with safety lead the

simplest of lives. We must remember that they shade off at one side into the insane and on the other into normals. (Fig.3).

Sometimes a lunatic does return to the normal state, often unexpectedly; just as in the opposite direction a normal may lose his or her reason after some serious trouble. The degenerate, by contrast, never can reach the normal level, however favourable his surroundings.

I have, and shall still further clearly indicate that the cause of this impossibility is physical—a condition of arrested development of the higher neurones.

This class of degenerates has increased numerically at an alarming rate, so much so that they constitute a national peril. This having been recognized, a Royal Commission was appointed to inquire into “the care and control of the feeble-minded.”

SECTION C.—THE ROYAL COMMISSION ON THE FEEBLE-MINDED

The Royal Commission on the Feeble-minded did a fine work for the nation. It did the work which we in the medical profession should have done 20 years ago. Why is it that we, who have rather an exalted idea of our position, have literally to be pushed along by the laity? The alienists have kept back the clock by full 20 years. They are conversant with insanity and mental degeneracy, yet they have only been able to focus their attention on what is hopeless and incurable, and have never spread their vision over the vast horizon of causation, so as to arrest the progress of a deterioration which has now become a national danger. We have no medical journal which favours eugenics, while our ordinary weeklies appear to avoid the discussion of sociological problems.

Let us, in the profession, now inquire what a party of intelligent laymen discovered for us. Though I read the Report with interest, I felt ashamed that I should have to take it from laymen, while both you and I could have told the Commission everything, and more than they have been able to tell us.

The Royal Commission remark that degenerates are often

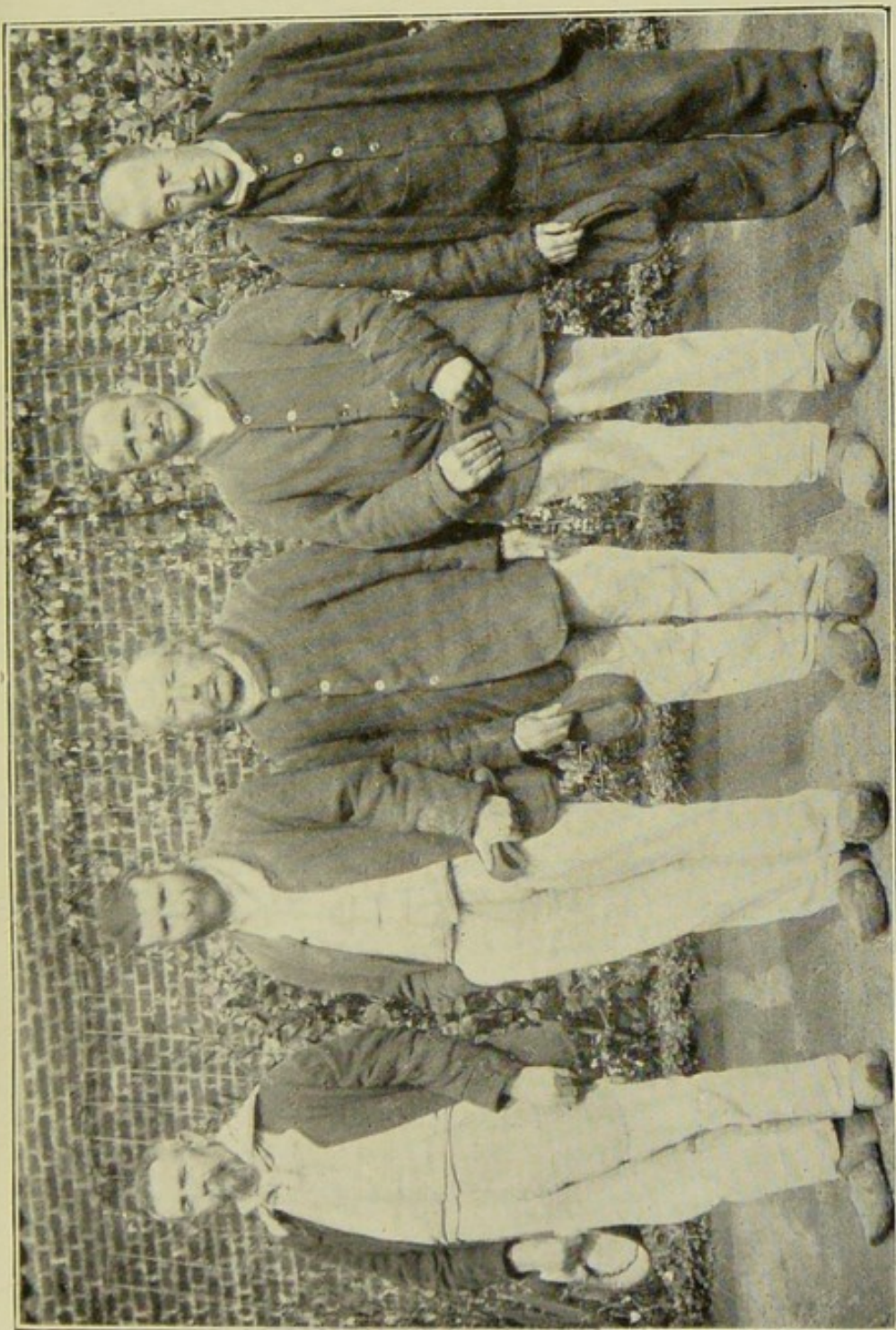
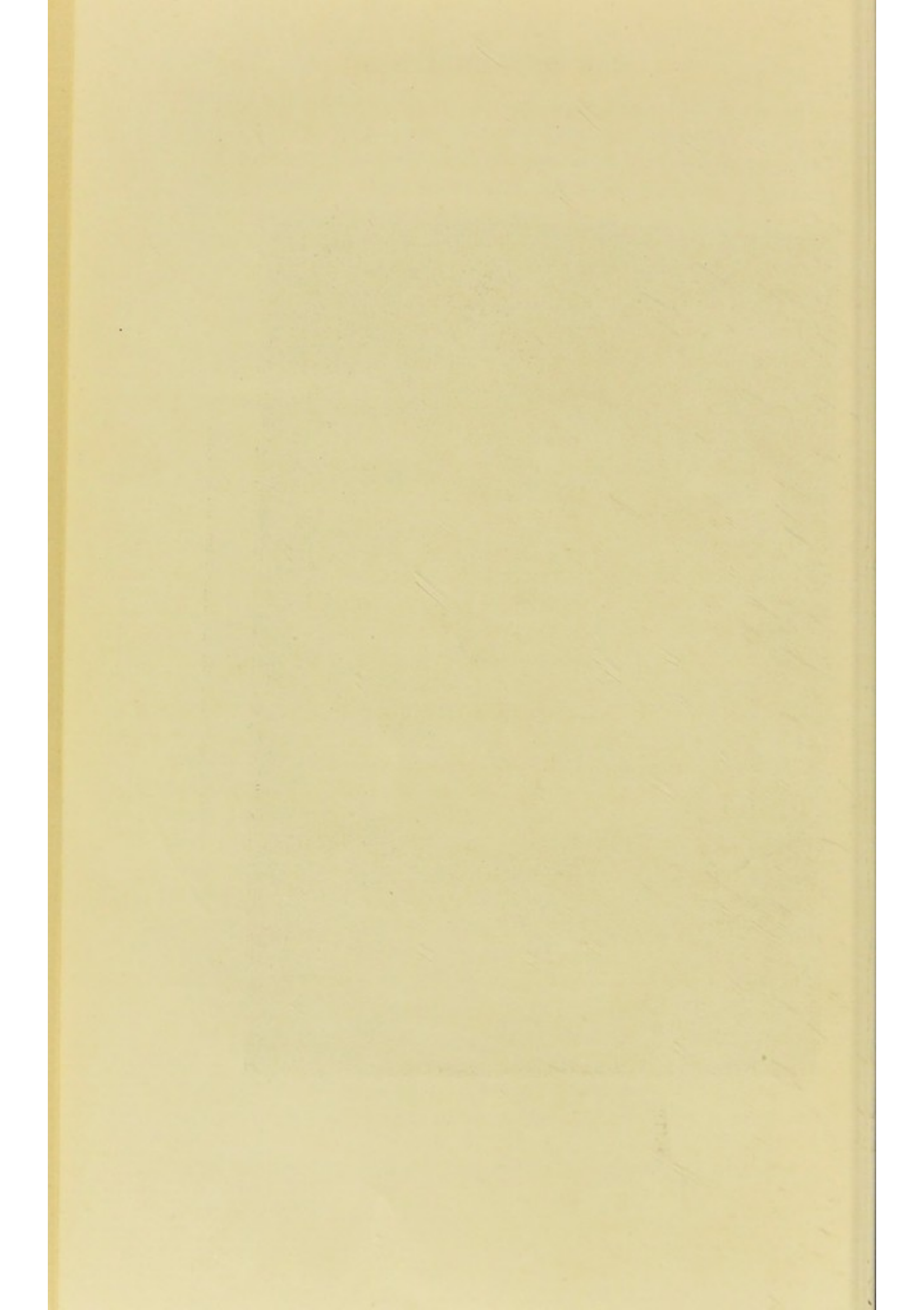


FIG. 3.

A group of degenerates who are weak-minded but not insane.



feeble-minded, but not always so, as their cunning borders on intellect, if not on intelligence itself. The Commission do not appreciate the fact that cunning is a proper and natural instinct in the lower mammals, essential for self preservation. It may be that where cunning exists in man there is an actual reversion, if I may be allowed to use this word in its usually accepted sense. It is possible that the actual brain architecture of the degenerate is on a lower scale. Or it may be regarded in an opposite light that we bring into the world with us all the lower, less noble, ideas and feelings of the animal world; where degeneracy occurs there is less mental activity to control and subjugate them. If this be so the degenerate has not been completed either structurally or mentally. He is either a reversion or is unfinished. Instead of being actively bad or hostile to society, he is in a passive or negative condition, unadapted to the ordinary communal environment.

They selected the feeble-minded who are not certifiable under that crude and inefficient piece of legislation, the Lunacy law. They undertook the degraded whom we have been expecting the alienists to discourse upon.

The definition which the Royal Commission formulate as to the feeble-minded is splendid, and happens to be almost identical with what I wrote of the degenerate.¹ They describe the feeble-minded as "persons who are capable of earning a living under favourable circumstances, but are incapable, from mental defect existing from birth or from an early age—(a) of competing on equal terms with their normal fellows; (b) of managing themselves and their affairs with ordinary prudence."²

The Royal Commission tabulate on a very broad and somewhat incorrect scale, dividing the mentally defective into two groups: Dements and Aments. This seems futile because dements pass over to the care of the lunacy doctor. They make two divisions of dements:—

1. Lunatics or those of unsound mind.
2. Those mentally inferior from age or decay.

Aments are divided by them into four groups.

¹ *Education, Personality and Crime*, p. 227.

² Report, vol. VIII, p. 4, para. 11.

1 and 2. Idiots and imbeciles who again belong to the lunacy doctor and don't concern us.

3. Feeble-minded, the object of the inquiry ; and

4. Moral imbeciles.

Poor moral imbecile ! No one will own him. The alienist says he is sane, but criminal. Others say that he is criminal, but insane. He is therefore handled by the lawyer instead of the doctor. In reality the moral imbecile is quite feeble-minded. Both these groups—the so-called sane but criminal and criminal but insane—are degenerates, in the sense in which I use that term.

The Royal Commission, taking the population of England and Wales as $32\frac{1}{2}$ millions, estimate that there are 150,000 mentally defective persons, or about $\frac{1}{2}$ per cent. ; and of these 60,000 require provision or only $\frac{1}{6}$ per cent ; that is, only one person in about 540 requires to be cared for and protected. I consider this an infinitesimal estimate. If it represented the actual facts, taxation would almost disappear.

The task the Royal Commission undertook was so stupendous that we may excuse the means by which it was carried out. Can any one imagine what it means for one doctor to examine 29,000 children, even though he had two years to do it in ? The fact that he only found 273 defective suggests a rather hurried survey. It means 50 children a day regularly for 5 days a week. Another observer spent one year examining a few hundred cases.

Mental deficiency was found in about half of the boys and one-third of the girls residing in the homes for juvenile miscreants, under the care of the Metropolitan Board.

Drs. Smalley and Parker Wilson gave evidence that many of the juvenile adults detained in prison are feeble-minded. Few can read or write well, and many return to prison five or six times. One boy returned nine times. The Blue books on this subject are full of much interesting information ; but as I consider that the present amount of degeneracy has been largely contributed to by our system of State Education, I shall pass on to that subject.

SECTION D.—COMPULSORY EDUCATION

From a large experience of children, I hold very decided views on education, especially on the deterioration of the poor from enforced cramming—as it were at the point of the bayonet.

The failure of compulsory education.

I am speaking partly of the period from about 1870 to 1900, the thirty years' war against intellectual progress by the Board of Education, when the administration was very severe in its methods. As we are now paying the penalty of this maladministration, it is quite proper to refer to it. In those days inspectors regularly put the classes through test examinations, to which the children were not equal. As this system is recognized to be fallacious as a test, the inspectors now address themselves to the task of seeing that the methods of teaching are sound; employing oral examinations, in preference to written, and encouraging manual instruction. This is quite rational. But there is still at the present time too much work, and too little attention to the physical condition of the children. One of our greatest authorities on education writes to me thus: "I am convinced very few realize the enormous change for the better which has come about during the last few years in our elementary schools; but from debility, deficient sleep, defective clothing and food, over work out of school, etc., the children are unfit for any type of disciplined intellectual work." That may be a fair representation, but we in the profession are apt to be roused to indignation at the human wreckage, through the culpable ignorance of the Government and the local bodies in control.

It is difficult to explain why the Board of Education should have exhibited such an obstinate spirit, and such crass stupidity, during a period when science and general knowledge were making such rapid strides.

Few people remember the good work done by the British and Church schools, in the middle of last century. Many of these schools gave instruction in mathematics, Latin, French and drawing. Through their efforts some of the poorer class rose to high positions. To mention one case only, the "British schools" in Bristol provided four mayors

British and Church schools.

for that town. This system catered only for children who wished to learn and were therefore equal to the strain. Dulards, and those who did not want education, would never attend under a voluntary régime. This had the great advantage of drawing willing students. Under the compulsory system, the unwilling and incapable children are compelled to attend school and break under the stress.

The
earliest
Govern-
ment sup-
port.

The earliest financial support of the Government dates from 1832. In that year £20,000 was voted for educational purposes; and it was increased to £30,000 in 1839. The grants helped local efforts, the improvement of buildings, and the increase of the modest salaries, often so low as £10.

Robert
Lowe's
perni-
cious test
system.

In 1858 a commission sat, the Duke of Newcastle as chairman, with the result that Robert Lowe, later Lord Sherbrooke, introduced the test system, by which grants were given—

- (1) If the school was in approved premises and the teacher certificated;
- (2) if the children made a certain attendance;
- (3) if the children individually passed examination in reading, writing and arithmetic.

This was clearly payment by results. It treated the mind, morals and brains of the child like so many pounds of sugar or currants.

This examination system is now recognized as fictitious and pernicious. All children are not alike. Every type, quality and variety of mentation appears; and it is a matter of personality on the part of teachers to meet these difficulties and surmount them. From many aspects this system was a gross injustice and even cruelty to the teachers, for half of the grant was paid as a part of their salaries. The percentage of grant money depended on the percentage of successful answers. The grant was 4s. per subject—reading, writing and arithmetic. So that each child might earn 12s. for the school. If a teacher had 100 children in his class, the maximum opportunity was the half of 1,200 shillings or £30. It was not a great reward, but if it was diminished, it might mean giving up the annual holiday.

Can any one understand the Government of the first nation in the world being so unintelligent, unsympathetic and unjust?

Lowe said, "If the new system is costly it shall be at least

efficient; and if it is inefficient it shall at least be cheap."

Lowe thought he could sweat the labour out of the teachers, and where possible save taxation. How strange that he never realized what injury to health occurs from this overstrain of teaching!

Some people have the idea that brain workers should not suffer from fatigue to the same extent as muscle workers. This is quite wrong. It may be illustrated in this way. After the chemical and physical energy, necessary to keep the body alive, has been expended, there is a daily surplus of, say, 1,000 units. It matters little how these are used, the result is the same. A navvy uses, say 800 units at his daily work and is not fatigued, for he has 200 units to draw on in the evening as recreation. He is therefore fit. I am, of course, dealing with one day's energy. A clerk will use up, say, 300 units in office work and 500 units when running about the city. When he returns home at night he is fit, and runs off the remaining 200 units at tennis or cycling. On the other hand, a brain worker—teacher, physician, head of department, or even an author—usually has an unlimited task to perform and may very easily exceed the limit of 800 units as already described. His enthusiasm may lead him on till he almost expends his 1,000 units; hence if physical exercise be attempted exhaustion must follow.

The great Matthew Arnold was a government inspector, and I was told a story about him which will bear repetition. He was examining a class, dictating sums. In this kind of work, everything depends on the intonation and emphasis. A lady interested in the class repeated the figures with careful emphasis. Matthew Arnold protested. The lady pleaded—"How can the girls add up correctly, if they do not get them down correctly?"

"Madam," replied Arnold, "your logic is irresistible, but unfortunately I work for an ass of a department."

It may be mentioned that this great classical scholar was a poor hand at the simplest arithmetic.

In the early nineties (1894) the Government realized that their system was so intolerable that they introduced the "sample" system; that is to say, a class would be divided into three, one-third for reading, another third for writing

The sam-
ple sys-
tem.

and the remainder for arithmetic. The whole class was then judged by the various thirds. There was a great element of chance in this. A boy or girl in the arithmetic section might be dull at figures, but good at writing. The results were false ; government statistics and reports were therefore of no value.

These
perni-
cious
systems
abolished
in 1898.

To quote a teacher of 30 years' experience, "the inspectors became more human," and allowed the teachers to sort out the class as they wished. It came about in this way. One of the chief officials in the Education department invited the opinions of about 20 head-teachers as to this pernicious system. They all wrote strongly against it, so the method of examination for results was finally abolished about 1897 or 1898. The schools of to-day (1910) are infinitely better than 10 years ago ; and the nation has little idea of its indebtedness to the teachers, men and women, who fought bravely to try and save the poor children.

The two
ideals in
education.

There are two ideals in education, the German and the English.

The German is democratic in principle. Every child marches up regularly a step at a time. It is a procession, like the steady advance of troops. In this way every child is helped a little and a general level of intelligence and knowledge is attained.

The English aim at producing a few clever scholars. This is a matter of selection, or survival of the fit ; but compulsory education and attendance, with its extreme stress and strain, necessarily involves an immense destruction of the less fit.

Neither system is perfect. We require a middle course, where the unfit are asked to do what they can do, and not what they cannot do. The selected few will always come to the top and can be encouraged to the highest possible attainments. The education, or more correctly instruction, which we force on the masses, is too much for their poor quality of brains. It is really a middle class education, more adapted for a higher stratum of intellect.

Council
schools of
to-day.

The teachers are good ; they put all their best qualities into the work. The classes are still too large. I find among the babies, 3 to 5 years of age, 50 to 76 in a class ; and among older children, 58 to 60 ; and when we reach the oldest, ranging from 12 to 14, there are 25 to 30 in a class.

The methods are improving. There is Kindergarten for the babies. Children are taught to visualise their subjects. The object is to store the sensory side of the brain in preference to the old parrot methods. Pictures and sketches are used for purposes of illustration. It is indeed little use pouring in abstract knowledge, facts and figures; they are at once forgotten, having no roots to hold on by; whereas what is evident to the eye, or other senses, can be more easily recalled.

Proper
methods
of
teaching.

Thus in teaching a child an axiom of Euclid as, "a straight line is the nearest distance between two points," the mental process is accomplished on the sensory side of the brain. If it be stored as a word concept, it will soon be forgotten; or if recalled, probably repeated incorrectly. On the other hand, it may be shown on the blackboard, or on paper, or better still by putting two nails in a board and connecting them by string. If at any future time the subject of a straight line be discussed, the pictures are revived in the brain with good result as soon as the subject is mentioned; and so on with any other problems and definitions.

The authorities are now trying to educate the fingers, using manual instruction as much as possible. This is a wise procedure, for it develops both the sense of touch and the ability for fine muscular movements.

The teacher's task is in many cases to improve the memory. It might damp his zeal if I said that memory is incapable of improvement; which is true to this extent, that every one of us has from the beginning a limited capacity of memory. It is therefore no credit to have a good memory, for such is a gift from nature. It is to those who are less gifted that the teacher must address his attention, so as to make the best of poor material. The teacher must stamp every concept on as many functional brain centres as possible. Increase the percepts and the concepts will take care of themselves. To take a very simple illustration, the word "apple" may be stamped on many centres. First, there are the centres of smell and taste. The visual centre, which is complex, receives impressions of the shape with its details, the colour, the word picture and the complete internal structure. The centre of touch records the feel of the rind. The auditory and speech

centres not only are stamped with the actual name, but are linked up with all the other centres.

While it may be a physiological impossibility to develop what is not there, the teacher can usually by careful and simple associations get a good result. Proceeding further the teacher associates the apple with the tree, with the shape of the tree and its leaves, with climate, soil and finally with its economic relationship and other conditions. This is the art of teaching.

There is a feeling of sadness comes over me in visiting a council school. The children are so weedy and have a tired look; there is an atmosphere of poverty and suffering; and if one inquires what is this all for, there is no reply. At least 80 per cent. of the education is too abstract, and when I ask teachers, what is your chief trouble, they almost universally reply, "The children are so tired."

If I inquire what is your next greatest anxiety, they reply "red tapeism." I dare not trust myself to comment on this subject, so I pass it in silence.

Defective
children.

At one of the schools I visited I saw several specimens of the work of mentally defective children, about 7 and 8 years of age, to show the failure of nearly one year's instruction. It is not a reflection on the teacher, nor yet on the method. It is merely an illustration of the hopelessness of the material. These children at first play with pencils and paper, but after a time they are encouraged to draw from simple copies, such as lines or curves, or a simple letter, as m.

The work done among physically defective children is excellent. Many of them suffer from infantile paralysis and then the brain is frequently damaged. The best care is taken of physical defects; thus if the right hand is paralysed, they are taught to use the left.¹

The reports of schoolmistresses on the subject of degenerate children are very instructive.

Mrs. Dickinson Berry² found that out of 100 children who were defective—

¹ Much could be done for these children, under good doctors and nurses, by the use of the constant current (positive pole on the affected limbs).

² *Report of Royal Commission on Feeble-minded*, vol. viii., p. 110, para. 354.

40 per cent. had learned enough reading to be of value,
and also understood division and multiplication.
60 per cent. attained so little reading as to be of no real
value.

15 per cent. could only add, but not subtract.

22 per cent. could neither add, nor subtract.

This shows the uselessness of attempting to educate these
weaklings by the present methods.

What concerns us in the present inquiry is, that certainly
80 per cent., if not the whole, of the 100 cases examined will
sooner or later enter into the arena of parentage, although
they are wholly unfitted for the responsibilities involved.
It is our bounden duty not to assume the usual attitude of
laissez faire, and allow such evils to increase.

Mrs. Berry and Dr. Kerr¹ say respecting special schools,
that—

- (1) a small minority of the scholars become self-supporting.
- (2) a large number are unable to earn anything and are
practically imbecile;
- (3) a large number "swell the ranks of the inefficient and
poorly paid workers."

Truly degenerate!

Look at a few facts to illustrate the sins of the Education
authority. In 1903 a patient of mine, a lady school board
teacher, had 120 infants on her list, with a usual attendance
of 90.

Another of my patients had 80 children in her class. She
herself began school at 3, and has been tired ever since. Now
she has 60 children under her charge, varying from 5 to 7 years
of age.

A young man had 80 boys in his class till 2 years ago. He
has now 53 boys in the III Standard, boys of about 9 years
of age.

Another teacher has now 70 boys, 13 and 14 years of age,
in the VI Standard.

This is what Sir John Gorst writes on our present system,
and how the Poor Law Commission reported on it:—

"The compulsory assembling of all children of school age in the
Public Elementary Schools gradually forced upon public attention

¹ *Loc. cit.*, p. 110, para. 355.

the miserable physical condition of the children of the poor: they were suffering especially from the lack of sufficient nourishing food, and in the condition in which they were presented at school the attempt to subject them to school instruction was useless and cruel. After long and strenuous resistance on the part of the richer classes, the responsibility of the State was at last admitted. The right of the children to be fed before they were taught was recognized, and an attempt to fulfil the obligation of the State through the instrumentality of the Poor Law Authorities was set on foot; but before the experiment had been fully tried, an Act of Parliament was passed giving power to the local Education Authority to feed hungry children and to recover the cost from their parents. The Act was permissive only, and most local Education Authorities have not adopted it. But it is now in full operation in many of the great towns, and even the London County Council has been constrained reluctantly to put it in force.

"Both Reports recommend the abolition of boy and girl labour, and that children should be retained in school, and not allowed to earn wages till 15 years of age. In the present economic condition of society a worker's family is strongly constrained to use the earliest opportunity of putting its boys and girls to earn the merest pittance of wages, which will increase the scanty means of the family; and under the regulations of the Board of Education, it is to the clever and most promising children that the boon of quitting school and earning wages is given. Child labour is cheap, and there are plenty of people willing to hire it: the result is that children, even during the time they are at school, are employed for extravagant hours at infinitesimal wages; as soon as they can satisfy His Majesty's Inspector of their capacity in the Fifth Standard or such higher standard as the Local Authority prescribes, they enter into some unskilled employment like that of errand boy; and by the time they are 18 or 19 years of age they, having learnt no trade, are ripe to join the ranks of the unemployed. Of all employers of labour in the country, the worst in this respect is the Government, in its Post Office department; hundreds of the most promising boys are taken from the schools, are employed for some years, in the not uncongenial occupation of riding about on bicycles delivering telegrams, and at 17 years of age are turned adrift, having learned no trade, to sink into unemployment.

"Both Reports agree in recommending a change in the curriculum of public elementary schools, so that our children should be brought up to be not bad clerks, but good artisans and workers."

My code
of edu-
cation.

There is no virtue in criticising the many and unpardonable blunders of the State in matters of education, unless I can point a way out.

In my teens, before the Education Board was in full swing, I used to hold evening classes for working people. My oldest scholar learning to read and write was 64; my youngest, a boy of 17, who would have adorned any University. I taught them the four R's, religion, reading, writing and arithmetic up to decimals. I relieved the monotony by little discourses

on topics of importance, how the sun "goes round the earth," the nature of heat, light, levers, pumps and so forth.

I remember how the ladies of those days (including my dear mother) used to interest themselves in education. They had schools for the ragged poor, boys and girls. They chose their teachers carefully, and would attend themselves for an hour or two daily, to superintend and inquire into the cases. The ragged children became less ragged, more intelligent, and improved in morals and manners. The ragged child of 10 was a smart apprentice at 15, and a useful, steady, self-supporting artizan at 20. Slummers changed into good citizens.

Those who loved the poor did a great national work. They stemmed the tide of degeneracy. They blocked the avenues of crime, and they bridged over the gulf of poverty.

Then came that dragon, the Education Board; and we see its results in the increased mass of degeneracy; the worn-out youth and the army of unemployables.

If I were to make decrees on education, I should begin when the parents married, by giving them the instruction necessary to bring healthy children, and not too many of them, into the world.

The infant, during the first year of its existence, should be very carefully watched over, by skilled lady visitors and by members of a new medical service. The remuneration would have to be proper, with some relation to the responsibilities, so as to attract good workers.

It is just in the first year of life that a child's prosperity or ruin is made. Every part and organ of the body must be looked to. If the very poor Jews and Hindus can take proper care of their babies, surely the Christian ought to be able to do the same.

The State must help the poor at this stage of infancy. It would be far better for national regeneration if the State, instead of giving old age pensions, would make an allowance of 5s. a week for every infant whose parents required such assistance. This allowance should, if possible, be for the first three years, but certainly for two. It is a matter of calculation how many millions of pounds would be required, with the present birth rate.

If there were young age pensions, in time old age pensions would not be necessary, for we would raise up a virile, industrious, self-respecting stock.

No child should go to school till 7-8 years of age. For the very poor there should be public crèches, or State nurseries, to feed, instruct and amuse the infants. After 4 the children should have the option of kindergarten, till they were 8. There should be no pressure. If one child picked up knowledge quickly, it could be sent along into a higher class, provided it increased in body weight. If a child be a dullard and cannot learn, he should not be forced. The State school doctor would soon put things on a better footing. Some physical defect would be discovered; some poisoning from the mouth, throat, nose or ear, or the result of constipation; some latent tubercle in abdomen, glands, or even in the brain. If the child is physically wrong in the brain, keep it at an advanced Kindergarten till it is 14, rather than press it and drive it to imbecility, or degeneracy, as we do at present.

If some children were kept from school until 8 or 9 years of age, or even till 10 or 12, they would learn more quickly. I have in mind a distinguished University graduate,—a teacher, who commenced school when he was 12, and not only won his diploma but four scholarships, all in 10 years.

The three R's—reading, writing and arithmetic—are quite abstract in character, and must not be pressed unduly. Education should be conducted on the lines of brain development. Sensory images or stimuli must be impressed and stored first. The visual and auditory centres, which are the highest, must be roused to activity; colour, form and proportion; time, tune and rhythm, which latter may be combined with movement. The sense of touch must likewise be educated with manipulation. When the brain has a storehouse of this character, observation and perception come easily. Following on percepts, concepts and association of ideas occur naturally and readily. These are the proper ways of improving the intelligence, and better than cramming, which is mere instruction. We must not forget that a child can often learn as much, sometimes more, in the field or garden, than in the classroom.

On the vexed question of religion, we must adopt generous

and practical means ; for plain, simple religion is a moral tonic in adult life, and the whole fashion of life responds to it. We want something that will stop the child pilfering, that will make him truthful, kind to the weaker ones ; when he grows up, honest to his employer, and not cunning in business.

At the age of 12, some children will make great efforts to climb higher up the ladder of knowledge. Let them do so, as long as they develop and their physical health is good. A few, even of the poorest children, will go on to University.

But there will be many dull children, who like play better than work. Let them play. Put them in the workshops, if there be not enough manual training in the schools ; turn them into the garden and the greenhouse ; send them for two months every year to the seaside, at the expense of the people.

All children after the age of 12 must receive clear instruction concerning the things we live amongst. They must learn why an apple falls to the ground, how the earth revolves, and the moon round the earth ; how the piston works, the theory of the thermometer, the barometer, the levers, the pump and the hydraulic press ; the theory of combustion and fermentation ; and not least the fertilization of plants and of the lower animals, such as worms, snails, and the frog. This will remove much morbid curiosity as they grow older, and steady their growing emotions.

Such collateral subjects might be extended, always working on these lines. They are of special use as they teach observation, perception, association of ideas and conception. Girls naturally must have a varied education, adapting them to usefulness at home ; but the broad lines laid down apply to them.

The most elementary principles and ideas of logic are of the highest importance in every life. The logical side of certain subjects should be employed, in order to reach the logical side of the child. In this way we develop his power of reasoning, which will be of the greatest use, whatever his career may be. The very poor are exploited in a most miserable manner by those of higher reasoning powers, especially by politicians.

If the working class could only reason, they would not be so easily entrapped by catch words as at present. They are

the tools and slaves of keener intellects, and as things are, there is little hope of their emancipation. How much the working poor call for our sympathy!!

Take as an example of our present system two very ordinary boys of 14, whom I examined recently.

Both have left school, both are exhausted and underdeveloped. Neither of them has strength or energy for apprenticeship, even if they had the opportunity, which is extremely remote. They are the sons of bricklayers. The taller boy represents the city, and the shorter, plump one, the country. The town boy only reached Standard III, which is his normal status. The country lad reached Standard VI, and was actually taught algebra. What will he be at 16 after this enforced academic learning? Of what use will algebra be in his future life? I hope I have indicated how, by a proper system of education, these poor minds not only can be improved, but actually saved.

Since completing this chapter, I opened Karl Pearson's *Biometrika* (vol. iii) to find out his opinion on the inheritance of mental and moral characters in man, after an inquiry, lasting 5 or 6 years, concerning some thousands of school children. I am so struck with his observations (pp. 158, 159), that I am constrained to quote them, even though biologists do not accept his opinion or conclusions as to the overwhelming influence of heredity over environment. The education authorities still labour under the idea that they can turn feeble-minded children into strong-minded; and bring up the children of the poor to the same level as that of the rich, who have generations of stronger stock behind them.

Karl Pearson's opinion is that geniality, probity, and ability, cannot be fostered by home environment and sound education. This is undoubtedly too exaggerated a view, but still he expresses wisdom in the following remarks.

He says: "It is the stock itself which makes the home environment, the education is of small service, unless it be applied to an intelligent race of men. I believe we have a paucity, just now, of the better intelligences to guide us, and of the moderate intelligences to be successfully guided. The only account we can give of this, on the basis of the results we have reached to-night, is, that we are ceasing as a nation

to breed intelligence, as we did 50 to 100 years ago. The mentally better stock in the nation is not reproducing itself at the same rate as it did of old ; the less able, and the less energetic, are more fertile than the better stocks. No scheme of wider or more thorough education will bring up, in the scale of intelligence, hereditary weakness to the level of hereditary strength. The only remedy, if one be possible at all, is to alter the relative fertility of the good and the bad stocks in the community. We stand, I venture to think, at the commencement of an epoch, which will be marked by a dearth of ability.

"The remedy lies beyond the reach of revised educational systems ; we have failed to realize that the physical characters which are, in the modern struggle of nations, the backbone of a state, are not manufactured by home and school and college they are bred in the bone, and for the last 40 years, the intellectual classes of the nation have ceased to give us in due proportion the men we want, to carry on the ever-growing work of our empire, to battle in the fore-rank of the ever intensified struggle of nations.

"The remedy lies first, in getting the intellectual section of our nation to realize that intelligence can be aided and trained, but no training or education can *create* it. You must breed it ! "

It is interesting to note that Professor Pearson speaks of the last 40 years as the period of decline in what may be termed the national stock, while it is about 40 years since compulsory education was introduced. It has put a greater strain and pressure on the masses than they could bear. It is from the lower middle classes that the upper middle classes are recruited, not from the upper ten. A certain portion of the lower classes, often there by misfortune, breed true and raise up healthy stock. This more virile stock passes up to the higher social stratum, giving it body. It is apparent to every observer that the masses are not increasing in virility ; they are actually degenerating. If we turn to the middle classes, the fear of destructive social agencies makes them timorous and prudent. They therefore limit their families to what they can rear successfully. The strength of England is then attacked at all sides,

What is the remedy? We must check the overbreeding of the masses. Think what it means for a labourer earning 25s. to pay 6s. in rent, and out of the balance support nine children.¹ Imagine what the children are like, or even what they would be like on double the money. However much we pauperize the masses with free meals at odd times, free shoes or anything else, it is a sheer impossibility to raise up a healthy race under such conditions. If the poor could be taught and induced to limit their families to 2, we should have 2 healthy children, valuable to the Empire, where now we have 6 or 8 diseased, or undeveloped weaklings.

If so much could be attained, the country could successfully nurture any who required it, and we should once more be a bold, courageous nation.²

¹ I have since become acquainted with a cab-washer, earning only 12s. per week, whose children number 11. When his wife is not pregnant she goes out charing. These are our future voters and rulers.

² I thought the practice of fining or imprisoning the poor for non-attendance of their children at school was obsolete. I find, however, cases reported in different papers, of these I shall allude to only two.

In one case, a labourer's wife had been ill two months with pleurisy; extra expense was incurred and rent was in arrears. The usual thing happened: the landlord, accompanied by a bailiff, cleared out every stick of furniture. Presently the education officer called, for the three children, being shoeless and in rags, had not been to school. The offender was hauled up at the Court and fined 7s. 6d., or 9 days in prison.

In another case the father was out of work and the wife earned 4s. to 5s. a week. There were five delicate children. (When are we going to teach the poor how to have two healthy children rather than five sickly ones?) They were all in great poverty; one child was very ill. The mother was hauled up at the Court for non-attendance of a child and fined 5s. As she had no money the husband was put in prison. The little girl, who was so ill, died while the mother was attending the Court.

CHAPTER II

THE DEGENERATE

SECTION A. THE LITERATURE : Criminals are not all degenerates—The literature in confusion—Féré on degeneracy—A break in the continuity of the race—Degeneration is bio-chemical and pathological, differing from degeneracy—Morel on degeneracy—Dr. P. C. Smith on degeneracy—Ottolenghi on the criminal.—SECTION B. THE QUALITIES : Degeneracy has two distinct meanings—The mental capacity of the degenerate and their physical endurance—The degenerate, a weakling, like a bud that cannot flower—The degenerate too fertile—Infant mortality, a blessing—The degenerate, a contradiction.—SECTION C. THE BORN CRIMINAL : Congenital criminals are degenerates—Ferri on the “born criminal”—The qualities of the born criminal—All his reactions are slow—Lombroso on the degenerate.—SECTION D. TYPES AND CASES : Suicide and degeneracy—Vanity—A case of murder for lust—Unbridled or inordinate lust—The clinical aspect of lust crimes—Breed or pedigree the factor in stability of mind—Kraft Ebing on the psychopath—Sexual crime should be dealt with *in camera*—Paranoia, as a cause of crime—The relation of epilepsy to degeneracy.

SECTION A.—THE LITERATURE

IF I were to outline the pages of this chapter in black, I should still fail to express a tithe of the sorrow and pity that we should all feel and must feel for the degenerate, in the hopelessness and helplessness of his position.

The popular or general opinion as to criminals is that they are all of this class, namely, degenerates. But this is by no means the case, for amongst criminals we find men who were born with higher instincts and fitted for better conditions, but who are now outcasts—or, as I prefer to call them, derelicts of Society. It is very important to keep this distinction constantly before us while considering this problem.

In this chapter, however, I wish rather to deal with the degenerate than with the derelict.

Degenerates, having something lacking in their composition, should not and cannot be treated as ordinary beings ; the vagueness of their character, as compared with that of the derelicts, has deprived them of the share of attention to

Criminals
are not
all de-
generates.

The literature in confusion.

which their numbers entitle them. Although much has been written on the degenerate and degeneracy, yet the literature on these vast subjects is to a certain extent confused. It is now a question of terms and definitions. We have to find out what different writers mean by the term degeneracy, and make a grand total of the various sections, the anatomical, physiological, mental and psychical parts.

Féré on degeneracy.

Féré¹ describes degeneracy as the loss of the hereditary qualities, which have determined and fixed the adaptations of the race.

The characteristics of degeneracy are exhibited in that abnormal tendency or condition, which becomes less and less capable of adapting itself to its surroundings, in such a manner as to assure the normal evolution. Thus Féré considers that degeneracy tends to sterility, by the inability of the degenerate to rise, or develop, up to the normal level. This, unfortunately, is not confirmed by evidence, for the degenerates, as we know them, are exceptionally prolific. Whether degenerates, without having any healthy intermarriage, would die out or become sterile in the second, third, or even fourth generation, cannot as yet be determined for want of correct statistics.

A break in the continuity of the race.

Féré regards degeneracy as a solution of continuity in the race or species; a definition which is admirably conceived and of wide application, not only to the physical but also to the mental or psychic states. Féré means that in the normal type there is a gap, which is filled by something inferior, as it were some links in the chain are rusty, damaged, and perhaps ultimately broken.

Degeneration is biochemical and pathological,

Degeneration, as applied by the pathologist, is a decay or dissolution, not from age alone but chiefly from unnatural or chemical conditions. Though this type of degeneracy or degeneration—the chemical—induces that of which we are speaking, yet it does not comprehend degeneracy as the psychologist applies the term.

differing from degeneracy.

Degeneration, from the pathologist's point of view, is a falling away of something that has once existed in the life of the individual; whereas the term degeneracy, spoken of in this treatise, stands for something which has never yet developed in that particular person. Féré expresses this

¹ *Dégénérescence et Criminalité*, pp. 235 and 232, Paris.

when he uses the definition—solution of continuity, meaning racial continuity. The individual, who is degenerate, has been deprived of something which belongs to his race or species, and may have belonged to his parents, and perhaps belongs now to his brothers and sisters. It is a solution of continuity in racial conditions or properties.

Morel regards the degenerate as a “dissemblance” in the family from the normal type, whereby it is recognized as differing from normal families. This is good as a description, but does not carry us far.

Morel on degeneracy.

Dr. P. C. Smith¹ follows the same line, thus I quote from one of his articles on Degeneracy.

Dr. P. C. Smith on degeneracy.

The unit of degeneracy is the family. A degenerate family is one in which there is imperfect heredity, showing itself by a loss that tends to be progressive of racial characteristics, anatomical, physiological, and psychical. The losses in the anatomical sphere are manifested as malformations, usually of a minor order, affecting mostly the head, face, and hands. Of the physiological defects, the commonest are disorders of metabolism and vaso-motor instability; the most important is diminution of sexual or generative power, which leads to the extinction of the family. The psychical abnormalities are impulsiveness, irritability, instability, suggestibility, and a tendency to obsessions, tics, and phobias. Degeneracy is the soil on which are developed the neuroses (as a rule), some of the psychoses, and some organic diseases of the nervous system, and it even predisposes to some maladies of other systems and to general diseases.

Professor Ottolenghi,² of Rome, describes a criminal as “an anthropological synthesis; the expression of an ensemble of specially degenerate characters, chiefly in the face, eyes, and jaws.” This definition I cannot agree to, as the criminal is the opposite of a synthesis. He represents, indeed, a want of racial synthesis; and, after all, the criminal is not made up of malformed eyes and jaws, but of uncontrolled and misdirected activities.

Ottolenghi on the criminal.

SECTION B.—THE QUALITIES

To recapitulate; in ordinary pathology, degeneration is a fall from normal conditions to decay; as in the fatty degeneration of the heart muscle, or the dissolution of nerve

Degeneracy has two distinct meanings.

¹ *British Medical Journal*, March, 1906.

² *Archiv di Psichiatrie*, 1897.

fibre or nerve cell. These are chemical processes, not biological; when they occur the tissue affected loses function, as is seen in cases of heart failure, Bright's disease, neuritis, alcoholic insanity, general paralysis of the insane and many other conditions.

But idiots, imbeciles, born-tireds, and degenerate criminals are not the subjects of such a fall, or chemico-physical decay. They have never lived on the normal plane. If there have been chemico-pathological changes, they are of toxic or nutritional character, in utero, in their parents' blood; and such processes were the causes of arresting their evolution, development, and growth.

It is only right to point out that the terms, degenerate and degeneracy, are most unscientific. The negative conditions implied would be more correctly expressed as—agenerate and ageneracy. As the English language is loosely knit and plastic, we can only continue these words with their acquired meanings.

The term degeneracy has then two quite distinct meanings.

1st. A falling away from the normal.

2nd. An inability to rise to the normal.

It is important to call attention to the double meaning of the term degeneracy, and if possible to put things on a more accurate and scientific basis.

The physiologist and the pathologist are concerned in the former. We, as psychologists, have to occupy ourselves with the latter. The one is decay and chemical; the other is a structural flaw and biological. The former implies normal existence, the latter has never had any such existence, but is an arrest of development; hence my term "unfinished" is more correct.

Féré applied his definition chiefly to aments, idiots, imbeciles and born criminals, who are obviously arrested in the vital process of growth, physically and mentally, and are possessed of conspicuous deformities or stigmata.

The mental capacity of the degenerates,

Degenerates, though frequently weak in mind, and termed feeble-minded by the Royal Commission, are however not insane. They do not necessarily suffer either from amentia or dementia, nor yet from delusions. While we compare the insane man or woman to a wreck, we may regard the

degenerate as a weed. He is subnormal, and indicates a falling away from the type of the *genus Homo*.

The degenerate differs from the ament or dement who are insane, in that these are incapable of labour under ordinary conditions; whereas the degenerate is suited to the simplest of social environments, as, for instance, a farm labourer, a soldier, a herd boy, a carter, or even a railway porter or a fetch-and-carry man. As soon as the degenerate is placed in more complex surroundings he breaks under the strain, and becomes asocial or criminal. In the primitive life he may be and frequently is honest and good, but when stress commences the lower animal instincts or emotions are called into play. He has no sense of proportion; no social perspective. In mental chaos he runs amuck, dangerous to himself and others. It is thus that the simple peasant hoes the turnips, feeds the cows, tidies himself in his many-buttoned suit for Sundays, and even responds to the directions of the parson. The same man, when unsettled by socialistic notions and dreams of unearned wealth, wandering into the city, finds himself outwitted at every point. When to this we add the fascination of the gin palace, and the poisoned neurones resulting from alcohol, we complete the picture of what we daily see around us. The philanthropic politician, with the best of intentions, has brought the underpaid labourer from his daily toil in the country, only to see him landed in prison and yet cannot understand the reason of his misfortune. In these days, when sympathy is one of the cheapest commodities, few people can realize that some human beings are fitted for one station in life, but quite unfitted for another.

and their
physical
endur-
ance.

Communal life demands a great variety of units to build up the whole. This is really fortunate for it makes so many niches, so many opportunities, for persons of different talents. If we were all brains, what should we do for want of legs or hands? Is it not a blessing that there are many less important duties which the simple minded can fulfil?

When St. Paul found discontent among his poor converts with their station in life, in the wealthy and debauched city of Corinth, he explained the situation in forcible language. He pointed out that though different gifts came to different individuals, yet they were all members of one body. The

foot was not to be dissatisfied because it were not a hand, or the ear because it was not the more gifted eye. If the whole body were an eye where would the hearing be? The eye cannot say to the hand I have no need of thee, and so on. The note of social reform is clearly sounded—"If one member suffers all the members suffer with it."¹ Is that not the key of the whole problem?

The degenerate a weakling like a bud that cannot flower.

The degenerate has the physique of a man, but the mind of a child with all its characters; trustful and easily led for good or evil, but lacking in initiative. He is a weakling and cannot bear the weight of social endeavour; he will never mature, and may be compared to the green unripened buds which we see, for example, on the hollyhock or rose stem. Sometimes we may see in the degenerate a reversion or sport; just as variegated plants throw out shoots of the primitive green leaves. These artificially cultivated plants and flowers may be compared to civilized communities, and the reversionary shoots and flowers to criminals and degenerates. In the case of the green buds which never flower, it appears as if the parent stem lacked vitality, and had run short of energy before its task was finished. A similar cause, all through the animal world, produces weaklings and malformations.

The degenerate too fertile.

But reversions, from the cultivated towards the wild plant, suggest in addition, some change in the germinal source or seed, from which the plant springs. This law also applies to the animal kingdom. There is, however, one important feature in which the simile breaks down—the question of reproduction. The unripened flower is sterile, so is the immature animal; whereas the human degenerate is unfortunately very fertile, which fact makes the problem of the degenerate one of the greatest magnitude in our social system.

Here let me interpose a word concerning infant mortality. Amongst the very poor it is largely the result of diseased conditions in the parents, or maternal weakness from excessive child bearing, and it is very undesirable that these poor things should grow up. If they do, there is no bed of roses in front of them, but suffering and social repression. The saving

¹ St. Paul's Letter to the Corinthians, chap. xii.

of these weaklings by improved medical treatment is partly responsible for the great increase of degenerates. The over-sympathetic philanthropist would take away all competition and stress, whereby the weaklings are sorted out and removed. This is a mistaken economy, for it saps the race at its very core.

Infant mortality a blessing.

Any disease, which weakens the stock, tends towards the production of degeneracy or criminality.

Syphilis is the race destroyer, though often difficult to trace. Tubercle is also destructive, and being at present the pet germ in the agitation for hygiene—Rickets is too often overlooked.

The degenerates are a puzzling contradiction. They may be very kind to their own class, although so pitiless to their victims; and it is almost inconceivable how frequently they yield to strong outbursts of religious enthusiasm. All this shows that they are completely out of touch with their environment. The moral focus is hopelessly defective. It is but seldom that the degenerate plans his crime beforehand. It is the work of a moment. The young Russian murderers at Tottenham ran amuck at the thought of a purse of gold, and miscalculated the indignation of the people. Had they known the English character with its sense of justice and disapproval of wrong, they would have given in and received a nominal sentence; whereas ignorance and unguided fear produced desperation and finally suicide. Probably these men were degenerate, being lazy, thriftless, cunning and asocial. But it is however just possible that they were normal, and that the persecution in their own country turned them into desperados.

The degenerate a contradiction.

SECTION C.—THE BORN CRIMINAL

Havelock Ellis comes near the mark when he talks of the instinctive or congenital criminals; but here again definitions get mixed, for in the same paragraph he describes them as moral imbeciles, whereas if they are imbecile they cannot be criminal. We should use the term degenerate, rather than the time-honoured expression, moral imbecile.

Congenital criminals are degenerates.

I do not think that we shall ever be able to pick out the degenerate by his physical configuration alone. In fact,

the peculiarities, to which criminologists call attention, are very frequently found to be normal in primitive races.

Many writers describe these degenerates as quite insensible of their position in the human family, apathetic towards their misfortunes and their helplessness. We know, for instance, how calmly and indifferently these people face death on the gallows. Likewise in crime their callousness is incomprehensible. Lacenaire said, "I kill a man like as I would drink a glass of wine." Another criminal wrote, "To hate and to avenge are the only things I enjoy."

Ferri on
the "born
criminal."

Ferri says the degenerate criminal, the *criminel-né*, is a detached personality, the result of a triple coalescence of factors. The three factors are—

- (a) the anthropological factor;
- (b) the factor of physical surroundings; and
- (c) the social factor.

Maudsley in one of his books says that the robber, like the poet, is born, not made. How then is it possible, he asks, to reform a criminal whom it has taken generations to make? This is perhaps too limited a view, for many a criminal is made in a single generation, especially when alcohol plays an important part. What must then be the effect where alcoholism is traceable on the mother's, as well as the father's side? Unless we approach this great problem in a truly scientific manner, we are no further forward than in the days of Aristotle. Thus we may quote from Euripides—

ὡς ἀληθὲς ἦν ἄρα
ἐσθλῶν ἀπ' ἀνδρῶν ἐσθλὰ γίγνεσθαι τέκνα
κακῶν δ' ὅμοια τῇ φύσει τῇ τοῦ πατρὸς.

How true it is then

That noble good children are born of good brave men
And on the other hand those of evil men are like their fathers.

The qua-
lities of
the born
criminal.

The born criminal has no moral sense, no self control, no remorse, no gratitude, no altruism, no proper affections, no realization of the claims of society, no ideas of responsibility or the propriety of justice. He is vain, unstable, flighty, emotional, extravagant, treacherous, cruel, lazy, asocial, anti-social and superstitious. In most cases the intelligence is low, and his attention is difficult to attract or retain. Life presents no cares nor anxieties to him. Everything is indifferent. *Laissez faire* is his motto.

It might fall to the lot of any of us to have to care for the born criminal. Here we have him as a cousin, or even a brother, and what is he doing? He calls on one friend and borrows £5, without any intention of repaying. Another day he walks off with a stranger's fur coat from an hotel. He joins in some shady financial transaction, which for want of sufficient business and legal acumen may land him in prison. Thus he is, year in and year out, committing crime or on the border line, without any shame, or thought of his saintly parents, or the slightest pity for those who suffer by him. Those who do not understand say, convert him, talk to him, apply good influences. The born criminal is, however, isolated from others in being absolutely callous and indifferent to higher influences or ideals.

Or we may have the born criminal in childhood, boy or girl. Here we commonly find abnormal sexual passions or conversation; the habits are dirty; the appetite is often very large; there is a strong tendency to steal, either food, finery, or money, often merely for the pleasure of stealing. They have a remarkable persuasive manner which fascinates outsiders, and in consequence they are often able to spread the most cruel scandals in a most studied manner. The curious feature is that they glory in it; the more pain the greater their delight. They almost exhibit the sporting instinct in their desire to frustrate the friends who try to help them. I am inclined to favour physical pain in these cases as a corrective, for it appeals strongly to their lower natures. By way of treatment those in charge must never appear nonplussed or annoyed, for such gratifies the born criminal. Assuming an attitude of complete indifference, so as to cool their vanity, the main object must be to gain the confidence of the young degenerates and having done so elevate the ideals of life. These born criminals exhibit remarkable intelligence, although when this is carefully examined it is often found to possess a superficial brilliancy. They vary also, having bright periods and dull periods at lessons. On the whole they remember very little of what they learn. They have often remarkable memories for gossip, scandal, or uncanny things which one would sooner they should forget.

This clinical picture is quite different to that of the idiot, the imbecile and the aments, who are more frequently born than made; yet alienists are still apt to confuse them. It is hardly necessary to compare them in this treatise.

All his
reactions
are slow.

Medical experts in prisons have found that the "born criminal" suffers from anæsthesia¹ and analgesia. He is a slow thinker and a slow mover. All his reactions are delayed. The negro and the aborigines are said to exhibit similar characters.

Degenerates suffer from poor circulation with diminished nutrition, and are liable to atrophic diseases. At Merxplas, I saw cases of atrophic wasting of the toes, presenting a peculiar claw-like appearance, forming wide spaces between each toe.

I have observed that born criminals not only feed the ranks of the unemployable, but as compared with normal workmen are barely able to perform a quarter of the amount of labour reasonably expected of them. Their laziness is due to lack of potential; and they cannot possibly do a fair day's work, whatever their pay. This ought to be considered by intelligent governments, and might be arranged for by carrying out forced and permanent occupations, when they leave prison. The ex-convicts are not lazy by reason of evil disposition; it is a positive inability to work. They are incapable of sustained effort.

In the born criminal the childlike state continues throughout life, instead of disappearing with the advance of youth and adolescence.

Lom-
broso on
the de-
generate.

Lombroso describes degenerate criminals² as inclined to repeat the habits of the savage, such as tattooing. He found them conspicuous for their emotion, vanity, restlessness, obscurity, passion, vengeance and imitation. Tested scientifically, the sense of touch is very deficient and there is usually analgesia. Hearing is duller. The sense of sight is likewise deficient, as in errors of refraction and colour.

Lombroso found criminals more sensitive to the magnet³ and to the weather, being easily indisposed with headaches

¹ Anæsthesia means literally without feeling, without the sense of touch. Analgesia, loss of sensation to pain, usually in some particular limb.

² *L'homme criminel*, p. 258.

³ *Loc. cit.*, p. 298.

and vertigo. Considering their exposed lives this is surprising, but it resolves itself into a question of resistance. Probably the normal has more resistance than the criminal; for is it not the power of resistance which keeps the normal above the criminal's level?

Where the criminal excels, is in his agility and muscular energy. This is a matter of training in connexion with his roving instincts, and a revert to the nomadic conditions. Lombroso points out the diminished vaso-motor reflexes.¹ Criminals don't blush. It has been demonstrated, both by the sphygmograph and the plethysmograph, that psychic stimuli, such as pleasure, sorrow and fear, do not react on the circulation as in normal people. This is to the criminal an aid in his professional calling; perhaps for this reason also, they do not suffer from septic inflammation. Their wounds are not painful and heal quickly, thus resembling the coloured races. It is a great convenience to the injured burglar, but it has the drawback of making him callous to the sufferings of others.

SECTION D.—TYPES AND CASES

Suicide is common among degenerates, because they are markedly deficient in the instinct of self-preservation. They have neither desire nor power to forecast the future. Suicide, according to statistics, has much increased in the last 40 years, during which time civilization has likewise advanced. It is probable that degeneracy keeps pace with civilization, if anything in increasing numerical proportion, and if so this anomaly is easily explained. Suicide is often the child of vanity and the desire for notoriety. Vanity is the most degenerate feature in the character of any one of us.

Suicide
and de-
generacy.

Vanity.

The ordinary murderer may be afflicted with vanity. This was very conspicuous in the case of that very unstable young man, Lefroy, who murdered Mr. Gold in the Brighton express. He was anxious to pose before the public, and begged to appear at the Old Bailey in a dress suit. He belonged to the theatrical profession, which is no assistance to a neurotic constitution.

G. R. Sims² writes of him:—

“As ‘Arthur Lefroy’ he wrote a successful pantomime,

¹ *Loc. cit.*, p. 300.

² *Referee*, Sunday, March 13, 1910.

Harlequin Sinbad the Sailor, for the Theatre Royal, Croydon. I have somewhere the card he sent up to my friend, Mr. George Spencer Edwards, then of the *Era*. On the card is 'Mr. Percy L. Mapleton, Opera House, Melbourne.' "

Lefroy had theatrical and literary ambitions. Several of his short stories were accepted; and it was alleged that he was on his way to see a theatrical manager at Brighton about a comedy, when a sudden temptation caused him to be the author of a tragedy. While awaiting his trial, he wrote impassioned love-letters to a popular actress, very much to her annoyance, and when in the prison infirmary, he used to amuse the company with recitations and imitations of popular actors.

A case of
murder
for lust.

The following case, of the suicide of a man after shooting his silly vain paramour, is a remarkable illustration of the vice of vanity. Those who knew about the couple informed me that they were cheerful and lively. They were engrossed in each other and quite indifferent to their neighbours. While at dinner eating their last meal, everything had been arranged and still they were gay. They had already knelt at the altar, and decorated the deathbed with flowers, only waiting for the hands of the clock.

Unbridled
or inordi-
nate lust.

Let us assume that this vain couple who faced death so calmly were degenerates and all is clear. The man had shown himself destitute of all moral and social responsibility. His lower animal lust made him not only covet his new paramour, but also desire her blood. Kraft Ebing has given cases of this kind, where the consummation of lust is not attained till either blood is spilt, or some other suffering inflicted. This is indeed the key of wife-beating and wounding. It is termed Sadism. This suicide was a somewhat analagous case. It would have been no pleasure to the man to have been shot first. He had a diseased or more correctly degenerate brute passion, which could only be satisfied by seeing his lover die in front of him. If there had been no fear of law and punishment, probably he would have preferred having a dozen more victims before killing himself, as many others have done.

The variety of paths into which the mentally degenerate are led, by unnatural or abnormal sexual passion, is extra-

ordinary. While one degenerate, with uncontrolled impulses, commits murder, another who has no such inclinations is led far afield by his abnormal ideation.

The clinical aspect of lust-crimes.

To describe such a tragedy as pathetic would be a distortion of terms. To charge them with responsibility and return a verdict of *felo de se* has the appearance of undue severity. Insanity is also out of the question, judging by what those around observed. Is it not more probable that the man was an actual degenerate? If he was born rather low in the social scale, he may have pushed to a higher position than perhaps his neurones were adapted to. It does so often happen that people who have risen socially makes serious mistakes, as if their brains were capable of effective action in lower grades, but not trained to higher or more responsible positions. It confirms the layman's opinion that breed, or stock, goes a long way in matters of social and even mental stability. Thus a poor man with a good and healthy pedigree, who rises socially, accomplishes successfully what is expected of him; he may soon find himself in the Cabinet. But a poor man, of unhealthy stock or unstable breed, when unduly elevated, more often goes under or commits some grave social error. The social elevation of the poor above their rank is no kindness, unless there is some stability and stock behind them. Many attain positions they are wholly unsuited for, which lead to failure from overstrain.

Breed or pedigree the factor in stability of mind.

Moral degeneracy no doubt has its physical counterpart in the brain, if we could only find it out. Kraft Ebing and others describe the particular form of degeneracy termed "perversion," as "psychopathy" and the actors as psychopaths. These diseased ones deserve all our pity, being irresponsible, but at the same time their very existence is poisonous to society, and intolerable to the general moral hygiene of the community. There is a something, a cause, which we have not yet found out, concerning the "psychopath," of the lawyer and the alienist. There may be some error at conception or a defect in construction; an unequal, abnormal mixture in germ plasm; or irregularity in the partition of sex qualities. Nevertheless, though a subject which disgusts most of us, we should obtain powers of control for segregation, sterilization or painless extinction.

Kraft Ebing on the psychopath.

This term psychopath is, however, too limited in its extension ; for every degenerate, such as I describe in this treatise, is in reality a psychopath—a mental sufferer.

In suicide, murder and acts of violence, in which opposite sexes are concerned, there is often an undercurrent of morbid, perverted sex passion. Vanity, as before stated, frequently prompts many unstable neurotics in their craving for notoriety. They anticipate that their act or crime, if out of the usual, will interest millions of readers over the whole surface of the globe.

If criminals had not so many admirers, many would give up the game. So frequently it is the over-estimation of themselves that keeps them going. They are actors in the theatre of life.

Sexual
crime
should be
dealt with
in camera

All these smudgy subjects, including divorce, the most sooty of all, should be dealt with *in camera*. There would probably be a vast falling off in sensational crime. It would not mean that the unstable would become stable ; but that they would not be so stimulated to run amuck. They would go slow, which is far preferable. It may be of interest to recall the noble effort made by Queen Victoria to elevate the tone of our Law Courts and cleanse the public press. The following is transcribed from the late Queen's published letters :—

“Queen Victoria to the Lord Chancellor (Lord Campbell).

“Windsor Castle, *December 26, 1859.*

“The Queen wishes to ask the Lord Chancellor whether no steps can be taken to prevent the present publicity of the proceedings before the new Divorce Court. These cases, which must necessarily increase when the new law becomes more and more known, fill now almost daily a large portion of the newspapers, and are of so scandalous a character that it makes it almost impossible for a paper to be trusted in the hands of a young lady or boy. None of the worst French novels from which careful parents would try to protect their children can be as bad as what is daily brought and laid upon the breakfast-table of every educated family in England, and its effect must be most pernicious to the public morals of the country.”

“Lord Campbell replied that having attempted in the last Session to introduce a measure to give effect to the Queen's wish, and having been defeated, he was helpless to prevent the evil.”

Paranoia
as a cause
of crime.

It is common knowledge that many weak-minded persons, otherwise not insane, suffer from delusions of persecution. The technical name for this complaint is Paranoia. Such

people frequently without much warning commit serious crimes, often murder. Thus Royalty is liable to attack by the weak-minded, who have their imaginations stirred up with all sorts of incorrect ideas against position or authority. There is always danger in the political pastime of stirring up the masses against the classes.

A man may attack an employer under the erroneous impression of wrongful dismissal. Some years ago a noted actor was murdered in the street by a theatrical employé? who had for long fostered an imaginary grievance. Another man shoots a high official and says to him, "You have taken the bread from my family"; it being quite untrue.

These cases could be multiplied to an unlimited extent. The delusions are usually apparent, and the offenders are treated as insane.

There are, however, a large number of paranoiacs whose insanity is not so apparent. A man has a suspicion of infidelity, which may have a shadow of foundation. If he be a paranoiac he will not rest till he is revenged. The symptoms of paranoia cannot be so definitely outlined that we can say with accuracy, "This is paranoia and that is not." There are many so-called normal people, who have a morbid way of dealing with the small details of life. These people call for our consideration, and they form a very numerous class.

Among the well-to-do, paranoia takes the form of irritability, ordinary but excessive quarrelsomeness, and the constant taking of offence at trifles. The poor and uneducated have so little control that when they are affected they vent themselves in violence and fall into the clutches of the law. Paranoiacs are always dangerous, because of the uncertainty of their movements and actions. Those who have the care of children should know that Paranoia frequently commences in childhood amongst very sensitive children. The child is either too happy and self-satisfied, or liable to depression and sadness.

As a rule, the intelligence is lowered, although such people may be even brilliant in one direction. There are exaggerated ideas of self importance, of superior position, or of strength.

If an event happen to disturb the equilibrium of two people and one be of the type described, he or she is unable to throw

it off, and it grows into a grievance—in fact, into a fixed delusion of persecution. On the other hand, a normal person, facing the trouble, can argue it out and not make too much of it. If the trouble tends to get hold of such a person, he or she will recognise that the cause lay in himself or herself. It will not become a fixed idea or grievance.

Those who understand this can do a great deal to raise children out of morbid ideas or incorrect ways of thinking. The vain can have their vanity gently exploded; the super-sensitive or brooding children can be encouraged to a broader outlook, introspection can be discouraged and their interests centred in healthy occupations. Such training is invaluable to children, for it means the difference of a happy, useful life as time goes on.

When I visited the Criminal Asylum at Tournai, I saw many interesting cases of men who had wounded their wives, or other people, on account of some fixed but mistaken idea of grievance or persecution. It is extremely probable that paranoia is a more frequent cause of murder, personal violence and indeed of family quarrels, than is usually supposed.

It seems to me as if the medical profession did not give paranoia its due in the way of causing crime, and certainly the legal profession do not appreciate it. That undefined quantity—self-control—is supposed to be equal to all delusions, or fixed ideas, concerning imaginary injuries and injustice, which is quite the opposite of the fact.

The relation of epilepsy to degeneracy.

Epilepsy is considered to bear some relation to degeneracy and to crime. We are said to be all potential epileptics. We certainly are all potential criminals, and it is only by the chance of heredity, or the luck of environment, that we are saved.

Hughlings Jackson¹ pointed out that as epileptic convulsions are due to irritation of the motor centres, so the hallucinations which often accompany epilepsy, may be due to irritation of the sensory centres.

Tonnini considers there are five kinds of epilepsy which may affect the criminal.

1. Motor epilepsy, which may happen to ordinary individuals.

¹ *Med. Press*, 1884.

2. Psychic epilepsy, which may occur in the morally insane, or in the born criminal, and may be due to lesion of the frontal lobes.
3. Sensory epilepsy, causing hallucinations and impulses, periodic insanity, or monomania. This may lead to murder, or violent action, probably because the patient imagines he or she hears voices which must be obeyed.
4. Complete epilepsy, combining these three.
5. Mixed epilepsy, psycho-motor or psycho-sensory.

Clearly where epilepsy enters as a cause we have a pathological factor, which supports the theory of degeneracy in the born criminal. Where the criminal has had fits or is of epileptic stock, these facts should influence the decision of juries, for epileptics are most uncertain in act and motive—in fact, irresponsible.

I am not dealing in these early chapters with the treatment of crime, but with the causation. Some of my readers may think that I am offering all sorts of excuses for the evil-doer, in order to avoid punishment. If there is irresponsibility, punishment is an act of injustice. On the contrary, what is regarded as irresponsibility calls for special care and isolation during the period that such a condition lasts; which may mean isolation till released by death.

CHAPTER III

THE CRIMINAL

SECTION A. CRIMINALS : Derivation of the term—A social product—The ordinary criminal may pose as a hero, but is really despicable—Our prison population—No criminal class—We are all potential criminals—The so-called criminal type is manufactured—The criminal instinct in children—A criminal from childhood.—SECTION B. CLASSIFICATION : Classification of criminals—Perverts and inverts—Insane, Borderline, Sports and Accidents—Derelicts and degenerates.—SECTION C. CRIME : Havelock Ellis' definition of crime—Transition going on in type of criminals—Lombroso's theory that there are criminals among wild animals—Crime among savages—Robbery, adultery and murder.—SECTION D. PUNISHMENT : Revenge develops into punishment—The effect of religion—Vengeance—In the Roman period social status counted and remains with us—The control of the Church—The Ecclesiastical Courts—The benefit of Clergy—The origin of the black cap—Class legislation and transportation—The chief groups of crime—those against property and person—Environment often makes the criminal—Case to illustrate.

“I shall despair. There is no creature loves me ;
And if I die, no soul shall pity me :
Nay, therefore should they, since that I myself
Find in myself no pity to myself.”

Richard III.

SECTION A.—CRIMINALS

Deriva-
tion of the
term.

THE word criminal is said to be derived from the Sanscrit *Krimen*, or *Karmen*, which means “action.” The root-verb is *Kri*, to do or act. This derivation does not assist us beyond stating that a criminal is an actor, which we know too well already.

A social
product.

The criminal of the present period is in many instances an artefact, for he is a social product, largely the result of civilisation. From the legal aspect it is not essential for the criminal to be a bad man. In fact, crime appears to be manufactured by the State in a most careless manner. He may be more correctly described as a defaulter. On the other hand, many horribly wicked men are from the legal point of view noncriminal.

The common criminal is to some a hero, and has frequently formed the subject of a novel. It is curious that such literature is morbidly popular among all classes, on account of the spirit of adventure.

The ordinary criminal may pose as a hero,

This attention on the part of authors is much appreciated by the criminal class, for vanity is one of their besetting sins. Whatever is interesting and attractive about the criminal as he poses, those who know his real position can only regard his whole existence as both miserable and despicable. That the criminal masses are increasing instead of diminishing in numbers is an indictment, not only against our social conditions, but against the ignorance and selfish indifference that so generally prevails. It is our fault that the poor are flooded with trashy literature, which acts as a powerful incentive to crime in unstable minds; whilst after the illicit publisher of such filth, and next in importance as the ruiner of home and happiness, comes the publican.

but is really despicable.

The following statements concerning our prison population are taken from an article by George R. Sims in the *Daily Mail*, November 2, 1909 :—

Our prison population.

The following table gives the number of prisoners received into local prisons for the years ending March 31, 1908 and 1909, under sentence of penal servitude or imprisonment :

	Ordinary Courts.	Courts Martial.	Debtors' and Civil Process.	In Default of Sureties.	Total.
1909	184,901	465	18,996	1,319	205,681
1908	176,602	501	17,918	1,212	196,233
Increase in 1909					9,448

INADEQUATE CELL ACCOMMODATION

There were in the local prisons last March 18,628, and in the convict-prisons 3,195. During the last quarter of a century the number of commitments per 100,000 of the population has fluctuated between 621·6 in 1882-3 and 460·7 in 1900-1. Last year it was 523·1. The continuously high numbers have caused a great strain on the cellular accommodation of the prisons, and "if numbers continue to remain high and to keep pace with the growth of population, the question of providing more accommodation must arise in the near future."

In England 30 in every 100 prisoners return to gaol. Of these 48 per cent. return a third time, and 64 per cent. of these return again.

From the judicial statistics for 1907, which are just issued, I take the following table of persons convicted during that year :—

SEX AND AGE OF PERSONS CONVICTED

	Under 12 years.		12 to 16.		16 to 21.		Total. 12 to 21.		Total. All ages.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Assizes and Quarter Sessions .	1	—	63	4	1,426	83	1,490	87	9,457	921
Court of Summary Jurisdiction (Section A)	1,883	116	5,009	582	6,302	1,051	13,194	1,749	32,775	7,118
Court of Summary Jurisdiction (Section B)	131	4	1,520	56	14,472	1,736	16,123	1,796	191,811	53,336
Totals .	2,015	120	6,592	642	22,200	2,870	30,807	3,632	234,043	61,375

It will be seen that, roughly, 300,000 persons were in this one year convicted of various offences.

Among the unpleasant items in the criminal statistics is the fact that 14,241 boys and girls under 21 were in 1907 convicted of larceny.

It has been shown by a writer in the *Lancet*, dealing with statistics that covered a long period that one-quarter of the offences charged as simple larceny were committed by youths under 16 years of age and that one-third of the burglaries and one-fourth of the robberies were the work of criminals between the ages of 16 and 21.

No
criminal
class.

Though I often use the term criminal classes, there is in reality no one class which is criminal. They are drawn from all classes, rich and poor, professional and commercial, well born and low born. All sections of society contribute their quota to this large group, which rather suggests that a certain number are born with a low power of resistance. I expect in the end that we shall find that mal-breeding is the chief or predisposing factor in crime, and that poverty, stress and compulsory over-education, are secondary factors.

We have had compulsory education for nearly 40 years, and here are some startling figures as to its effect in connexion with the criminal classes.

Dr. Milson Rhodes, a well-known prison authority, analysing the prison returns for 1907, shows that of 174,631 prisoners the degree of instruction was as follows :—

Illiterate	28,207
Standards I and II	75,666
Standards III and IV	61,158
Standards V to VII	8,836
Superior instruction	319
Not known	445

As over 110,000 of these prisoners were under 40, the bulk of the illiterates must have been children of school age, at the time that compulsory education was introduced.

Of the criminal boys brought under the Borstal system 26 per cent. are found to be afflicted with some sort of disease, deformity, or disability. As a class they are $2\frac{1}{2}$ inches below the normal height of the general population of the same age, and they weigh approximately 14lb. less.

My own observations,¹ among boys in prison and the same class in Homes, show that they are often 4, 6, and even 8 inches too short, while frequently they are 2 to 3 stone too light. These facts point distinctly to bad parentage and evil conditions at home.

I have already said that we are all potential criminals. That is to say, any one of us under adverse conditions might have gone astray in a similar manner to our weaker brethren. This doctrine is offensive to some. I can add that many of us, outwardly good, are actually concealed criminals, with criminal instincts suppressed and only covered by our favourable surroundings.

We are all potential criminals.

The theory of a criminal type is a popular error. It is, of course, quite easy to imagine or manufacture a type. Take, for example, a group of men, not one of whom stands upright or looks straight at you; if you place such men in prison costume, the ugliest that can be imagined, and add the short cropped, stubbly hair and beard, you then have the criminal of the sixpenny novel or "shocker." Every facial or other defect is accentuated by such miserable and degraded conditions.

The so-called criminal type is manufactured.

We must not be led away by types. Too often people mistake harsh and coarse expressions, common amongst all classes, for criminal types.

On the contrary I think criminals, when properly dressed, are very harmless looking, and certainly do not accord to the proverbial type. Murderers² so often have a soft, gentle appearance; burglars look serious and thoughtful; forgers

¹ See chap. x, Fig. 20, and chap. xvii, Fig. 75, p. 349.

² See chap. xi, Fig. 25; and for ex-burglars, the photographs in *Education, Personality and Crime*, especially that of XH511, p. 213—a fascinating personality.

have the mechanical, pen-driving, attitude; pick-pockets have somewhat the air of shopwalkers, and so on.

But the criminal in prison looks like a cowed, distracted, hunted beast. He is on the look-out with a characteristic, nervous, twitching expression, never knowing whether he is doing what is expected of him. A British convict is a pitiable object, so much so, that however bad he is there are few who would not feel an impulse to assist him. Let us, however, hope that before another decade we will try to improve present conditions, following the example of America, and, I might well add, of Holland and Belgium.

Criminals form an anti-social group. Neither civilisation nor religion have succeeded in drawing them when young into the paths of right-doing. I say when young, because there is an actual criminal instinct in some, if not in most, children.

The
criminal
instinct
in chil-
dren.

All who have had the care of children can testify to their early vices. We see in the infant face the image of what he will be in adult life and even in old age. The child casts the shadows of the realities which are to follow. Nearly every vice as well as every virtue, of adult life, is to be found in the infant.

Of some children we may truly say that they are "born saved" because, to speak figuratively, their steering gear is in good order. They will cause us no anxiety.

In the majority, however, we find accentuated one or many of the human weaknesses. In the earliest infancy we find passion and anger, jealousy and cruelty. Children show intense vanity, love of self, love of show, laziness, thieving, and when they have been under the care of improper nurses there is frequently lust and impurity. Some of these "symptoms" are very decided even so early as the first or second year, others not until the speaking stage, but they may all have appeared and, if rightly treated, been cured by the age of 10. Hence the importance of proper surroundings in childhood. The real merits of parentage come in here, for children, being very prone to imitate, are more influenced by example than by precept.

We can easily understand how the children, who dwell in pleasant places, are soon cured of their primeval criminal

instincts, and may have them stamped out never to return. Children, with adverse surroundings, have but little chance. They are much to be praised when they grow up good and industrious. Here are some illustrations, taken from the report of the London County Council on reformatories and truant schools.

Of a boy of 8 years old the report says :—

“ ‘Tiny boy of fair and angelic appearance, but a moral imbecile of most hopeless and wicked kind. Has attempted to drown a child. He never needs to be told twice to do a thing, and never asks a question.’ ”

Another of 13 is thus described :—

“ ‘Uncontrollable temper if anything crosses him ; throws food about ; smashed windows ; language awful ; threw baby across the room.’ ”

This is the character of a boy of 10 :—

“ ‘Much sharper than he appears ; very artful ; probably drowned his companion.’ ”

Impish cruelty is apparently the distinguishing characteristic of a young hopeful of 9 years, of whom it is reported :—

“ ‘Took four people to get him here ; extremely cruel to children and animals ; killed a cat with his hands.’ ”

These ‘moral defectives’ are exceedingly troublesome, the report points out. Some have ‘murderous tendencies from pure cruelty,’ and have tendencies towards quarrelling, pinching, and biting other children. ‘Manslaughter has been committed by children of innocent, pleasant, and in one case almost angelic appearance,’ adds the report. ‘There is every grade of mental attainment among these children afflicted with this lust of cruelty.’

The criminal is not always a sudden transformation in adolescence, or even in youth ; he may be the continuation of an atavistic infantile state of mind and morals. He may be a thief or murderer at 30, but was just as much a potential thief, or murderer, at the age of 13. Uncontrolled lust may have brought him into prison when 70, but the same lust was there at 7.

A criminal from childhood.

Of all crimes theft is not only the most common, but the most natural. Theft is the love of possession which dwells in every heart ; it is, in fact, the basis of the commercial instinct. It would be exceedingly difficult to define the

boundaries of theft and honesty in the majority of commercial undertakings.

Theft, as the community defines it, is an incorrigible habit, usually commencing at a very early age. Most of the burglars I have met began on small thefts; this stage was preceded by pilfering at home in childhood.

There is a touch of manliness about most thieves, for they take credit to themselves for choosing wealthy houses for their depredations. Frequently a burglar has said to me, "Well, sir, I never robbed a poor person."

When we realise these facts, we must work on new lines, anticipating these developments in the young; and, as the woodman straightens his crooked stems and weedy saplings, so we must prune and strengthen during the impressionable period of youth.

SECTION B.—CLASSIFICATION

Classifi-
cation of
criminals.

From a rather extensive study of cases, going carefully into the history and somewhat intimately into the lives of many unfortunate men, I have tried to classify criminals from two or three different aspects.

Thus I should divide the whole of them into two primary groups :—

Perverts and Inverts

Perverts
and
Inverts.

I apply the term Pervert in the widest and not in its present limited legal sense. Perverts are active and often intelligent. Inverts, on the other hand, are passive, lazy and idle, drifting into crime because it is easier than work and they are often deficient mentally. I derived the latter term from the botanical application, in the cases of imperfect or unripened buds. The invert is an imperfect man. He has never attained his normal potential. He resembles the undeveloped green buds on the rose-bush, which have not enough strength to flower. In fact, as these sap the vigour of the wood, so, indeed, our inverts are a drag upon Society.

Inverts include tramps, won't-workers or work-shy, unemployables, born-tireds. They are fairly well represented in

all classes of Society ; but in whatever class they appear they are burdensome.¹

Perverts are criminals, whether strong, virile and active, or weak, degenerate and muddling. The normal line of conduct has been deviated from. They are enemies to the community.

From another aspect I should view criminals as :

1. Insane.
2. Mentally weak, or on the borderline of insanity.
3. Sports or variations, due to heredity. Of these I have met many examples, where in a normal healthy family, a criminal, the proverbial black sheep, suddenly appeared and seemed to be quite out of place. Finally there are
4. Criminals by accident, due to their unfavourable environments.

Insane,
Border-
line,
Sports
and
Acci-
dents.

This has been fully treated in Chapter XX, page 190, of my former work, *Education, Personality and Crime*, and there is but little more to add.

From a further study of the subject, and after some research on the finer structure of the brain cortex, I can divide criminals in yet a third manner.

Theoretically, we should expect the criminal to be always a bad man ; but in practice we find that frequently he is a derelict, who would have gone straight if an opportunity had been afforded him.

Derelicts
and Dege-
nerates.

Derelicts were meant for better times, having a normal basis as regards brain and mind ; but adverse social storms have driven them off their correct course. May the poor things yet get into port ! ²

Degenerates form a large and important group among the criminal class, and unfortunately amongst those who are not criminals ; such as the unemployable, the born-tired, and the won't-worker or work-shy. Degenerates never start fair in life. They illustrate the infantile type of mental control, or more correctly want of control, actually misleading the adult body. Their brain machinery has never been properly finished.

¹ Some interesting details about tramps will be found in the Appendix, Section A.

² See photograph, Fig. 76, chap. xvii, p. 350.

SECTION C.—CRIME

Havelock
Ellis' defini-
tion of
crime.

Transi-
tion going
on in type
of
criminals.

Havelock Ellis says, "crime is a failure to live up to the recognised standard of the community," and he gives as the cause some accident of birth or development, placing the criminal on a lower and older social level. Havelock Ellis gives many illustrations of low grade and brutal criminals, who do not represent those of the present day, for it is probable that the criminal of to-day is taking part in the general transition of society to a milder, less brusque, type than Ellis depicts. Nowadays men are apt to be well groomed and somewhat featureless ; lads, instead of being rough and hearty, are smooth and effeminate. The determined semi-barbaric criminal of 50 years ago is getting replaced by the "gentleman" type. Who would have expected a burglar in evening dress a generation ago ? Can we imagine the surprise of our grandparents at skilled burglars, well dressed, very companionable and with good manners, travelling about the country in motor cars robbing mansions and hotels ? With the march of compulsory education, times have completely changed. All classes are affected, and an innocent and blissful ignorance may be replaced by a partially educated intelligence of a low order, which becomes a menace to society. Society has nothing to thank education for in relation to crime, except that it is less brutal than formerly. This does not so much mean that the criminal is more merciful, as that he has less stamina. The starving children packed in schoolrooms, instead of running wild, must deteriorate physically, and there is also the exhausting strain on their weakened brains, caused by enforced attention.

Lombro-
so's
theory
that
there are
criminals
among
wild
animals.

Lombroso had a theory that amongst herds of wild animals there are always some criminals. Such animals are unduly vicious and unsociable. They lead a more solitary existence and give evidence of inferior cranial development. Comparing these conditions, it was Lombroso's opinion that on account of physical degeneracy, we must have a certain proportion of criminals.

It has been observed by Malthus, Darwin, Herbert Spencer and many others, that when population reaches a certain limit the natural means of subsistence necessarily become strait-

ened, and so the competition for life becomes a very serious factor. Crime is one of the results.

In former times there was no system of proprietorship among primitive races ; nor indeed among the Spartans and ancient Chinese. All property in land was held in common ; a condition to which some Socialists of the present period wish to return, as a cure for poverty and crime. Though this might have the effect of doing away with crime among themselves, yet theft did continue on travellers or on other tribes. In fact, in ancient Egypt, the robber was a man of position and honour, being recognised by the State. Likewise the Greeks gloried in piracy, as indeed did our sailors of the Elizabethan period.

Crime
among
savages.

Robbery.

There is an Indian tribe called Zaccha Khail, which consecrates its infants by passing them through a hole in the wall, with the command "Be thou a robber." Many tribes in Arabia and Africa keep up this ancient industry or profession of thieving.

As savage races organised themselves in tribes and communities, the offences they most objected to were adultery and murder. In the case of adultery they often made an effort to wipe out the whole family, including the innocent children and even the slaves. A murder might be visited by revenge on the part of the relatives—so that each offended family settled matters as best it could.

Adultery
and
murder.

SECTION D.—PUNISHMENT

Punishment shows an evolution from revenge. Law and order developed gradually, in a more or less crude manner. Chiefs and their appointed officials awarded punishment of a revengeful character. Thus the Kaffirs used to kill a robber. The Polynesians would slay an adulterer. The Thibetans more mercifully would fine a robber and, if he could not pay, would fine the relations. Cannibals, moreover, cook and eat criminals. Rulers among primitive races always visited heavy punishment for offences directed against their own power or persons. This is only natural as the outcome of the self-protective instinct, but it is strange how this individualism has predominated amongst civilised people.

Revenge
develops
into pun-
ishment.

In ancient days, and even now among savage races in

Africa and America, animals which kill human beings are tried and punished, usually with death. It is rather important to refer to this because the same disposition is frequently observed among children.

Casati ¹ narrates the occurrence in Central Africa of a goat killing a dog. The goat was tried, sentenced to death and executed. The superior people in the tribe ate the goat and gave the dog to the conquered race.

In another case a sow killed a child, and with the help of the young pigs ate it. The sow was tried and executed, but the young pigs were let off on account of their youth.

Likewise the Maoris kill an animal that strays over a sacred place.

But in our own islands this childish revenge was not unknown, for there is an old Irish law tract, which ordained that if a bee caused blindness by its sting, the whole hive shall pay the fine.

It is, of course, only a low intelligence that can carry revenge to such a point, yet Plato,² following Attic custom, suggested that if any one were killed by an animal it must be tried and slain. It looks as if a lower undeveloped mental condition was associated with the spirit of revenge, rather than with toleration.

The effect
of
religion.

As religions developed, with their belief in gods and spirits, and in the true God, punishment for offences became a religious duty—in fact, an expression of wrath on the part of an offended deity.

Ven-
geance.

This is seen to most advantage in the old Testament under the Jewish theocracy. A study of Leviticus and Deuteronomy fully bears out this idea. Punishment indeed was vengeance. According to our present ideas the punishment was too severe, yet the reckoning up was eugenically sound with a view to purge the race of unwholesome families. Quite different is it nowadays, and we trace the change to the Roman period, when there was a great distinction made according to the social status of the offender. A man of rank and position might slay a poor man, or appropriate a poor but chaste girl for immoral purposes, without being called to account. The same spirit has travelled into our own law systems and persists to this very day.

In the
Roman
period
social
status
counted,

and re-
mains
with us.

¹ *Ten Years in Equatoria*, p. 176.

² *Leges*, ix, 873.

In our own land, in early times, there developed a mixture of the theocratic and regal elements. Thus in the period following the Normans until about the Reformation, there were two great powers in the land—the King with his Barons, and the Ecclesiastical authorities, which included the monasteries. The monasteries controlled everything which was for the good of the people. They supervised the leper hospitals, the schools, the almshouses, managing them at a minimum cost, the revenue being drawn from the tithes and churchlands. The monks, living apart, were the only educated people. They could not possibly be tried in the ordinary courts which were brutal and depraved in their methods. They were therefore tried by their bishops and archbishops, just as nowadays a soldier is tried by his officers.

The control of the Church.

These were called the Ecclesiastical Courts. They did not, however, require to punish with mutilation or death, considering the class of offenders. If a monk were very bad he could be deprived of religious position and would then be an outcast from society altogether. Every one who could possibly claim to be sufficiently connected with the monastery endeavoured to be tried by the Ecclesiastical Court, because he was more likely to obtain a fairer trial and less brutal punishment than in the ordinary civil court.

The Ecclesiastical Courts.

Thus people, such as barons, who had given land to monasteries or exerted their patronage, would claim this privilege; also the pupils in the monastery schools and all those who were in minor orders. This was termed claiming the benefit of Clergy. The fact that a man could read was evidence that he was well educated, which necessitated his connexion with a monastery school.

The benefit of Clergy.

There were also certain offences which were only dealt with by the Ecclesiastical Courts, irrespective of the rank or position of the offender. These were perjury, adultery, or any other sexual offence. Divorce was but little known, being a luxury limited to the baronial class. Any sacrilege was dealt with by this Court, and a few other special crimes. Improvement, religious and moral, was one of the objects of this Court.

Occasionally when a man was found guilty by the Ecclesiastical Court, it was decided that his crime was such that it

The origin of the black cap.

should be dealt with by the Civil authorities. He was then handed over to them for a fresh trial, and if no Civil authorities could be procured, the Ecclesiastical judge, who was usually a bishop or an abbot, took upon himself the civil functions. To show that he had ceased to act in his ecclesiastical capacity, the abbot covered his tonsure with a black cap while pronouncing the civil sentence. Such cases were usually, but not necessarily, those requiring the death penalty or mutilation. The black cap is now the only relic of the Ecclesiastical administration of crime. It is not quite clear why this custom of putting on the black cap should have survived in the civil courts, after it had lost all meaning.

Class legislation and transportation.

One of the earliest treatises of English Law was written by Glanvill in the reign of Henry II in 1187. There were then three different courts : the Communal ; the Curia Regis ; and the system of private jurisdiction. The last was the origin of feudalism, in which the lord was responsible for his dependants. It was a healthy system, but like most human systems degenerated into what we now term "class legislation." With the great increase of population, rapid means of transit, education and the *toute ensemble* of civilisation, there is now no place for class legislation. Nevertheless class legislation has only been modified in a very small degree. Whatever concerns the property and the pleasures of the rich is carefully guarded. Not so many years ago a poor peasant might be transported for destroying the pheasant which ate his corn, or the hare that nibbled his crops ; minor offences, such as sheep-stealing, were likewise visited by transportation and treated just as severely as the more serious offences of forgery, or coining. Even to this day the law of trespass is carried to an unreasonable extent.

Many criminals have thus been fashioned by a thoughtless, pleasure-seeking, and powerful ruling class. Some of those criminals whom we transported were the backbone of our land, and have since built up a sturdy nation in the southern hemisphere.

Two chief groups of crime—those against property and person.

If we analyse a book of law, we find that criminal offences fall into two groups ; offences against property and offences against the person. There seems a preponderating importance attached to the former. There are also marked traces

of class distinction, for the educated gentleman, who by fraud robs a family or families of their all, is punished often less severely than the lower class of thief who steals a few trifles. I shall frequently have occasion to call attention to such instances.

We cannot properly understand the why and wherefore of the criminal groups, unless we become acquainted with the surroundings in which they have been fostered and developed. It will then be quite apparent that they are not of their own making. Criminals have partly evolved out of the system of class legislation, class distinction, and the holding down, not to say oppression, of the poor, weak and helpless. The poor are kept poor, and there is no regular machinery or sustenance to raise the helpless, or support the weak. It follows, that many do resort to crime as a necessity for bare existence.

Environ-
ment
often
makes the
criminal.

I know an ex-burglar who has been 33 years under lock and key. He was cast out of his home, when 12 years of age, by his father in a fit of temper for an act of pilfering. The bright, sturdy child was snapped up by an *élite* gang of pick-pockets before sorrow and remorse took the place of passion in the father's heart.

Case to
illustrate.

Some of us can hardly conceive what such an act means ; to cast a child of 12 out of the house, and tell him never to return ! In this instance when the father realised the circumstances and repented, he advertised continually for his boy to return. The boy saw one of the advertisements and laughed at the broken-hearted parent, for all filial affection was destroyed, and he was made much of by his captors. Before long he was an expert pickpocket, often passing his father in the street, and once picked his pocket of some valuables. From the age of 12, till he was converted at 50, he pursued the industry of picking pockets, burglary, and other acts involving skill. Though now a pious man, he has no regrets on the moral aspect of his past, and why indeed should he ? It is satisfactory to relate that he has for many years been in a position of trust and has discharged his duty honourably. As a criminal he was an artefact.

In another case, two boys of 15 and 18 walked the streets

of London for three days without food. Why did they not become thieves ? They would have been justified in waging war on society. Their mother had died 2 years and the father only a week or two before I interviewed them. They were at once turned out of the single room, which was their miserable home, and there was no State power to help them. They were sent by the police, who are the kindest and best friends of the waifs, to the Homes for Working Lads, and are now provided for.

We as a State or governing body look on passively and allow the helpless poor, who may be honest and sincere, to suffer starvation, sickness, or death. It is a national disgrace and lowers us in the eyes of thinking nations. This state of things represents the dregs of feudalism ; such callous indifference is now being resented by those who have suffered so long. In fact, the outlook is getting serious.

CHAPTER IV

HOW CRIMINALS ARE MADE

SECTION A. THE PRENATAL HISTORY : Tradition versus knowledge—Important factors in the early history of the criminal—Alcohol as a prenatal cause—Alcohol as a factor in young mothers—The alcoholic parentage of criminals.—SECTION B. POST-NATAL AFFLICTIONS : Tubercle among criminals—Infant mortality—Cases to illustrate—Malnutrition and Mal-education.

SECTION A.—THE PRENATAL HISTORY

SOME of the statements in the previous chapters have no doubt surprised many readers and perhaps scandalised a few ; so that it seems necessary to show by the quotation of a few carefully verified instances, that these statements are only too well founded.

I am aware that I am attacking time-honoured customs and traditions grown rusty, but in this age knowledge and verity should override both precedent and tradition. My readers would agree, if they beheld one tithe of what I have witnessed of the misery and sorrow resulting from such artificial and antiquated conditions. In order to save the time and labour of the readers, and present the position as vividly as may be, I am choosing a few types out of a group of two or three hundred cases. I also propose to look at the criminal from both prenatal and post-natal aspects ; indeed, as far as possible to look all round him.

Tradition
versus
know-
ledge.

Were his parents alcoholic ?
Was there any tubercle in his family ?
Does the infant mortality in the family tell us anything ?
Is there any history of fits, night terrors, or other neuroses affecting either himself or the other children ?

Impor-
tant
factors in
the early
history of
the crim-
inal.

Was there malnutrition ?

What has the Board of Education done for him ?

Did they offer him anything worth retaining ?

Was he too exhausted by the wrong kind of education to

have the heart, the zeal, or the energy to tackle the business of life, or even face the hard toil that honesty demands?

It is really a misfortune that we cannot choose our parents, for with them lies too often the cause of success or failure in life.

Alcohol as
a prena-
tal cause.

Alcohol in the father or mother is an extremely common antecedent of the criminal's existence. This is not the place for a long discourse on alcoholism, but some general results may be referred to.¹ It is well established by experiment that alcohol arrests ovulation and the development of the foetus, in proportion to the dose. A small dose results in diminution of the size of the unit or individual; a little more produces malformations or defects; while a still greater dose so weakens the organism that death results soon after or even before birth.

Alcohol
as a
factor in
young
mothers.

There you have the plain, unvarnished truth, and if this be so, it requires very little judgment to condemn the common custom of pregnant women "keeping themselves up" on porter, stout, or other alcoholic beverages. The same objection applies to nursing-mothers partaking of alcohol. Alcohol does not make more milk for the babe, as some doctors used to think. Liquid nourishment makes milk and improves the human supply, both in quantity and quality; but that alcohol increases the secretive action of the mammary gland cells, is a theory for which there is no valid evidence. This aspect of maternity, or motherhood, may be viewed in a new and more important light, as affecting the future moral and physical stability of the children and explaining some of the troubles and difficulties of youth in both sexes.

The alco-
holic
paren-
tage of
criminals.

But to hark back to the gaolbirds; when "father drank" and "mother was a bad 'un" or even if "mother was a good woman," the criminal started with a defective body, a defective brain, and deficient power of resistance. He cannot be judged by the same code that might be laid down for one of ourselves, who perhaps has three or four generations of temperance and saints of mind and body, behind him.

Parental teetotalism is then the exception among criminals. Nevertheless it does occur. One of the deepest dyed criminals I ever examined had a splendid history of two, and probably

¹ See *Education, Personality and Crime*, chap. iv, p. 27.

three, generations of teetotalism and respectability behind him. Most of his brothers were peculiar, but the sisters were good. What then was at work among the germ plasm of the male children to cause this deflection? Are they "sports," or variations, in the biological sense?

The comparative effect of alcoholism in either parent is still an open question, but it is well known that alcoholism in the male may equally cause infant mortality. It is however interesting and important to note that if a drinker give up drinking, reproduction may return to normal lines, and in proof of this I give a hypothetical case, typical of many other real and well authenticated cases.

Let us suppose the case of a working man, who drinks hard and is constantly out of work. The home is very miserable. Say there are 6 or 8 children; infant mortality probably accounts for half. The daughter, aged 16, is in consumption; and the boy, 10 years old, is an idiot; while the baby, 4 years old, is paralysed. Under the care of philanthropic and religious agencies general conditions get better. The tuberculous girl is sent to the seaside and improves. The paralysed and idiot boys are sent to proper institutions. But here comes the value of improved conditions. The poor woman expects a child and is five months pregnant. Good nourishment is supplied to the mother; and to mother and infant for another eight months. The babe is normal when born and continues healthy. This case, built on solid instances, carries a physiological lesson of the greatest importance, for it demonstrates that the mother's blood, even in adverse conditions, is sufficient for the foetus during the first half of intra-uterine life. But when the foetus grows larger, the drain on the mother demands an increased amount of food for herself. When this is supplied, the starved foetus may yet be saved from being an imbecile or a degenerate.

It has frequently been observed that when the drunkard is converted, the home becomes comfortable and the conditions of nurture improve. When this has happened if later there is another baby, it is normal; and so history repeats itself. There are many physiological lessons in this hypothetical case, both as to Nature and Nurture.

SECTION B.—POST-NATAL AFFLICTIONS

Tubercle
among
criminals.

I have been unable to detect any special liability to tubercle among criminals. With them, as among all the poor, a mother dies here, a sister there, more rarely a father dies of consumption. The criminals themselves, with their extra virility, their untrammelled and largely open air life, seem fairly free from tubercle. The prison reports tell a different story, but this I imagine must be due to the confinement, and warm, close, badly lit cells.

I remember once having a stable-boy whose parents died of phthisis. When he left, he went to a horticultural establishment and always slept out of doors, usually in a shed. Anxious to rise in the social scale he became a waiter in an east-end chop house. Although he had more food, warmer clothing, more shelter and more comforts, he broke down with tubercle in the larynx and lung. Ultimately he recovered under the open-air treatment in a workhouse infirmary, and after that pursued an open-air life; as he expressed it, "no more livin' in for me." It is, I fancy, much the same with the gaolbirds.

The Prison Commission have published an official report with an analysis of the families of 723 convicts. It is as follows:—

Parents.		Children.		
Tubercular.		Tubercular.	Not Tubercular.	Percentage Affected.
Father only	46	60	297	16·81
Mother only	43	58	219	20·0
Father and Mother	3	3	12	20·00
Neither	631	114	4,643	2·39

This table has many interesting points. Thus each tubercular family produces on the average 1 to $1\frac{1}{4}$ tubercular children. We know by experience that a tubercular parent may have half, or even all, of the children affected; while some families will escape quite free. Again we observe that of this group of criminals only 1 in every 8 families is affected with tubercle.

Dr. Charles Goring, who compiled the report, points out

that the prevalence of tuberculosis lies between 8 and 10 per cent. of the general population; whereas in this group the percentage averages about 18 per cent. It does not appear that this is a high percentage, considering the social status and stress of this particular class. We are, however, apt to lose sight of the fact, that about 1 in 3 of every post-mortem examination shows signs of tubercle, not necessarily active, often healed and of old standing.

There is much concealed tubercle in the race, as is shown by the 114 cases from parents, who did not exhibit any signs of tubercle. Thus $2\frac{1}{2}$ per cent. of the children of non-tuberculous parents suffer from tubercle. The free and open life pursued by tramps and criminals is preventive of tubercle. I am now treating a young man for tubercle, who was perfectly healthy as a tramp. The disease only attacked him when he changed, or reformed and lived an indoor life.

Incidentally it may be suggested, that the usual type of philanthropist regards infant mortality from too narrow and sentimental a standpoint. Surely it is better to die young than to grow up for a life of failure and disease, of intolerable pain, or to be the victims of the strong. I feel sure it is not sufficiently realised, that behind the tale of infant mortality lurk two dreaded enemies—syphilis and tubercle—perhaps a third—alcohol—or even a fourth—injury to the mother by way of starvation, or the exhaustion from long factory hours. The latter factors do afford, and have afforded, a field for the practical philanthropist, as in the noted example where a mayor of Huddersfield, by offering prizes, reduced the infant mortality of that town to almost half. But his experiment was incomplete, for he gave a sovereign to every mother whose child reached 1 year; whereas there are many risks to child life after then, in which hereditary taints play a prominent part.

Infant
Mortality.

Here is a typical case; a poor woman brought her little five year-old-boy to me suffering from meningitis. He was the fifth and youngest child. The eldest boy, 12 years old, is a cripple with hip-joint disease; the second died of tubercular peritonitis; the third of broncho-pneumonia; the fourth has spinal curvature; and this last one died later of tubercular brain disease.

I could enumerate a hundred such families, but the above represents a type well appreciated by the profession and also by the observant philanthropist. Here were five children in 7 years and two weaklings living, who probably will not reach maturity.

In face of such facts how can we advocate raising a weakly race from a sickly childhood. The only results are struggle, misery, failure and crime. Far better is it to improve the healthiness of the parents and to instruct them not to overbreed.

Cases to
illustrate.

I shall now take at random a bundle of cases, giving the infant mortality, which I express as a vulgar fraction; of which the numerator is the number of deaths, and the denominator the total number of births.

There is first a murderer, active, healthy and virile, of peasant stock. In his family the infant mortality was $\frac{2}{12}$, or 2 deaths out of 12 children. His parents were steady and industrious.

The next is an impulsive murderer, a quiet man but with outbursts of bloodthirsty impulses. He is of alcoholic parentage; and when under the influence of alcohol became homicidal. At other times he is most docile. In his case the infant mortality was $\frac{6}{9}$, which is very high, showing something is primarily wrong with the stock.

Then I have a thief, who spent 35 years in prison. Both his parents, now deceased, were drunkards. Here was an infant mortality of $\frac{3}{8}$. Three deaths out of a family of 8.

A neurotic, who was sent to prison in the first instance for a crime of which we think he was innocent. Father, deceased, was a drunkard, mother a good woman. In this family of 7 children 3 died in infancy = $\frac{3}{7}$.

A pickpocket, not really a bad sort, but ran amuck with society. He spent 15 years in prison. Father, deceased, was a heavy drinker. Infant mortality—7 out of 13 = $\frac{7}{13}$. This was a country family, where the environment of the children should be favourable.

A burglar, who spent 30 years in prison. His father was a drunkard. Infant mortality—of 9 children 3 died = $\frac{3}{9}$.

A blackmailer of healthy stock, and no infant mortality. There were 7 strong children, all of whom lived.

As a factor in building up the criminal we may take mal-nutrition for granted ; and also to some extent mal-education.

Mal-nutrition.

It is difficult to see how the former is to be corrected, unless the wage bill can be very sensibly increased ; and the poor educated in cleanliness and thrift. Many of us would like to import some French, Swiss, and Dutch girls, and marry them to our working men. We have all seen cases of such blending ; their homes are clean and the children so happy, when contrasted with the adjacent homes in the same street.

I have already devoted remarks to the subject of Education in a previous chapter and also in my former work. I have been surprised at the corroboration it has received, from Council school teachers and educational authorities. After 40 years of pressure on the parents and crushing any little intelligence out of the poor children, we are waking up to the fact that these methods have crowded our streets with degenerates. The authorities are at last doing something for the weaklings stuffed with and stupefied by adenoids ; handicapped by pierced ear membranes, squints and ophthalmia. The Board do not however realise that for many of these children, the age of 5 (formerly 3) is much too young for formal education. In Holland they wait till 6 and even 7, and as a consequence the children are more set. They do not at once need to take to spectacles, as so many of our children do, or evince other signs of race degeneracy. Our stock is weakened by putting on it more than it can bear, and it must give way at some point, frequently at the eyes. Weaken the stock and we feed the criminal ranks. Conserve and strengthen it, and however slowly, we are protecting and creating possibilities of righteousness and happiness.

Mal-education.

Nature and Nurture then compose the Prologue ; when the curtain rises on the first act, Environment has its turn. The enormous share of environment in fashioning the future has been proverbial through all ages, and at no period in the world's history can this have been more evident than at present.

CHAPTER V

RESPONSIBILITY

SECTION A. FIRST PRINCIPLES : An undefined term—The original meaning and derivation of the term responsibility—In the physiological world—In intellectual spheres—In common life.—SECTION B. ILLUSTRATIONS : A case of ordinary theft—The responsibility of an uneducated serving maid—How responsibility affects ourselves—The responsibility in dealing with shares—The responsibility of the fraudulent solicitor—and intelligent food distributors—Different social levels respond differently—There is a fictitious responsibility among juvenile criminals—Municipal responsibility fails through the quality of the Councillors—Political responsibility.—SECTION C. THE LEGAL ASPECT : What responsibility means—"Legal" responsibility is unreasonable—The legal definition of responsibility—The normal man who falls presents a difficult problem—He becomes an invalid, therefore restore him—The degenerates or the "unfinished" are not responsible—Those who have been under asylum treatment cannot be regarded as responsible—How we hung a lunatic for murder—The British sport of capital punishment.—SECTION D. PEOPLE WHO ARE NOT RESPONSIBLE : Tainted humanity—Can the insane be responsible at times—The responsibility of epileptics—The responsibility of monomaniacs—The responsibility of alcoholics.—SECTION E. EMOTIONAL IRRESPONSIBILITY : Intellectual and emotional insanity—The thirst for blood is emotional—Emotional crime indicates mental instability—Emotional insanity demands careful study—We are all dual personalities—Moral offences on the emotional plane—The difficulty of correctly estimating responsibility in the depraved—The intellectual personality alone responsible.—SECTION F. ST. PAUL ON DUAL PERSONALITY : St. Paul's thesis on emotion versus intellect—St. Paul on responsibility—Résumé—Insanity does occur often without gross brain lesion, but there may be lesions not yet discovered—The physical centres of the emotions are at the base of the brain—The responsibility in marriage.

SECTION A.—FIRST PRINCIPLES

An undefined term.

THERE was once a raw Scotch youth studying at Oxford, who asked his professor the meaning of a Latin word. The professor, with slow dignity, adjusted his spectacles and, leaning back in his chair, wearily dilated on the obscurity of the passage. In fact, he added, this is the only instance of the occurrence of this word in such a connexion. With a fixity of gaze the Scotch student said—

"I asked you a plain question, and I want a plain answer ; and you are paid to give it."

If I want to know the meaning of the word "Responsibility," should I be allowed to address a Judge, say the Lord Chief Justice of England, in those terms? and could he give me a really satisfactory answer?

I have endeavoured without success to tempt some of my legal friends to undertake the task. Dr. Mercier, who is regarded as a leading authority, has written a book on *Criminal Responsibility*, but, so far as I can discover, he does not define the term in such a way, that when dealing with criminals you can draw the same clear distinction between responsibility and irresponsibility, as between guilt and innocence.

We may, I think, safely fall back on its simple or original meaning, as the power or ability to respond or answer, from the Latin verb *respon-do*, I answer. But this is only the beginning of our quest; we must further consider to what the response or reply is directed. Let us take by analogy conditions of physical response, and proceed therefrom to those of an intellectual character.

The original meaning and derivation of the term responsibility.

Thus, a tap below the knee calls forth a response from the extensor muscles, which we term a tendon reflex. We should normally respond in this manner, but if disease invade the sensory columns of the spinal cord, there is inability to respond. The normal responsibility of muscles and tendon is lost. Or the reflex movement of the leg may, on the other hand, be greatly exaggerated and beyond control, from disease of the lateral columns of the spinal cord. We have then two conditions of physical irresponsibility, paralysis or weakness, and exaggeration or loss of control. This example is not so inapt as it may appear, for we shall see later that when the higher mental control is weakened, regrettable acts are done on the physical, or lower animal plane.

In the physiological world.

Throughout the physiological world, both in man and animals, we observe certain responses to certain stimuli in conditions of health. Such tissues are in a responsive or responsible condition. Take the case of restoring consciousness in a faint by the stimulus of cold water, or by an electric shock; or the closure of the eyelids, with the reflex flow of tears when dust gets on the eye. These mechanisms are able to respond properly to their duties under varying conditions. But in certain nerve paralysis the conjunctiva cannot call

for or obtain a reply or response when dust gets on to the eye ; therefore it is not responsible, so ulceration ensues. The tissues are then degenerate or irresponsible.

In intel-
lectual
spheres,

If we now pass from the physical sphere to the intellectual, is there not a sense of humour in response to a joke, or of sympathy when there is pain or suffering ?

Likewise a man poorly instructed in history or literature cannot respond to an allusion in either of those subjects. Even in the matter of recognising a friend we have to be capable of memory or image-storing, with the power to recall that memory. If there be loss of memory, there is a corresponding inability to respond to the situation or stimulus of the friend's face or presence.

Æsthetically, the appeal of a picture, or a poem, or a landscape, or a musical effect, or scheme of decoration, cannot be answered by an undeveloped or non-developed faculty. Certain responses are necessarily and actually due to certain stimuli. The question of correct response determines the normality of the conditions or of the living force evoked.

In com-
mon life.

If we take an every-day illustration, such as a charge in a police court, the accused stands in the dock to make his response or reply. Is he responsible for what he has done ? Is he able to respond, or in other words to live up to the environment which formed the basis of this charge ? Is he able to fulfil the moral obligations of his station in life ? The answer appears simple, for if he were able to live up to his environment, or to what the community expects of him, he would not be charged in the police court.

SECTION B.—ILLUSTRATIONS

If a person of true or correct moral perception meet an old lady in a lonely place, or in any difficulty, his chivalry naturally guides him to render whatever assistance may be useful to her. On the other hand, the ruffian, who is devoid of moral sense, seizes the opportunity for robbery, assault, or murder. Though we abhor and detest the villain, he may be more deserving of our pity than our condemnation. This I admit is exceedingly difficult to realise in individual cases. The normal person is able to respond properly to the environment

described ; but for some reason, which it is the duty of Science to discover, this latter unfortunate ruffian does not possess the moral faculties necessary to carry him safely through the temptations and opportunities of those particular circumstances. In other words, he is not able to respond to the ordinary claims of such a situation.

Take another example of a more ordinary kind—that of theft. It is a common experience to pass an open shed with a store of petrol in cans. As I pass these day by day I never experience the slightest desire to steal a can. This is entirely due to the benevolent attitude in which I have been brought up. Mental suggestion and pictures have been cast into my brain since childhood, indicating first that it is wrong, and then why it is wrong, to steal. A theft would affect me very unpleasantly ; I realise that the loser might be affected very injuriously, and the community would be disgusted with me, which would disturb my self-respect. Therefore the action of theft cannot in the least appeal to me. I am able to respond to the situation of unguarded petrol cans, or anything else of greater value.

A case of
ordinary
theft.

But to give a particular instance, which happened some 6 years ago, one fine evening three youths, after watching and planning, brought up a barrow and loaded it with petrol cans at a secluded garage. It was a joyous and fearless occupation as they sang, whistled and smoked. Unfortunately the chauffeur arrived and they were caught. Even then they did not realise their position, as with handcuffs on, the junior lighted a cigarette and replied to one of the constables, that he "ain't goin' to push no bloomin' barrow to no police station." The levity, courage and indifference of the youth were admirable ; he would have made a splendid young officer, or an energetic colonist. Not one of these youths was responsible. Their social environment was on a very low level. In their own circle of slum life they would not steal, because in such communities there are only the bare necessities of life. Where the possession of a second coat seems to them mere superfluity, then the sight of a dozen cans of petrol spirit quite surpasses their ideas of moderation, and breaks down any barrier of self-restraint ; they cannot possibly realise the social disorder involved in loading their barrow with a

few of those cans. We may deplore such utter absence of honesty or moral sense, but these qualities are only relative in each of us. The honesty of the slum is very limited as compared with the honesty of the general public.

In Wales and Cornwall there is an unwritten law, "Thou shalt not steal more than 5s. worth." In these countries pilfering is no disgrace. The same generous principle might well be extended to the slummers until they are elevated, a duty which devolves upon the educated classes.

We see, then, that while I am able to respond to the situation of fifty unguarded cans of petrol, the starving slum boys are not equal to such a strain.

We might as reasonably expect a hungry dog or cat to pass a piece of meat lying on the ground. In these cases there is an ungovernable, but at the same time natural, impulse. We can appeal to the dog's intelligence, and by inflicting physical pain teach him not to touch any food that has not been given to him. In the same way we can, by fear, obtain a fictitious honesty from this class of poor uneducated folk. It is not, however, a matter of responsibility, for such minds are not adapted to the larger environment and therefore they cannot respond normally, freeheartedly and genuinely.

The responsibility of an uneducated serving maid.

Take again the case of a young servant from a poor home employed in a well-to-do family. The child cannot respond to her new environment, and dips her fingers in the jam when opportunity occurs. Her mistress might feel justified in punishing her, considering there is evidence that the girl has all her faculties, except perhaps moral sense. It is possible, however, to educate the child up to her new responsibilities. In perhaps about a year, when the child has become accustomed, or more correctly adapted, to her new surroundings, she will not pilfer—in fact, she will probably protect her mistress' property. When this happens she will have responded to her new environment or circumstances. In other words, she will be responsible; formerly she was not so.

How responsibility affects ourselves.

We often use the expression that we do not feel equal to our responsibilities, which means simply, we are not responsible. Or I may say that I shall not hold myself responsible for certain events which may happen. This means that I am unfamiliar with certain eventualities and therefore unequal

to meet them, or that other things may occur which may be beyond my knowledge or control. It means that when I am confronted with a certain set of circumstances, I know I cannot be certain of doing the right thing. Supposing a doctor has to perform a surgical operation of great complexity and risk, and considers that shock or other factor may thwart all his efforts. The risks are so great that he cannot undertake to respond. But he might suggest a surgeon accustomed to the particular case who could respond, or be responsible. Hundreds of such factors enter into the responsibilities of ordinary life.

Though I can resist stealing an oil can, if I held some stock which I knew must fall in value, I might, without shame or sorrow, sell it on the Stock Exchange, in order that some one else might be the loser. Except as a gamble and in company of gamblers, this latter act is quite as dishonest as the theft by the boys. But whereas the boys were irresponsible thieves, I should be a responsible thief, for my educated ideation could throw on the mental screen the whole picture of the loss and poverty which would overtake the purchaser, who might be the proverbial widow.

The responsibility in dealing with shares.

In the same way, the educated solicitor, conversant with all the ways of the world, and having been fully trained up to, or adapted to his surroundings, is a fully responsible individual. If, then, he commits some huge fraud, he does so under full responsibility, even though he be obsessed by the greed for wealth. Likewise the importer and distributor of food, who poisons the nation with his adulterations, is fully responsible and criminal. So also the body of directors who cheat their customers, or allow them to be cheated in quality of food or material.

The responsibility of the fraudulent solicitor,

and intelligent food distributors.

All these educated men are adapted to the higher social and communal life and its claims, and are able to respond to the situation. They, however, pervert their intelligence for wrongful gain, for the deception of others, and they are, therefore, not only criminals but responsible criminals, deserving the fullest punishment which can be meted out.

Different social levels respond differently.

We must recognise that there are many social grades, each with its own level or measure of responsibility, and each requiring a certain amount of education to be equal to the

responsibilities of that sphere. There is the slummer's grade, in which life is reduced to its most elementary principles. In this condition ethics, either social or moral, have no foothold nor are they required. Then we have the labouring class and the artisans, who have their own code of morality and honesty.

We are apt to blame the working classes because they will not keep to their agreements, if they turn out disadvantageously to themselves.¹ This is frequently observed in matters of dispute, which are mutually referred to arbitration. We must not be too severe on the working classes, nor exact too high a standard of honesty or honour. They are like children mentally, and they cannot respond to the spirit of arbitration. This is a strong argument against placing the control of the country—in fact, the voting power—in the hands of the mentally undeveloped masses.

This irresponsibility is a final answer to democratic leaders with reference to democratic principles. Though we have no wish to be ruled by the irresponsible masses we should be just and kind to them; above all, improve their present home life, and materially advance the wage bill, which is down almost to starvation level, especially in the case of women.

Above these we find other levels of the community: the tradesmen, the business and professional classes. Each class should have a finer sense of duty, probity and honour than the class below and should be able to take up more responsible positions. It is, therefore, wrong to impute the same guilt for theft to a slum dweller as to a tradesman. It is an injustice to imprison the burglar and to sentence lightly the college youth or educated business man who has committed fraud. The latter is responsible; the responsibility of the burglar has yet to be estimated. I don't justify either of these criminals, nor do I wish to condone the offences of the lower and less responsible class. My aim is to point out that the two classes should be treated differently; but I shall consider this more fully in the next chapter. The man of education, who is able to live up to his status, should not be lightly

¹ Several newspapers have recently called attention to the fact that in 12 or 14 cases of arbitration, the workmen have refused to obey, because the decisions were adverse to themselves.

dealt with on account of the disgrace to his position, while the low grade criminal is heavily punished for a smaller crime.

To show the fictitious responsibility that is created, I shall refer to the cases of many physically healthy boys who are put in prison for small crimes, mostly predatory. Many of these lads have reached the fifth, sixth or even ex-seventh standard at school. Naturally we should suppose that these boys had been educated up to a higher social position, with a corresponding increased sense of responsibility. But it is not so. When these children, who are discharged from school at 14, reach prison at 16 or 17, they are found to be only equal to standard two or three, which is really their proper place, with a correspondingly reduced level of responsibility. To illustrate the position more plainly, one very nice young convict, really a good boy, about 17 to 18 years of age, undergoing his seventh sentence for stealing, the last offence being burglary, expressed it thus: "They don't think nothing of us at school, they don't. They just make us learn and learn. They never teaches us anything useful, or common-sense like." I asked, do they teach either manners or morals, and the answer was "Not likely," which in the idiom of that social stratum is an emphatic negative. This is of course a strong indictment against the Board of Education.

There is a fictitious responsibility among juvenile criminals.

The present amount of education can barely be managed by the better fed and more intelligent of the poorer classes. I say it can barely be managed, because a few of those who leave school at 14 may retain the knowledge they have acquired and vastly improve upon it. The majority, however, leave school in a state of confusion, loaded with a series of bald statements of unarranged facts. The teachers do well. It is no fault of theirs. If there were not good teachers, the result would be terrible, and we should require many more asylums and prisons. The fault—the pitiful wickedness—is in the system.

As evidence of the propositions I have ventured to enunciate, varieties of fraud among guardians and municipal corporations is a matter of common knowledge. In these cases the dishonest persons have, as a rule, come from the lower ranks. There is no pedigree behind them. The parental stock is unstable. These regrettable incidents have been

Municipal responsibility fails through the quality of the Councilors.

known and watched for years and will continue so long as men, accustomed to think in shillings, manipulate very large sums of money. They might be described as irresponsible, for they are placed in an environment too lofty for their natural instincts and education. The history of the last thirty or forty years is the strongest testimony against the success of popular control, and the most forcible argument in favour of well-bred people alone being entrusted with public affairs.

Political
responsi-
bility.

Political confusion can only be explained in the physiological terms of responsibility. In former years, when national life was more strenuous and Britain's greatness and Empire were being built, it was essential to have politicians who were able to respond to the difficulties they were frequently confronted with. We had Canning with his splendid pedigree, Pitt, Fox, Palmerston, W. E. Gladstone, W. E. Forster, Mr. Fawcett, John Bright, Beaconsfield, Salisbury and many others. Not one of these were mushroom sports, but each and all were the evolution or development, of good, solid ancestry. They took many generations to make. Some came from sturdy yeomen, others from a well-bred aristocracy. There was much selection in mating to raise such fine personalities. But when we turn to democracy, especially when allied with socialism, we find ministers undertaking tasks to which they cannot respond. They are therefore irresponsible. They will do serious harm to the Empire and perhaps wreck it, because though they may individually be of irreproachable character yet they are unable to respond to such a position.

It may be that the masses will rule and that what is termed the "will of the people" shall prevail. But what is this "will of the people"? Is it a quantity based on physiological conditions or is it not? If it is not, then the Empire must bow, or even fall, before more virile nations. As a matter of truth the nation owes nearly all to the more stable middle classes; it owes little, yet something, to the aristocracy; and absolutely nothing to the masses. The masses are a dead weight. We cannot raise them till they comprehend the responsibilities of family life. Then we may select and elevate individuals among them who develop favourably; but don't put the masses or lower people on the same

platform as the more useful thinking classes, for it is against physiological law and must fail. Every large employer of labour will endorse these views ; if not, let that employer select five of his employ  s to sit in his office and partake in the management. Then he will understand the term democracy.

Some can rule and some can not. The masses can not, nor can they guide, nor even think correctly. If the code of education which I have suggested in Chapter I were followed, the masses or many of them would rise ; in other words, these poor people would become responsible. They would be able to respond to the interests of the nation as a whole. Then they would be entitled to vote ; till then—not.

SECTION C.—THE LEGAL ASPECT

I consider that these and similar every day examples illustrate the only true explanation of what responsibility means and demands. It seems to be the power to live up to a certain level or standard. If a person has not been born on that level, nor taught how to behave or respond on such a level, then he is not fully responsible if he does not comply with the demands of that level.

What responsibility means.

But the legal and popular demand for responsibility as affecting the person and property of individuals is quite different. It is an unreasonable demand—a demand without a physiological basis—and for this reason no lawyer can define the term, Responsibility, in simple language.

“ Legal ” responsibility is unreasonable.

The practice of the law courts in regard to responsibility is only in relation to what might be termed gross insanity, and therefore in the more subtle cases of mental disease there is considerable confusion. For this reason one doctor fails to see mental disease where another doctor perceives it ; and instead of meeting previously and threshing out the pros and cons, the doctors appear in the witness box as partisans, for or against the culprit. This method ought to cease. No jury, however intelligent, can correctly estimate a case where doctors differ. There ought to be a report, a majority report, handed in to the judge before the trial as to the culprit’s mental condition. Doctors seldom differ as to a broken leg, but in

The legal definition of responsibility.

all sincerity they differ materially as to a strained muscle or injured spine. The obscure cases of insanity which are so common, resemble the injured spine in the opportunities they afford for diverse opinion.

In a case of murder tried in 1902, before the Lord Justice General of Scotland, the Judge laid down the following rules and principles for the guidance of the jury:—

“What was the effect of the mental alienation which existed or appeared to exist? It was necessary to remember that the mere fact of mental delusion, or alienation, would not necessarily exempt from criminal responsibility.”

This, by the way, is legal opinion; we must not admit that human tradition is final, for it may be established before long that mental alienation, however slight, indicates an instability which entirely invalidates responsibility.

“In order to exempt from liability to punishment, insanity must amount to such an aberration of reason that the accused did not know the nature or quality of the act, or if he did was not aware that it was wrong. Further, mental unsoundness might not be of such a degree as to exempt from trial or punishment; but it might be of sufficient character, or degree, as to reduce the offence from a higher to a lower class” (as in this particular case, where wilful murder was reduced to culpable homicide). “If a prisoner knew that his act was contrary to the law, and that he was breaking the law, he was responsible.”

I fear with extended knowledge and observation, we shall discover many wilful lawbreakers, who are aware of their wrong-doing, but are overpowered by impulse or emotion. They are, in fact, incapable of resistance—unfinished brain machines, or degenerates, yet they are not insane.

In law one of the tests of insanity is the incapability of the prisoner to instruct his defending counsel. The jury must inquire whether the prisoner knew the nature and quality of the act at the time; and did he clearly recognise that he was doing wrong?

We may often do injustice to a prisoner in deciding these issues, until we admit the degenerate class—the psychopaths.

Many judges and lawyers, however, regard crime as the result of a disordered mind, and here is a case to illustrate:—

In a certain assize court a man was tried for killing another by shooting him in the throat. The murderer had, after a quarrel, travelled to another town, bought a revolver and on his return perpetrated the crime. The judge considered the facts clear and disallowed any medical evidence as to the culprit's insanity. Strange to relate, in addressing the jury, he altered his tactics and said the prisoner acted like a madman. The jury agreed and sent the prisoner to an asylum instead of the gallows. The time may come when such a man will be judged as a base, imperfectly mentated individual, or in simpler terms a degenerate, or psychopath, and relegated to a colony for life, or if the age be more enlightened to painless extinction.

There are many cases of profound difficulty, which can only be determined individually and specially on their own merits. A man who has had a happy and beautiful environment, loved by his family, his chief joy their happiness, may become entirely changed in his affections and character. It may be through alcohol, or through premature decay of his neurones leading him into bad company, and he may fall into the hard grip of the law. Such a man is considered responsible and must under our present legal methods be so treated; but he is not fully responsible. He no longer is able to respond correctly, or normally, to this beautiful and happy environment. He is disunited, disinherited, or uncoupled from that psychic quality which made life beautiful. He is suffering from some physical disablement, perhaps the result of some toxæmia, or from a nerve degeneration which is no fault of his own. His nerve-centres are out of working order. He does not see correctly, hear correctly, argue correctly nor respond correctly. Let us suppose he is tried for murder, indecency, or forgery, although according to my contention he is not fully responsible. He probably is sent to prison, perhaps is hanged; but he was only responsible before this change in his disposition occurred.

Of course the whole outcome of this argument is that this so-called normal man should be treated as a diseased man, a psychopath. To flog him, or put him in the silent cell, or inflict hard labour would be useless. This is where we want the physician. Restore his body. Bring back his

The normal man who falls presents a difficult problem.

He becomes an invalid, therefore restore him.

mind if that be yet possible. Let his true ego or personality realise how it has been displaced, the sorrow it has caused, and then we may get a cure or restoration, which is more wholesome and gratifying than revenge.

The degenerates or the "unfinished" are not responsible.

There is another class, who are guilty of violent and predatory crime. They are no aristocrats. They have no intellectual gifts by which they may be clearly adjudged responsible. I allude of course to the special subjects of this treatise, the degenerates or psychopaths. I have sufficiently indicated as a working and workable basis, that these degenerates have risen but a little above the childish condition of mentation. They reveal it at every step. If they were 5 years old, instead of 50, we should say they were naughty children. We should not be so anxious to punish them as to train them. But when they are 50, we don't call them any longer child-minded, but weak-minded. Punishment will do no good, while training comes too late and would be ineffectual. They have grown crooked and can never be made straight.

Are they responsible?

I emphatically say, No.

They are absolutely unable to respond properly, correctly, or normally to the environment of civilisation as it exists to-day. They might respond to a simpler, ruder and less complex civilisation, but not to the higher city life with its ceaseless stress and turmoil.

Listen to what the Blue Book of the Royal Commission on the Feeble-minded says ¹ :—

"There is, however, a further question to be decided: what should be the test of Responsibility? In the case of unsoundness of mind the test was formulated in the judge's reply in the MacNaghten case; 'that at the time of committing the act, the accused was labouring under such a defect of reason from disease of mind, as not to know the nature and quality of the act he was doing; or, if he did know this, that he did not know that he was doing wrong.'"

In this opinion, as has been pointed out, stress is laid on knowing the nature and quality of the act; this is made the critical and definitive test. But generally speaking,

¹ Part vi, p. 151, paragraph 465.

in the case of mentally defective persons, other than those of "unsound mind," it is a question whether "mental defect" should not be considered to mean defect in any of the faculties or qualities of mind, and not be limited to those of knowledge and judgment. Criminal jurisprudence and physiology would thus be in accord.

Dr. Mercier, who gave evidence on behalf of the Royal College of Physicians, has pointed out that in relation to insanity, the question of certification has been made to turn almost wholly on the assumption that it is "a disorder of the intellect"; so that a person is not regarded as insane by reason of any peculiarity of temper or disposition, although he may exhibit peculiarities that incapacitate him from earning his own living, and that render him a burden and a nuisance to his family and to those who come in contact with him. He says: "The conception of insanity, as solely an intellectual disorder, should be superseded by the understanding that it is inability, by reason of mental (not necessarily intellectual) defect and disorder, to manage oneself and one's affairs."

In this description Dr. Mercier evidently includes degenerates or psychopaths, a class who ought I consider to be separated, as representing unfinished cerebral architecture, or incomplete mentation, quite apart from insanity. I discussed this question in *Education, Personality and Crime*, before the Report of the Royal Commission was published, and came to very much the same general conclusions, but drew a sharp line between the two classes under consideration, the insane and the degenerate.

There is a third class of culprits, who, according to my argument, are irresponsible. These are the unfortunate people who at some time have spent part of their existence in asylums. They have been insane but have "recovered." Perhaps 10 years after his discharge a crime is committed by one of these. No symptom of insanity has been observed in the interval, nor even at the time of the act. In procedure we make an obvious mistake. The alienist is asked at the trial what was the condition of the culprit's mind when he committed the crime. The answer can only be guesswork or speculation; though the mere fact of previous insanity shows damage

Those who have been under asylum treatment cannot be regarded as responsible.

somewhere in the cortex, even if we cannot say where. These serious issues surely should not depend upon such dubious testimony or opinion.

The following case is of great interest, because it carries us back 100 years in judicial procedure. If the newspapers are correct the judge not only belittled the medical evidence as to the prisoner's sanity, but rather warned the jury against scientific men or facts.

How we
hung a
lunatic
for
murder.

"A stout, strong, rough-looking roadman," aged 61, some years ago, was convicted of murdering his wife in a very brutal manner. The man worked in a quarry and murdered his wife by beating her to death with a hammer and stick. He then placed her body in a barrow and wheeled it down into the village, where he was arrested. It was generally considered that he was a very violent man and that a little alcohol turned him into a dangerous lunatic. The prosecuting counsel called the attention of the jury to two doctrines in law procedure, which are decidedly questionable from the aspect of physiology.

The first is that the law presumes every man to be sane until he is proved to be insane. This in the light of our present knowledge is quite hypothetical in dealing with a criminal. The second is that the burden of the proof of insanity rests with the defence. In the search after the facts, it is the duty of the State, though prosecutor, not only to favour and facilitate any such enquiry, but actually to endeavour to find out the truth for the sake of the truth.

Whilst admitting the brutality of the murder, let us realise the material of which this poor brute was made. His father was a drunkard and an immoral man. His mother was described as "peculiar." She was in fact actually insane, living a hermit's life since she was a widow, full of hallucinations and delusions, at times dangerous; she said she saw spirits and witches, and heard voices. His mother's grandmother was insane and had been confined in an asylum. His sister had been confined in an asylum. One of his brothers died in an asylum in 1895.

The culprit had several convictions against him for violent acts since 1878, and was sent to penal servitude for 5 years for a criminal assault on his daughter.

This case illustrates what I so repeatedly urge, namely, the treatment of all crime by scientific experts. A judge and jury can make a correct estimate of the facts, but everything else should be directed by those who understand these matters.

The judge is reported as telling the jury that their minds "ought not to be troubled by nice distinctions put before them of scientific terms"; (or as reported in another paper) "by scientific men." "They must judge the case reasonably, and use their judgment guided by such assistance as they could get from witnesses in the box. They must use their common sense. The question was whether when he committed the crime he knew he was doing wrong. That was the test. Lunatics were not to escape the consequences of their crimes merely because they were lunatics. Plenty of lunatics know well enough when they committed sin, and that knowledge was sufficient to make them responsible. A person might be a lunatic and still be responsible in the eyes of the law for what he did."

It has been frequently stated by alienists that an insane person is insane through and through; and it is true that you can never count upon what an insane person may do. Therefore this judge's opinion, even if correct in law, is absolutely at variance with all scientific knowledge. One would have thought the murderer's pedigree would have had some influence with a man of such high intelligence as a judge.

If a scientific committee, instead of a judge, had conducted this case the result would have been very different. There would in fact have been no murder, if doctors had control, because he would have been discovered as a psychopath in the year 1886 and isolated. At that time he was employed by a local tradesman, and had to leave on account of his dangerous character, being especially violent if he had a little drink. On one occasion when thrashing his wife, a neighbour interfered. He immediately ran into the house for a gun, but the neighbour, a woman, escaped, or might have been shot.

Another employer said he was a good workman when sober, but mad when drinking. He might keep sober for 3 or 4 months, for he drank in bouts. There were several instances

reported of where he had attacked fellow-labourers who had annoyed him. The murderer's wife was described as an intemperate, lazy, slovenly woman, who used to nag the accused, especially if he were in drink.

The police superintendent had to warn his constables against the accused, as being a powerful aggressive man, dangerous even when sober. This superintendent, who evidently was a sportsman, had two or three very dangerous encounters, but regarding him as weak-minded usually let him free without charging him. It is interesting to record that the murderer and his wife had 15 children.

The medical officer of an asylum examined the murderer in prison and found that he had delusions, and was very unstable mentally. He was quite indifferent and unconcerned about his crime, or the sentence of death. The doctor had no doubts on the subject and reported him as insane, but the Home Office declined to interfere.

I heard privately that the night before the execution, he spent a good deal of time talking to an imaginary individual in the wall of the cell. He seemed to fancy he was talking up a chimney to some one, a common delusion amongst the insane and frequently occurring in asylums. He was quite unconcerned at the pantomime of his exit out of this world, and was callous up to the end, although the morning he was hung he acknowledged the justice of the sentence.

It might readily be imagined by the lawyer that because the man confessed and acknowledged the justice of his punishment, that therefore the accused was sane. But this is not so, for many a certified lunatic would act in exactly the same way.

In other words such a prisoner may know what he is doing and he may know that it is wrong. But the knowledge that it is wrong is a sort of knowledge, comparable to that of the proverbial cat on the breakfast table. There is no remorse and there is no spiritual consciousness or intuition, which would lead to an effort of self-control. There is in fact no conscience. Thus we must regard these men by our present limited knowledge as insane and irresponsible. If we get the opportunity of pathological study of a large number of criminal brains, I think we shall find a similar state to what I

describe in the case of one markedly degenerate yet sane criminal.¹

If the law were affiliated to science these degenerates who may not be actually certifiable under the Lunacy Act, would all be cleared away out of public view.

There can be no question that we hung an irresponsible insane man. As he was such an inhuman brute, popular wrath tried to justify it. The mode is however degrading; and it is not business. On the other hand, if anything could be said against the diagnosis of insanity, it must be admitted that he was a degenerate, a psychopath, or an "unfinished."

Few people would have any objection to removing this man and many others of the same kind, who are not yet murderers, if the means were less barbarous. If we introduced the lethal chamber, or if the culprit were given an anæsthetic or morphia, so as not to have such a hideous demonstration, then much of the objection to the death penalty would be removed. Few of us would object to its free use among violent and degraded people.

M. Brouardel, the principal authority on capital punishment, author of *Pendaison et Strangulation* (Paris), says, on page 45, "que l'on connait la brutalité que préside aux exécutions capitales en Angleterre." I fear from my inquiries among prison authorities and also from an ex-hangman, that British executions are very rough and ready.

The
British
sport of
capital
punish-
ment.

We may kill our victim on the gallows in three ways:—

1. By choking; forcible jamming of the tongue at the back of the throat. This used to be the method till 30 years ago. It is very slow and gives plenty of time for meditation.
2. By garotting; that is, compressing one carotid artery. Unfortunately, the artery under the knot, on the upper side, escapes pressure. This is slow and clumsy.
3. By breaking the bones of the neck and tearing the spinal cord. In the St. Thomas' hospital reports for 1905, vol. xxxiv, several cases are reported where men injured in this way² lived several hours, sometimes for days. So this is not a perfect method.

¹ Chap. xi.

² These were not cases of hanging, but fracture of the spine by indirect violence, as by falls or heavy weights.

We can only hope that all three methods play some part, and combined with nervous shock bring the official murder to a rapid conclusion.

I have been reliably informed of the hanging of two innocent persons. One, Mary Leffley, of Lincolnshire, for poisoning her husband with arsenic—I think in the eighties. Her innocence was proved some years later by the deathbed confession of a man who had a spite against Mr. John Leffley. One day, when Mary was selling her farm produce at market, this man slipped into Mary's cottage, and put some arsenic in a rice pudding which was cooking in the oven for John's dinner. It was a great mental shock to Mary to be dragged or carried to the scaffold, and as she was dropped, or thrown, into the pit she still protested her innocence. It was considered that her guilt was never proved!

The other case was not so painful. A young man was hanged in the provinces for shooting a man—I think a policeman. On the scaffold the youth kissed the executioner, who has a kindly face and manner, and finally protested his innocence. About a year later a notorious murderer, before proceeding to the scaffold, volunteered a confession of this murder, and it was said to be confirmed by other information.

If we used the lethal chamber and watergas, there would not be the same repulsion to occasional miscarriages of justice.

SECTION D.—PEOPLE WHO ARE NOT RESPONSIBLE

Tainted
human-
ity.

While the insane are usually relieved from responsibility, and while I am pleading for the "unfinished," beyond all these classes arises the more vague, but more terrible, vision of the great masses of folk who come of tainted stock, and who under certain conditions of stress or provocation may reveal themselves as veritable degenerates. Such culprits may never have been insane themselves, but a parent, or grandparent, an uncle, aunt, cousin, brother or sister may have been so afflicted.

Can the
insane be
responsi-
ble at
times?

Can a man of tainted stock or heredity be responsible? I am aware that some alienists claim that a vast number of the insane are responsible. With this paradox I can agree. Many of the insane are responsible, but only as children are.

If a child pilfers, his responsibility may be stimulated by punishment, so that he would not repeat the offence. The same degree can be attained with a considerable proportion of the insane.

Some years ago I had charge of a branch county asylum, in which there was a very troublesome and violent woman who injured several of the old patients. Her passion was so extreme that it sometimes ended in collapse, sometimes in a fit. By my instructions, and strictly against Government regulations, after one of her attacks on an old woman, she was very thoroughly shaken by the nurses and threatened with severe punishment. Needless to relate that was her last act of violence. The whole performance was carried out by women who were kind and reliable, more as a display, for there was no rough usage employed. I considered the treatment justified as a form of paternal correction, but it was illegal.

Epilepsy is a complex and as yet unfathomed subject. We are all supposed to be potential epileptics, but certainly all actual epileptics are most unstable. Whatever form the epilepsy may take, the question of responsibility in these cases should not be pressed too far. Most curious are the lapses from consciousness, or as it is called "automatism," to which many epileptics are liable. These resemble dual personality; but the latter condition differs from epilepsy, for an epileptic has a varied existence without conjoined sequences; whereas in dual personality the normal periods A are continuous, and likewise each of the abnormal periods B. Thus if a person is normal, A, in June and again in December, confusion may occur, because A cannot account for the gap, and expects summer and flowers in December, being only able to think of the last moments before B arrived or intervened. The same confusion would result if B changed to A in the town and returned six weeks later at the seaside; for B would be unable to account for the new surroundings. I have treated this fully in my former book from actual facts.¹

The responsibility of epileptics.

It is seldom that anything regular or consistent occurs in epilepsy; as a rule there is a state of confusion, and the terrible and ghastly crimes, which epileptics may commit,

¹ *Loc. cit.*, *E.P.C.*, chap. xvii. The history of Mary Barnes, who had 10 subpersonalities.

are entirely the outcome of this confusion and of course irresponsibility.

The responsibility of monomaniacs.

There are many monomaniacs who are really irresponsible, such as kleptomaniacs, abnormal sensualists and others. It is generally adjudged that they are irresponsible if their position and needs place the crime in absurd relief. These monomaniacs do not seem to affect the intellectual capacity, for many of our finest politicians, musicians, literary folk, and others have been so affected. In fact men of great intellects seem specially unstable in one direction or another.

The responsibility of alcoholics.

Another frequently excused class of criminals, are respectable alcoholics. A may be of coarse heredity, while B is of gentle birth and upbringing. Suppose each gets a little drink, just enough to paralyse the prefrontal cortex of the brain and its higher associations, the alcohol does away with will power, guidance, and self-control. They may both act criminally, but the tendency will be for A to be rough and coarse, while a degree of refinement will accompany B's foolishness; but the results may be of quite different value from the legal aspect. The refined B, by very reason of his altered balance and novel circumstances, may easily go further than A and get into more serious trouble. How are we to balance up the merits of responsibility? Their brains are poisoned or drugged, yet when sober they may be normal and fully responsible. Such cases are most difficult to estimate. They stand in quite a different category from the feeble-minded degenerate who is a chronic drinker, and who in one of his bouts commits a serious offence. As a matter of fact a large number of these degenerates, especially the drunken ones, are classified in prison as weak-minded (W.M.). The defect may not be discovered in a short sentence of three months; but it usually reveals itself in prison after 2 or 3 years.

One murderer, who was a heavy drinker and undoubtedly a degenerate, told me that after he had been in prison 2 years he became insane, and continued so for 6 or 7 years. This was partly confirmed by his official record. He deplored that he had not been hanged, as his suffering during that time was far worse. This poor man was I consider irresponsible, but he was treated as responsible and sane so far as the death sentence was concerned.

SECTION E.—EMOTIONAL IRRESPONSIBILITY

There are a great variety of phases, in which legal or criminal responsibility is doubtful, but all of them hover round the area of insanity. It would be more correct to use the term intellectual insanity, in which there are vivid delusions, hallucinations, mania, or something very tangible to lay before the jury. In latter days, partly through the work of German specialists, such as Kraft Ebing, we are realising that there is another kind of insanity on the emotional, or so called "affective," plane. The law only recognises the intellectual insanity, because it is visible to our eyes and ears; metaphorically we can "handle it." But the diseased emotion is entitled to a much fuller consideration than at present, and its effects are just as apparent and dangerous to society. Abnormal or deficient intellect, being more commonly the offspring of poverty and disease, is more apparent among the masses; whereas diseased emotion, which is often associated with brilliant intellect, belongs chiefly to the classes. Those suffering from well-recognised mental disease are placed in asylums instead of prisons, so those suffering from diseased emotions should be equally safeguarded. This will not be done until the subject is more scientifically understood. Emotional crimes seem to come as nerve storms amongst very brainy people, such as poets, artists, writers, leading politicians and even among judicial and church dignitaries. It seems as if these brainy folk were top-heavy, like inverted pyramids. We are nationally becoming more unstable and more neurotic, with the result that emotional crime is rapidly on the increase among the classes. It is to be observed, however, that the Jews, though a very neurotic race from the strain of centuries of persecution, are more able to control and resist the lower emotions. I attribute this partly to their good ancestral stock, but also to the importance they attach to religious training and self-denial in youth.

Intellectual and emotional insanity.

We are all called upon at some time to defend crimes, the result of emotional insanity, in which traces of intellectual insanity may be found. Such crimes, usually sexual, make a very bad impression on the jury, and it is only by magnifying the importance of the intellectual insanity that the accused

has any chance of escape. Though such an offender may avoid detention in prison, there ought to be a form of legal supervision or even detention, other than a common gaol, in the interests and for the safety of the public.

The poor have not in these conditions the same advantages as the wealthy, where abundant medical testimony is sought to prove insanity or weak-mindedness. For want of clear knowledge concerning emotional crime, the poor are severely punished, while the rich often escape.

The legal mind lives too much on traditions and precedents.¹ It is unreasonable to ignore the mysterious workings of a perverted brain, and deal with all crimes as if they were the psychic phenomena of normal persons. The difficulty lies in convincing a lawyer, or even a layman, that if a man or woman commit an offence and exhibit ordinary intelligence, there may yet be a deficiency or defect in the brain with irresponsibility as a consequence.

The thirst
for blood
is emo-
tional.

One of the hidden causes of crime is a thirst for blood, a sort of atavistic instinct, which lies on the emotional side. This is often the basis of murders perpetrated by children or young people—the pleasure of seeing blood flow. The criminal instincts of children are often fostered by going to slaughter-houses to see the blood flow. Ladies frequent trials which must be very distressing and are often very disgusting, merely on account of their depraved and really bloodthirsty emotions. This is of course the English form of the gladiatorial show and the bull fight. But I allude to this subject more fully in Chapter XIII. We, of the medical profession, must urge that emotional crime be recognised and treated as a mental aberration. It may be and often is curable, but never by imprisonment.

Emo-
tional
crime
indicates
mental
instability.

Moreover it must be emphasised that the people guilty of emotional crime are ill-balanced somewhere; their intelligence may be perfect, often they are geniuses, yet in spite of the contradictory appearance of this statement they are not sane.

¹ On November 9, 1909, at the Guildhall, the Attorney-General, speaking in praise of law and lawyers, said: "We had built up the substance of our laws on the basis of precedent. Sometimes that was regarded as rather a technical foundation, but after all, precedent was only another name for experience."

I have known, and had under my care as a certified lunatic, a woman of ordinary intelligence, the only reason why she was certified being that as soon as she came in front of a man, she commenced to undress herself. For this reason she had to end her days in an asylum. There was nothing in it beyond her great admiration of the nude, a very common taste. This was unquestionably an emotional act; if done in a public highway, a crime, for making herself a nuisance in public. Old men occasionally suffer from the same disease. They are nearly always men of the highest repute and respectability and usually with good records. They are blasted as criminals when they ought to be treated as neuropaths. They are not even degenerates. In many cases we may discover that there is some senile decay, as their actions are so purposeless and so out of accordance with their previous histories.

This is not the place for discussing such a topic, perhaps the less the subject is followed by the laity the better. Suggestion and auto-suggestion, from studying this sort of literature, is often like a spark to a hidden or previously unrecognised desire. However, the medical and legal professions should give more attention to these subjects, and examine them more freely among themselves. The psychologist, St. Paul, knew all about it, and wrote in unmistakable terms as to its etiology, clinical symptoms, and treatment. He it was who first described the phenomenon of dual personality; and I am not sure that he did not describe multiple personality.

Emo-
tional
insanity
demands
careful
study

There are indeed very, very few of us who are genuine through and through. It is not that we come upon the stage of life as impostors trying to deceive the onlookers. It is a matter which we cannot help and is entirely beyond our control. Nature has unfortunately made us double. We have—as it were beneath us—instinctive desires entirely on the animal plane. Those desires recognise no control and no responsibility. The individuals, who are the obedient slaves of these emotions, are for practical purposes suffering from what we ought to name emotional insanity, or psychopathy. Some of these are so low down in the scale that they are easily recognised, and spend their lives in and out of workhouse or prison, or if a danger to others are locked up in asylums. The intellectual part of their nature counts for very little,

We are all
dual per-
sonalities.

This dominating emotional personality is called by some depravity, by others lust or selfishness. If the emotions could be entirely uprooted the race would die out in one generation, but that is no argument for permitting its abnormal development. Unfortunately, the intellectual personality, which separates us from the beasts and ought to have supreme control of our whole being, frequently is compelled to play a second part.

This dual personality is on one side emotional, and on the other side intellectual; each striving for the mastery. Responsibility can only attach to the intellect, and in normal persons there should be a balance of power. It is this equilibrium which is so difficult to attain and so easily upset. The Biblical psychologist describes it fully, addressing the Romans who were hastening to their fall through the want of control of their sexual emotions. Their virility was decreasing, and we see the same has occurred in Spain and France, and is now attacking us. The Roman or Italian strain in us is of very doubtful advantage; while it makes for courage and beauty, it ends in luxury and laziness.

There is a hard fight between the two personalities. Where the emotional gains crime begins, and when it wins the intellectual balance is overthrown and no responsibility can then be attached. It is time for the physician to step in. If the intellect be of poor quality, the case may be hopeless, and the life is worth little to the community. But it may be that the life is a valuable one to the community and that the intellect is great and good. In such cases the balance may be restored by rest, suggestion, change of the line of thought and other methods of a clearly medical nature.¹ These are not opinions nor yet theories; they are facts. What we require is that the Law should recognise them. Society might then be repaired and a larger, better style of living could begin. Many of the unfit whose very existence is an open social sore might be permanently removed; others might be restored to normal and useful lives.

Moral
offences
on the
emotional
plane.

As I look out of my window, I see a van of a wealthy drapery firm and on the pavement the liveried driver conversing with

¹ See my remarks on multiple Personality and the Ego and Sub-egos, *Loc. cit.*, p. 170, chap. xviii.

a respectable young woman. I clearly see the trend of the conversation by the flushing and vaso-motor disturbance in her face. I see in each heave the conflict between the maternal instinct, a natural emotion, and the struggle of the intellectual personality for a fuller control. She may be, psychologically, a degenerate for want of sufficient nurture in infancy, but General Booth tells me even so her soul and happiness are quite as valuable as my own. The knave is also actuated by emotion. He is most decidedly on a low level intellectually or he would not be a van driver. His intellectual personality, what there is of it, yields readily to the emotional and is in fact governed by it and even aids it. Such an emotional act—seduction—under the present social conditions ought to be a crime, because it is cruel, selfish, one-sided in its purpose and always disturbs the social equilibrium. The curtain possibly may not fall till a charge of infanticide ends in a sentence of death, pronounced on a youthful, once innocent and harmless girl. Perhaps the curtain will only fall when the State is saved all trouble and expense by a splash in the river, with nothing to be seen and nothing to record.

Both of these young persons offend against the moral code of society, and their offences are entirely on the emotional plane, however much they are aided and abetted by the operations of subservient intellect. In healthy normal beings the emotional sense, however strong, would be controlled by the intellectual faculties and guided into legitimate channels, with happiness and contentment as the result. In other words the emotion when under control is the basis of family life.

The above offender is on a very low social level, in which responsibility is almost an unknown quantity. My pen almost refuses to work as I try to write that he is to be pitied. The impulse of the reader is to shoot the man for his cruelty and depravity, and such is my own natural feeling. But we must treat the situation as a scientific problem. You and I could not perpetrate or even meditate such cruelty, merely because of our favourable upbringing. We do not, by contrast, merit praise, because all this has been in the quality of a gift to each of us. But these two are degraded, and what might be termed "unfinished" in their mental fabrics, for

The difficulty of correctly estimating responsibility in the depraved.

reasons already explained. In addition, quite possibly, both of them were reared in an atmosphere of vice. How then can we blame either of them, even the monster who has probably already brought misery into many other innocent lives? He indeed is not able to respond to the simplest, and most reasonable, demands of the community. Is not such a degenerate entirely out of focus with his surroundings? He can neither think correctly nor act properly. Only by brute force and by fear of physical punishment can he be at all restrained from still more monstrous crime. Is not this a very strong argument in favour of sterilisation or even painless extinction? And does it not demonstrate of what little worth is human life in some cases?

It is a question of the dual personality, the intellectual and the emotional. The latter is ancestral and so old in Time, so necessary for the race, that Nature has strengthened and safeguarded it, even against the onslaught of the conventionalities of civilisation, and when let loose is like a machine of unlimited force. But such is not recognised by Law.

The intellectual personality alone responsible.

The intellectual personality contains the physical basis of responsibility, depending for its very existence on nutrition and education. Where these have been denied owing to the progress and customs of civilisation, and the intellectual personality is paralysed or non-existent, we get these irresponsible monsters, on whom we should naturally like to exercise the fullest vengeance.

SECTION F.—ST. PAUL ON DUAL PERSONALITY

St. Paul's thesis on emotion versus intellect.

St. Paul, describing the dual personality in ordinary beings, refers to the struggle with its many lapses, in the following terms :—

“That which I do, I allow not” (intellect condemning unrestrained emotion).

“For what I would, that do I not” (intellect struggling).

“But what I hate, that do I” (intellect weeping over a temporary defeat).¹

The psychologist writes a little further on : “Now then it is no more I that do it, but sin that dwelleth in me.”

¹ From a letter to the Romans, chap. vii, ver. 15.

"I" here refers to the intellectual personality, the "Ego." I have in a previous work alluded to it as the equilibrium of all the sub-egos or intellectual faculties; while the word "sin" alludes to the other, emotional or ancient personality, sometimes spoken of as "the old man" which holds the ground well, being the first in the field as already indicated.

It is quite evident that St. Paul grasped the whole situation as regards responsibility, and recommended pure simple religion and wisdom as the cure, by way of thus establishing the ego or higher personality, in full control.

St. Paul
on re-
sponsi-
bility.

But he says in the same letter¹: "For as many as have sinned without law, shall also perish without law." Unquestionably he refers here to the irresponsible. Those who are not able to respond to their environment, perish²—an argument, perhaps a command, in favour of painless extinction. But the educated and well born, who have had every opportunity of becoming responsible, shall apparently be judged.

For he continues: "And as many as have sinned in the law, shall be judged by the law."³

To sum up:—

Man is a dual personality in a condition of equilibrium. We may go further and say that the Ego or Personality is composed of many sub-personalities or sub-egos in equilibrium. The balance is easily upset, for in the broadest terms, one personality or group of sub-personalities is emotional while the other group is intellectual.

Résumé.

The intellectual personality alone is capable of recognising, or developing responsibility. If the emotional personality is in control, the higher personality being vanquished, the individual is absolutely irresponsible. He is like a ship without a rudder. This should be so recognised in Law that he should be handed over entirely to the physician. This is not asking a favour, but the barest justice.

If the intellectual personality be attacked by disease on the physical plane, insanity, intellectual deficiency, or weak-mindedness is the result, and the individual is again absolutely

¹ Chap. ii, ver. 12.

² Not a hell hereafter, for them at all events; an extinction.

³ When the word "and" occurs at the beginning of a clause or sentence in the New Testament, it means emphasis to that statement.

irresponsible and should be handed over entirely to the physician. This is partly recognised by Law and the treatment on the whole is fairly satisfactory, but requires considerable extension.

It is quite as absurd to-day for Judges and even juries to deal with psychological problems—crimes—as it was in earlier days for uncouth barbers to undertake surgical operations, such as bleeding.

Insanity
does oc-
cur often
without
gross
brain
lesion,

but there
may be
lesions
not yet
discov-
ered.

The phy-
sical cen-
tres of the
emotions
are at the
base of
the brain.

In speaking of emotional crime and insanity *versus* intellectual crime and insanity, it is important to appeal for aid to physiology. We know that all intellectual processes are connected with the grey cortex of the brain, especially the pyramidal layer. There may be insanity, without any gross brain lesion. It may take the form of a delusion, or melancholia leading to the murder of progeny, in order that such progeny may escape the stress of life; or there may be maniacal or homicidal impulses. We cannot at present offer any physical basis for many of these insanities, although some of them seem due to the action of toxins on normal nerve cells. It is, however, probable that there will later be found some arrested development, say in a visual, or an auditory area, or in an area of association, which may account for some of these symptoms. If there is disturbed or abnormal function of a permanent character, it is only reasonable to suspect some irregularity of structure. Until now it has escaped the observation of alienists and in consequence they adopt the most unscientific attitude of denying its existence.

The seat of the emotions has been placed by Sherrington in the large grey ganglia at the base of the brain, and has been fully treated in Chapters XI and XII.

These experiments are too limited in their effects or applications. They place pleasure at the negative end and what we call viciousness at the positive. Vice and ill-temper are active; pleasure and inward happiness and control are passive, according to these experiments. To a certain extent this is true. If we breathe good air, eat proper food and have a good digestion, sleep well, exercise judiciously and keep clean, then there is a feeling of *bien aise*, or inward comfort, which is really negative or passive. We are comfortable inside, and are not inclined to waste any superfluous energy.

On the contrary, when our environment is unsatisfactory and provocative, we are called upon to exhibit our emotional feelings by drawing heavily upon our energies, which disturbs the physiological equilibrium.

The psychopath who has a disturbed equilibrium, is all action and strife, planning and attacking. There is no mental peace. He is drawing on his motor cells, and every tissue of his body, in an abnormal way. The result is exhaustion, which is frequently doctored up, or recouped fictitiously by alcohol. The uncontrolled emotions become overpowering, and the more they are indulged, or fostered by alcohol, the less chance is there of the normal intellectual supervision and restraint coming into play again. Such a being, though he walks our streets, and even moves in society, is as much an unrestrained lunatic as the raving maniac or the homicide, only in a different direction. He is above all things unfitted for an ordinary social community. He is a danger from every aspect and irresponsible.

The cause of this emotional insanity or crime is too speculative for such a book as this ; whether it be an arrest in the chain of evolution prenatally or whether there be an unfortunate mixis of male and female germ cells, so that one part of the individual may develop on male lines, another part on female lines, producing an unnatural blend—a hidden and unrecognised condition of indeterminate sex. At all events it imposes a serious responsibility on those who are given in marriage, to work on hygienic principles with great conscientiousness. This lack of responsibility among parents, rich or poor, produces an alarming amount of irresponsible degenerates and accounts for most of the sorrow and crime in the world.

The responsibility in marriage.

CHAPTER VI

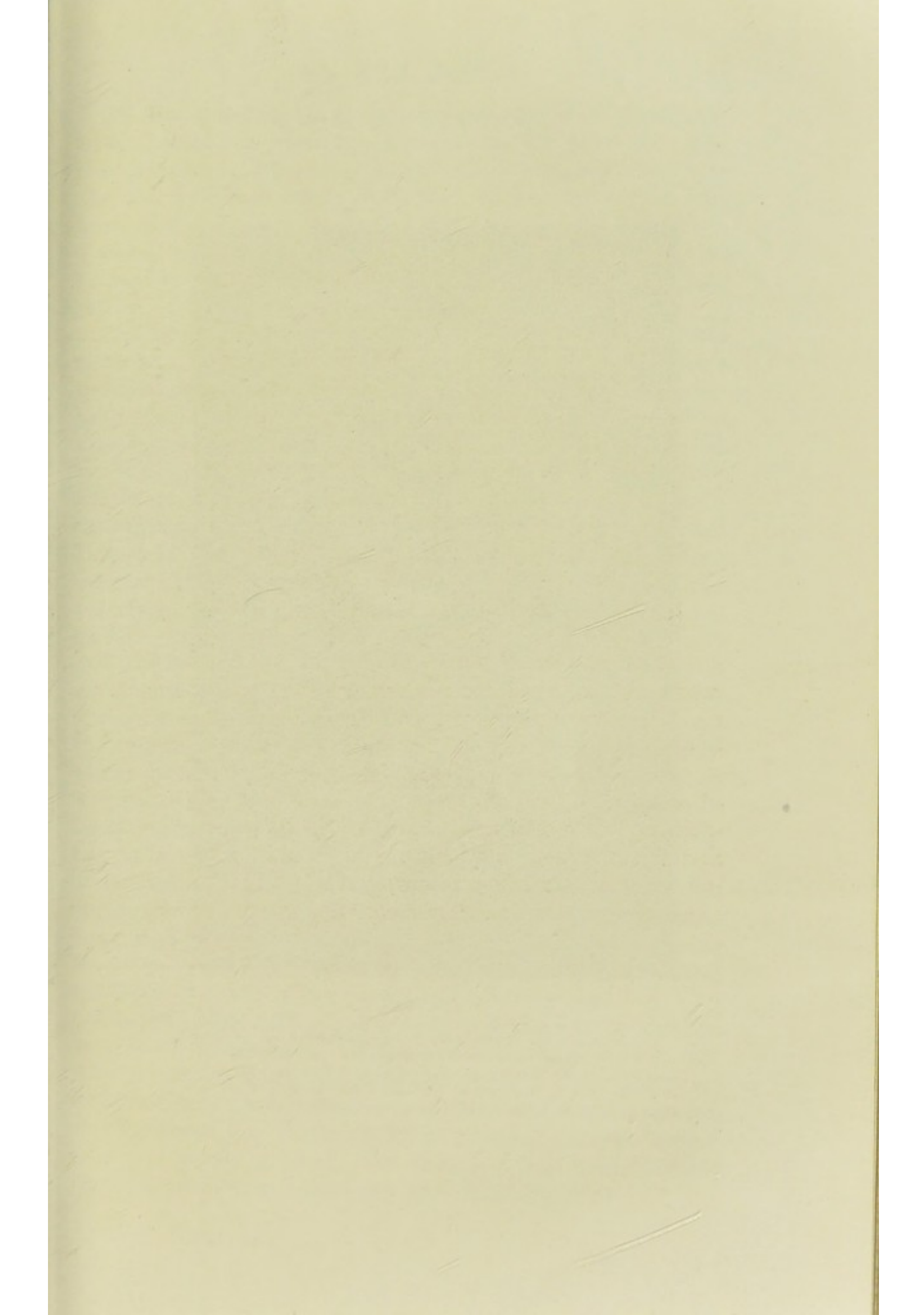
SIN AND CRIME

SECTION A. THE PRESENT CONFUSION : Crime *versus* sin—Motive—Sin should cover crime—The crime of adulteration of food—Are conscientious objectors or agitators criminals?—SECTION B. THE PRESENT INCONSISTENCY : The Suffragette question—Cases to illustrate—Sexual offences—Affiliation : a legal farce—The German law of affiliation—The American law—The lawyer as a man.—SECTION C. CRIME AS A DISEASE : Criminal procedure on the upgrade—Crime is abnormal—Treat criminals as invalids and sort them out—Improvement is the whole object of correct treatment—No intelligent object at present in treating crime.—SECTION D. CRIME AS A DRAMA : The criminal's trial : a drama—The prologue—The later acts—The sad ending—The criminal, a malformation—He carries an inherited invisible taint—Illustration taken from an ordinary breakdown in health.

SECTION A.—THE PRESENT CONFUSION

Crime
versus
sin.

THE modern ideas of crime and sin fall under different categories, and the legal mind is anxious not only to keep them apart, but to avoid any consideration even of gross sin. This attitude has had and still has, a profoundly evil effect upon the administration of the law, for no permanently beneficent effect can result from regulations that have no moral basis or sanction. Crime, in a technical sense, has no necessary connexion whatever with morality. Nebuchadnezzar and Darius created crimes, and Daniel and the "Three Children" became criminals—because they refused to become sinners. The innate sense of natural justice has always refused to feel the same reprobation for the merely artificial crimes of smuggling and poaching, as for crimes which involve sin. Nevertheless the relation of crime to sin must be faced. By separating the two and practically ignoring sin, we commence with entirely wrong premises. We require a third division, a new terminology—"technical offences." A technical offence might be a trifling sin against the community, but not so important as to be regarded as crime, nor treated as such. Sleeping out is an offence of that class. At present it is a crime.



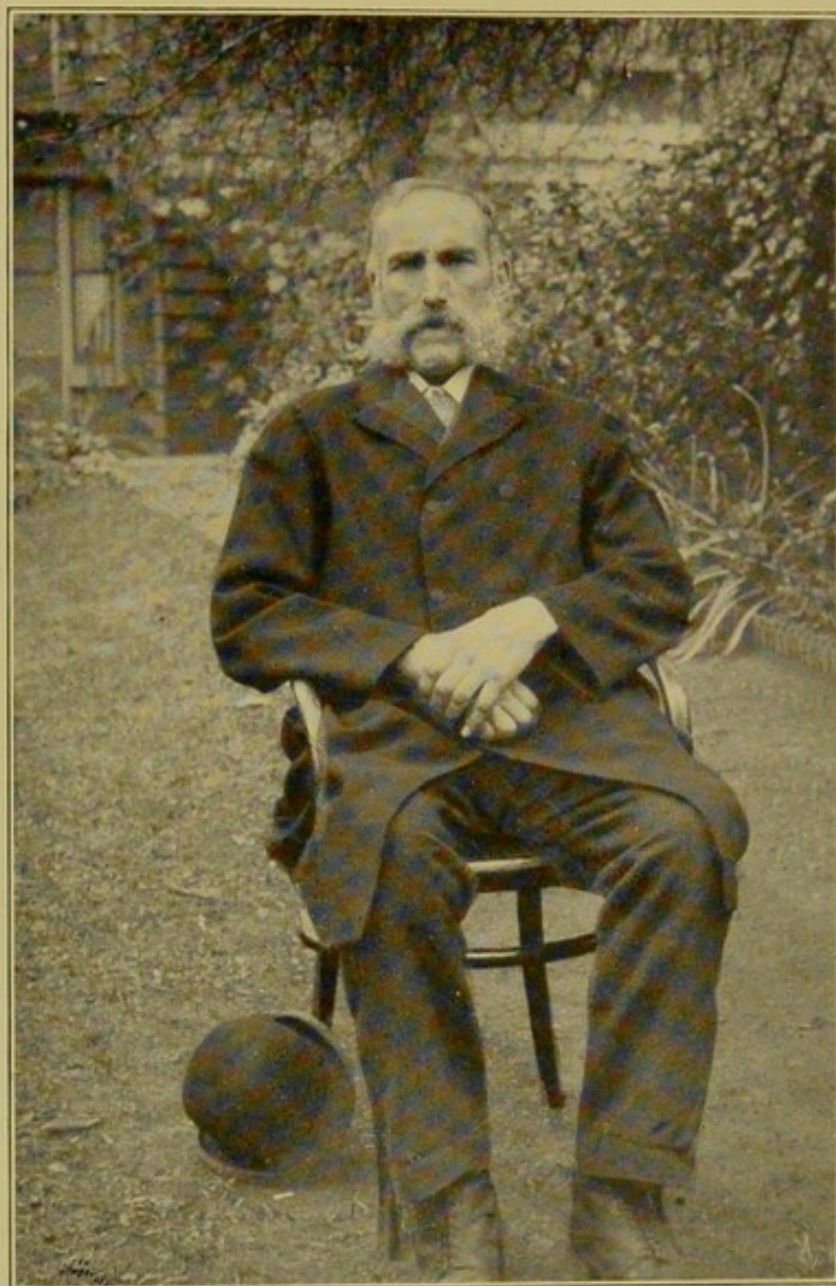


FIG. 4.

A good man, of fine healthy pedigree, who has suffered four unreasonably severe, almost brutal sentences—thirty-four years in prison. The total value of the property he was accused of “receiving” was under £10. We think he was perfectly innocent of two charges; in one case seven years on the accusation of stealing three pairs of braces.

The law deals with sin as a matter that should be left entirely to the parent, the priest, or, I might add, the physician. Sin is a matter of indifference to Law until it becomes crime and the poor victim is entangled in the complex web of the law. Once that calamity occurs the quality of mercy becomes a personal matter with the judge or Home Office, because as far as law is concerned, it does not recognise mercy but only justice.

The law has for many years been too severe, even on first offenders. Standing before me are two nice men; one a particularly nice man, who is an extremely intelligent gardener (Fig. 4). The other poor man, now about 50, was sent to prison when 9 years old, accused of stealing two fowls. Six weeks in prison for 5s. would be severe even to an adult; but in this case he says he never knew of the existence of the fowls. Considering that he had a good home and lived in a small town, it is difficult to understand what he would have done with the fowls if he had stolen them. At the age of 11 he was again sent to a prison for a minor offence, of which he was guilty. This time it was for 3 months; to-day he would have had to pay a small fine. There can be no doubt that, mixed up as he was with old convicts, much seed was sown in his mind which acted as suggestions in later life. When he was 16 he was sent to prison for 7 years for a common offence which is generally treated now with as many weeks. In fact, one convict, who had been 30 years in prison, got 1 month for the same offence. If he has waged war on society surely he has our forgiveness, if not our sympathy.

The former friend, who has spent more than a third of a century in prison, received when a youth 7 years' penal servitude, for buying three hives of honey which had been stolen. He affirms that he was in complete ignorance of this latter detail and there seems no reason to disbelieve him.

A reaction has led to much useful and merciful legislation, such as the Probation of Offenders Act. Though the Act is kindly meant, it has not been well thought out. It has no backbone, for it lacks the principle of restitution, and is devoid of educational provisions, which is essential for the moral tone of a young criminal. The present Act is a bait to the young sportsman to commence with his first crime.

The Court of Appeal will assist in checking the very harsh sentences that some judges are accustomed to inflict. I noticed recently a sentence of 6 years was reduced to 6 months.

Motive.

As a matter of principle we attach more importance to motive than to the accomplished acts. We should especially expect any intelligent law to embrace motive. This is nominally the case and we find it under the title "intent," which is an important factor in English criminal law. Nevertheless in practice we observe that the law frequently ignores motive. Thus from the legal aspect, if A attempts to kill B and fails, A is not scientifically treated as a potential murderer, but punished according to the amount of injury he has inflicted. Conversely, to this day we hang epileptics for murder, regardless of the fact that we cannot determine their responsibility with any degree of accuracy or certainty. There seems no intelligent guiding principle or rule, for Law appears to deal principally with the act and its result. The physician regards the act as evidence of physiological and sometimes pathological processes, such as fixed ideas, which he treats as cause and effect.

Here is a case to illustrate how motive may be imputed in order to advance from a serious to a more serious charge.

At a provincial Assize a blind pauper was charged with the murder of another pauper, aged 84, by striking him on the head with a boot. The blind man was committed for manslaughter but was subsequently indicted for murder. The jury found the prisoner guilty, but strongly recommended him to mercy on account of his blindness and of deceased's provocation. The poor blind man was condemned to death, whispering "Amen" to the last words of the sentence. The physiologist would say that a man deprived of the most distinctive faculty of the *genus Homo*—the faculty of sight—required considerable latitude in the matter of responsibility. The physician could assure us that those deprived of sight are peculiarly sensitive, nervous, timorous, imaginative, suspicious, and as a result irritable. It would not be proper to criticise the acts or words of a judge; all we as physicians can say is that we hope the claims of physiology will be attended to before this generation has passed away.

Sin is personal, while crime is communal. Sin should cover crime, as a large circle encloses a smaller one. However small a crime may be, it should necessarily be demonstrated as a sin against the well-being of the community. This ideal condition is not yet reached, for some of the grossest sins against the common weal¹ are not accounted crimes, whilst much that is treated as petty crime is not sinful. It might at first sight appear as if my contention could be set at nought by concrete instances.

Sin should
cover
crime.

We cannot, for instance—a glaring instance—excuse the lawyers, or relieve them of the slightest responsibility as regards the adulteration of food. The chemist and the physician are always at their service, only too eager to encourage legislation which is for the good of the people, especially the helpless children. Yet the Food Adulteration Acts, and especially the Milk Acts, are notoriously ineffective.

The adul-
teration
of food.

The man who adulterates milk is committing not only a sin against the community, but a crime; though as the law stands it is often difficult to punish him. It is a double sin. In the first place a person buys a special food—of great value in the case of children—and is defrauded, so that his children grow up rickety and delicate. Here there is not only the sin of theft, but also the terrible sin of treason to the race, and the punishment can hardly be too severe to be exemplary. The purchaser pays fourpence for a quart of milk, and receives at most threepennyworth of milk, the rest being water. Is not the sin of theft in this instance as complete as if the vendor stole the penny out of the purchaser's pocket? The same principle applies to every form of adulteration, and although it is the most accomplished type of skilled theft, yet it is treated only as a minor offence. It is a heinous sin against the community; rendered more so because of the difficulty of its detection.

I have in other places emphasised the importance of good milk for infants. Milk is the secretion of the gland and in that sense its watery part is a dilute serum. It is not water in the popular sense, except in so far that our bodies and brains are made up largely of water. To add water is to

¹ From the Saxon derivation, *Wela*, a prosperous state of a person or community.

change the chemical composition of the milk, and lower its nutritive value. The physical vitality of the children depends on milk, their growth, their energy, their happiness, their morality, and therefore I may almost add their future salvation. This has been known for generations to every one who has reared a family.

I think it is no exaggeration to attribute a tremendous amount of the present degeneracy, both physical and mental, to this particular form of infantile starvation, as well as to the use of artificial foods. It may be suggested that this subject has but little connexion with the title of the chapter ; but it is this physical deterioration which increases pauperism and crime, and therefore the basis of preventive treatment should commence here. How is it then that the State has not paid proper regard to this subject ?

A striking contrast is at once apparent in Holland, where the children are well supplied with good milk, butter and fresh vegetables. Food adulteration is a serious crime in Holland, punishable not only by heavy fines, but with long terms of imprisonment.¹ The Dutch children are round and plump like balls, as indeed every young child should be. In infancy supernutrition must obtain to supply material for growth.

Are conscientious objectors or agitators criminals ?

Injustice has been done to various sections of the community, by treating conscientious objectors as criminals. In olden days the Quakers often died in prison as if they were criminals, because they objected to the payment of tithes to support a religious system in which they had no interest. They did not even sin against the common weal in so acting ; on the contrary, they improved the social status by making for religious liberty. Thus we read in the seventh book of Sewell's *History of Friends* :—

“ For a little before this time there was published in print a short relation of the persecution throughout all England signed by 12 persons, showing that more than 4,200 of those called Quakers, both men and women, were in prison in England ; and denoting the number of them that were imprisoned in each county, either for frequenting meetings, or for denying to swear, etc. Some prisons were crowded full both of men and women, so that there was not sufficient room for them all to sit down at once. By such ill treatment many grew sick, and not a few died in such gaols ; even ancient people of 60, 70, and

¹ A month to 3 years, without fear or favour.

more years of age were not spared ; and the most of these being tradesmen, shopkeepers, and husbandmen, were thus reduced to poverty ; for their goods were also seized for not going to church (so-called) or for not paying tithes."

Let the reader observe that though all this appears very brutal, it was quite correct according to the law of that period.

The case of the early anti-vaccinationists involved a double aspect. They sinned against the community by exposing unvaccinated children during epidemics of smallpox, but they were right in protecting the health of their children, for it has since been proven that syphilis and other diseases can be transmitted by vaccination. This objection is now obviated by the use of calf lymph.

It may be suggested that in the variety of circumstances, it is impossible always to preserve this connexion between sin and crime. I maintain that an intelligent system could surmount every difficulty ; and the authorities, who deal with such cases, should hold in view the moral welfare of the culprit, and not over-estimate any disturbance to the comfort of the community.

SECTION B.—THE PRESENT INCONSISTENCY.

Consider the attitude of Law in permitting attacks, sometimes of great violence, on refined women who are unselfishly fighting for the quintessence of the British Constitution—namely, representation with taxation—otherwise expressed as no taxation without representation. They have nothing personal to gain ; on the contrary, they have lost much and will lose more. Yet they fight on, knowing they have purity, righteousness, godliness and justice on their side. Seldom has the British Government acted so unwisely and unsympathetically as on the present occasion. Prosecution has been reduced to persecution.

The Suffragette question.

Thus a suffragette and a burglar, each loaded with a sentence of 3 months in prison, ride through the streets side by side, and each is a criminal. Yet the former is laying down health, comforts and perhaps her life in an attempt to benefit the lives, well-being and happiness of the poorer classes of women and children, who have been so long neglected.

The burglar of course calls for no description to prove his criminality, either legal or moral.

Since writing this, certain events have occurred which confirm the last few remarks ; and I take the following extracts from *The Christian Commonwealth*, August 25, 1909, from an article entitled "My Prison Experiences," by Miss Daisy Dorothea Solomon, daughter of the late Mr. Saul Solomon, an eminent public man in Cape Colony, and a great admirer of W. E. Gladstone.

I am not taking any side in politics, but merely wish to present a correct view of law and crime, and how terms can be transposed without any definite principle.

"Next morning at 10 o'clock we had to appear at Bow Street Police Court, and there I received my sentence of one month's imprisonment in the second division of Holloway Prison for 'wilfully obstructing the police !' Confinement in a cell adjoining the Court followed, and there I was joined by Lady Constance Lytton and three others of our party. Fortunately for us, Miss Seymour, of our Union, kindly handed us in some lunch through the peep-hole, otherwise we would have had no food until the evening.

"At about 2.30 p.m. we entered the prison van, 'Black Maria,' where we were each locked into a little sort of cage. Of course, we could not see out, but I shall never forget the delight when all of a sudden I heard a tremendous cheer from our friends outside, and many a time it rang in my ears during my month of captivity. We were sorry afterwards to learn that part of our number were sent to Holloway in a 'Black Maria' which contained male criminal prisoners bound for Pentonville."

* * * * *

"The effect of the system is to harden the wardresses, few of whom exhibit any spark of human sympathy. We were exercising in the yard one day ; it was during the frosty weather, and the place was very slippery. One of our number, a tall woman and by no means young, slipped and fell. Two of us ran to her assistance, but were immediately dragged off by the wardress. The poor lady could not move, and got whiter and whiter ; however, in time she managed to stagger to her feet, and said she had injured her thigh. She was told she must walk in, and somehow succeeded in dragging herself to her cell. She was in hospital until her release, and was unable even to turn round in bed. But it was not until the day before her sentence expired that the Röntgen rays were applied, when it was found that one bone was broken. Our comrade is still disabled and under treatment, although the accident occurred nearly six months ago, and there is little chance that she will ever be able to walk again without support. It is to be hoped that such grievous neglect will not be repeated in Holloway. And, as for the wardresses, I am glad to say that some of them were of a more humane type, and we much appreciated this in a place where it was a joy to see a smile, and a privilege to be kindly spoken to."

The account of this injury sounds like extra-capsular frac-

ture of the neck of the femur, which may mean a cripple for life.¹ What will our Russian friends think of our "principles"? The blessings of a strong democracy are evidently accompanied by a lack of generosity towards opponents. Chivalry is a feature among the classes, whilst spite is a quality of the masses, so that here again we have to do with "breed."

Let us consider some of the circumstances and events which call forth the necessity for female suffrage.

Cases to
illus-
trate.

Look what the English Government has been doing for generations in regard to poor children.

Here is a quotation from the women's paper, *Votes for Women*, for January, 1910.

"PART VII.—THE MOTHERLESS CHILDREN.

"THE STATE AS FATHER."²

"But what of the children who are under State control? How does the Government avail itself of its free hand in dealing with the 234,792 children wholly or partially dependent on the State, according to the Local Government Board's own return in January, 1908?"

"It is not a pleasant thing to contemplate, even on the paper, the answer to that question. The State keeps 22,483 of these children in workhouses. Here is a description of a Government nursery:—

"It has often been found under the charge of a person actually certified as of unsound mind, the bottles sour, the babies wet, cold, and dirty. The Commission on the Care and Control of the Feeble-minded draws attention to an episode in connection with one feeble-minded woman who was set to wash a baby; she did so in boiling water, and it died.

"But, as Mrs. Barnett points out, facts such as these reveal nothing new. A dozen years ago Dr. Fuller, the medical inspector, reported to the Local Government Board that in 64 workhouses imbeciles or weak-minded women are entrusted with the care of infants. Dr.

¹ Since writing the above, the following appeared in *The Times* of May 25, 1910:—

"An action brought against the authorities of Holloway Prison by Mrs. Meredith McDonald has been settled by the payment of £500 and costs to Mrs. McDonald.

"In March last year, while exercising in Holloway Prison, Mrs. McDonald slipped on some ice, fell, and broke her leg. The accident was held to be primarily due to the dripping of water from a tap."

I may add that she is permanently crippled. I have no wish to be too critical concerning our prison methods, the whole system is wrong and requires scientific remodelling, but those who are interested might read with profit Miss Pankhurst's letter in *The Times*, June 18, 1910.

² By way of contrast see chap. xv, section C, p. 305, to know the humane manner in which the Belgians treat their poor illegitimate children.

Fuller wasted his breath. The abuse still flourishes. To-day, as the Royal Commission admits, the visitor to a workhouse nursery finds it too often a place of intolerable stench under quite insufficient supervision, in which it would be a miracle if the babies continued in health.

"We were shocked to discover that infants in the nursery of the great palatial establishments in London and other large towns seldom or never got into the open air.

"We found the nursery frequently on the third or fourth storey of a gigantic block, often without balconies, whence the only means of access even to the workhouse yard was a flight of stone steps, down which it was impossible to wheel a baby carriage of any kind. There was no staff of nurses adequate to carrying 50 or 60 infants out for an airing. In some of these workhouses it was frankly admitted that these babies never left their own quarters and the stench that we have described, and never got into the open air during the whole period of their residence in the workhouse nursery.

"In some workhouses 40 per cent. of the babies die within the year. In ten others 493 babies were born, and fourteen, or 3 per cent., perished before they had lived through four seasons. In ten other workhouses 333 infants saw the light, and through the gates 114 coffins were borne, or 33 per cent. of the whole."

**Sexual
Offences.**

Perhaps the most flagrant injustice in our legal system is the persistent and culpable neglect of the interests and welfare of the poor and helpless. Here we have the worst of sins, cruel and far reaching in its effects, altogether ignored by the law. Especially is this evident in the absence of protection for women and children. I refer of course to the law relating to the seduction of young girls.

This injustice is largely owing to the excessive maleness of our laws handed down to us from feudal times. It is not the maleness productive of chivalry or honour, but it is purely animal in its origin and tendency. Is it not barbarous to credit a girl of 16 with as much self-control and knowledge of the world as an experienced adult? There is fair play in everything, even in vice, but our legal system affords in this case a very onesided sport. The age limit for the protection of girls should be raised to 21, as in the case of boys. When a sexual offence of this kind is proved incontrovertibly, the minimum sentence should be extremely severe.

Many of us know from travellers and missionaries that even the Zulus have a higher code of morality than Christians have. A missionary, a relative of Mr. Saul Solomon, travelling in Natal verified this fact. He was invited by the great Zulu chief Tshake (pronounced Chaka) to witness the trial of a

seducer. The accused was fairly and carefully tried before his chiefs and found guilty. A band of warriors was then called up, who promptly assegaied the culprit. This done the chief asked among the young braves for a husband to marry and protect the young woman for life, and a marriage ceremony followed. The Zulus say that if they do not take care of the mothers the nation will die ; and it is the proper and physiological way to deal with such an important national problem.

The Zulus also teach thrift. No youth can marry unless he has saved enough to give his wife a dowry. If he treats his wife badly she returns to her father's house, and will not return unless he is penitent, and provides a second dowry. The dowry principle is to teach the young braves that a wife is a prize to be worked for. Unfortunately some missionaries have misunderstood the native idea and described it as a system of purchase.

At present our laws are intolerably bad and it looks as if the time has arrived, when if we cannot find sufficiently broad-minded and unbiassed men to improve them, the interests of women should be safeguarded by the opinions and authority of intelligent women.

But there are other cases in which women should be able to exert control, as in the following examples :—

A young lady, infected by her lover with a loathsome venereal disease, passed through a serious illness, verging on an operation for peritonitis, and emerged with all prospect of having children absolutely removed. Such a case, unfortunately not rare, presents many regrettable features, but the law declines to interfere except on a commercial basis ; that is to say, if the girl brought in wages to her parents, or perhaps only to her father, he could claim damages if he could prove loss.

But in another case a husband infected his wife, so that she had to undergo a severe operation which, with the accompanying peritonitis, placed her life in danger for some time. A miserable suffering wreck for 2 years, she sought separation or divorce, but found that, by tradition and "precedent," no such justice could be obtained.

Here is one case, which was tried, and on which precedent

rests. The prisoner, a married man, at a time when he knew, but his wife did not know, that he was suffering from gonorrhœa communicated the disease to his wife. Upon these facts it was held that the prisoner could not be convicted of unlawfully and maliciously inflicting grievous bodily harm upon his wife, nor of an assault occasioning actual bodily harm. Considering that the disease is not only very painful, but often fatal in the case of women, it is not easy to admit that the law shows either sympathy, justice, or even intelligence.

Affiliation
a legal
farce.

In yet another of my experiences, a servant girl of 18, an orphan, sought my help because she was pregnant by her master. I pointed out the hopelessness of her position unless her master would "play the game." This he would not do and as a consequence she sank, or more correctly was crushed, far down into the mire of poverty, distress and oblivion. I could not take up her case without some risk of libel or slander, knowing the law to be so ambiguous on this subject. The law demands, perhaps fairly in some cases, almost more evidence and proof than in a case of murder, which is a great obstacle in this class of "offence." But even if it be proved, the affiliation order is exceedingly difficult to carry out; in fact, it is almost unworkable, as I have frequently observed, so that a man may easily wear down his victim. The Law, of which we Britons are all so proud, looks on * * * * *

The Ger-
man law
of affilia-
tion.

In Germany, when illegitimacy occurs and the paternity is proven, the Government relieves the mother and collects the contribution from the father. This is indeed the correct method, for in all these cases the man has offended against the community.

Occasionally acts, connected with illegitimacy and seduction, are so revolting that the perpetrators have been attacked, and even assassinated by those they have wronged. Does the law in these cases adjust the grievances and put the label "criminal" on the right person? Are our laws regulated by might or by right? Do not our newspapers teem with cases where inequality and injustice seem to occur, and must repeat themselves, with but little hope of improvement, until the whole system of the law is remodelled on physiological lines. Justice should include two qualities, impartiality

and commonsense, if it is to carry out its true function, which is to adjust grievances.

The Americans have a keener sense of fair play and rectitude than we have, in many cases. A man addicted to vice, who does not "play the game," runs certain risks and his victim, if revengeful, suffers a diminished penalty in consequence; murder being reduced to manslaughter.

The American law.

It is time that we acted on these lines. Men of this class who shelter themselves under such British law, are frequently of the meanest and most contemptible type of the *genus Homo*. Ought they not to be labelled "criminal"?

Let us pause, lay aside the trammels of the law, and think as men. Let the lawyer change to father or brother, study proportion and the relationship of some of these cruel, cunning sex offences and their far-reaching effects when they might have been forgotten. I am thinking of seductions; of the family blight; of the ruin to the weaker vessel; agony prolonged and sorrowful; insanity and even death. When we look at these things as men, not as lawyers; as physicians, not as judges; it is then that we desire to see more justice and less law. The crowd murmurs assent, though perhaps sub-consciously, at the assassin's bullet or the dagger thrust from the injured one. Law, protecting the oppressor, condemns the retaliator, thinking perhaps wrongly, that condemnation will also accrue before the Great Judge, who knows mercy but not favour.

The lawyer as a man.

SECTION C.—CRIME AS A DISEASE

It is fortunately impossible to state completely what will be the exact state of English practice at the date of the publication of this book, because that practice is continually changing, and changing for the better. But as yet the changes have not effected any perceptible diminution of crime.

Criminal procedure on the up grade.

Indeed, although statistics may show in some chosen periods a diminishing prison population, crime is really on the increase. The "ill-to-do" population is growing too rapidly for cure or absorption by the older processes, and as a matter of expediency moral standards are being lowered all round; while the great

bulwark of religious or spiritual sanctions is apparently fast disappearing.

The treatment of crime and criminals, which is now so difficult because it is unscientific, would become comparatively simple, if an intelligent principle could be found to guide us.

Crime is
abnor-
mal.

We should in future learn to regard all crime as an abnormality; abnormal in purpose or intention, in deed or act and in result. The reason I say this is because criminals always have been and always will be a factor, and perhaps a natural result of communal life. Their existence or presence depends, to an extent as yet hardly at all realised, on what may be described as accidents of birth or early environment, so that the criminal is more or less inherently abnormal either in mind or motive. A ship that can never respond to its rudder is abnormally constructed; conversely, the steering gear is abnormal, which cannot bring the vessel into port under ordinary conditions.

We must investigate crime in the same way as we investigate disease; therefore first of all we should deal with symptoms. I have given reasons for considering crime as a disease in the individual; but undoubtedly it is a disease in the community. Now if it is to be treated as a disease, it must be investigated as a disease; and the first step in medical investigation is diagnosis: the symptoms must be identified and classified, before any scientific curative treatment is possible.

Treat
criminals
as inva-
lids and
sort them
out.

We know that in hospitals or asylums cases are sorted out according to their individual necessities. This sorting out can only be done by those skilled in the healing art who know the causes of the symptoms. One case is sent to the surgical ward; another to the medical; one case requires exercise; another rest; one requires strengthening, another cleansing. So also in the asylum treatment; one is dangerous and must be watched; another is harmless, perhaps senile and demands gentle measures; a third is full of fixed ideas and delusions which no argument can affect, or line of reasoning improve and has to be sheltered from others, as well as protected against himself. The treatment to be aimed at both in lunacy and crime is one that leads to improvement, or restoration—perhaps to cure.

This one object—improvement—is seen by all, felt by all and aimed at by all. In fact all efforts lead in that one direction.

Improvement is the whole object of correct treatment.

No intelligent object at present in treating crime.

In our English treatment of crime this idea of improvement, of possible cure, is conspicuously absent. In its place, as the leading principle to be traced through all legal procedure, is the root-idea of punishment and sub-consciously of sport. To give a hunted animal "law," means that the start of the pursuit is delayed, in order to afford some sort of chance to escape. But the amount of "law" must be nicely calculated, lest the chances of capture and consequently of an exciting "run" be unduly reduced. Under such auspices in a law-court the exceptional proficiency of an advocate, or of a criminal, may hang an innocent man or liberate a murderer. The public impartially applauds the skill of either, and whatever the result, when the hunt is over, who cares for the quarry?

SECTION D.—CRIME AS A DRAMA

The criminal has had a "fair trial" and we have done with him; but in truth the trial is only an incident, perhaps a minor incident, in a history of which the chapters before and after should be really far more interesting to the community. The essential prologue of the drama might be prenatal. If so it took place very likely in his mother's womb, or was quite possibly a literal visitation of the sins of the father. The subsequent action of the piece would have stirred the most apathetic, or even callous spectator, by its pitiful episodes of malnutrition, and sufferings from sickness and the sins of others. At all points he was helpless and buffeted, swept along the stream of circumstance. If then he committed a murder on Wednesday, his capacity for murder was equally existent on the Tuesday or Monday before the event. He was an artefact, representing the sins of society, waiting only to be fitted into the occasion or opportunity which has, wrongly, I consider, been accredited with making him. It was the delicate adjustment of events that brought him before us as a criminal.

The criminal's trial—a drama.

The prologue.

Though the curtain falls on the "Court scene," it will rise again on a later act, or acts, which cannot well lead to a "happy

The later acts.

ending." The State, after a certain period of useless cellular incarceration and periods of equally useless occupation or idleness, thrust him out not only uncured but unimproved ; not only unimproved but hotly worsened.

The sad ending.

Another season the same criminal appears again on the board, in a different role, and is again hunted down, accorded a "fair trial" and so on. In fact life is made intolerably miserable from a variety of causes, without any genuine effort being made to attack those causes. Such effort might be made and it is the purpose of this treatise to indicate in what manner.

The criminal a malformation.

He carries an inherited invisible taint.

It must never be lost sight of that, in dealing with this common type of criminal, he is a malformed unit. He is not of that class of criminals who are normal at the start. He does not have ambitions of wealth and position to tax his ingenuity how to acquire, regardless of honesty, or the feeling of others ; nor is he the criminal of intelligence. He has an inherited taint as definite as that of cancer, consumption, or the various neuroses.

Illustration taken from an ordinary breakdown in health.

A fair girl develops phthisis at 25. At 24 she was the picture of health ; but was she not consumptive then, though not so evident as when the fell disease revealed itself, after a chill, a year later ? It required a fine adjustment of events to show what was lurking inside her tissues and out of view. She was in one sense a consumptive in her mother's womb, the victim of inheritance perhaps from her father.¹ But to make the simile more comprehensible take another case. A person breaks down at the age of 30, 40 or even 60, with some nervous disorder, physical or mental. While the specialist is busy with treatment and regards the cause as to an extent a negligible quantity, yet puzzled as to the failure of his efforts, the family nurse holds the key of the problem. She knows that the patient "has just gone the same as his or her father, or mother, or perhaps aunt or uncle, and a cousin went the same way and so did a sister." Here we have the whole picture as to causation, and it is causation that lies

¹ I am aware that I am contraversing the latest theory, that tubercle is not inherited, but merely the tendency. To be quite accurate I explain on p. 176, that we should rather say the power of resistance to tubercle is disinherited, and in so far my simile is apt.

fundamentally at the root of treatment. It shows us if cure is out of the question. It tells us how improvement may be obtained, or it dictates what is the best way for general amelioration. We may be at the last act, or at the last but one, but we do not misunderstand the ending, because we have knowledge of the prologue. It is the purpose of this treatise to invoke the community to take its proper share in the construction of the prologue. If this indictment be true, and it is a serious statement to make, something must be radically wrong at the start.

CHAPTER VII

TREATMENT

PRESENT BRITISH METHODS AND RESULTS

SECTION A. THE THEORY OF JUSTICE : Astroëa, the goddess of justice—The weighing of the heart in the Great Balance.—SECTION B. THE ATTITUDE OF LAW : Saxon law—Norman law—What is law?—Codes—*Lex talionis* or outlawry—The hygiene of outlawry—Common law—Law *versus* justice—Justice *versus* equity—Evolution in law—The unfinished man not allowed for in law.—SECTION C. THE INEQUALITIES OF LAW : The manufactured criminal—The absurdity of piling up sentences and then reducing them—The absurdity of repeated imprisonments for chronics—It is empirical for the sentence to fit the crime—The vice of unduly heavy sentences—The uncertainty of sentences—Cases—A brutal sentence: ten years for twopence—The remarkable history of Williams II—The fallacies of the Vagrancy Acts—Is Law ridiculous?—The dog's collar—An indictment against Law.—SECTION D. THE GUILT OF THE NATION : The persecution of political prisoners.

SECTION A.—THE THEORY OF JUSTICE

IN a treatise of this character which approaches a sociological problem from the biological standpoint, we are always confronted in the matter of remedy, or treatment, by a repelling force. To take an apt simile, a man is drowning and there is only one rope that can save him. There are other shorter ropes, but the only useful rope is refused. That is where we are to-day. We watch the perishing and the only rope—Justice—which can save, is withheld. We may use Law, but it does not reach them.

Justice is the warp of every social problem. Law is the weft. Justice has a guiding principle. It is governed by laws which are physiological in their basis.

Law has no laws to rule it. It is therefore, by contrast with Justice, lawless. Law is a question of opinion, experience and force. Hence it becomes necessary to expound the theory of justice, as a guiding principle. This cannot be better done than by an historical sketch of justice. The ancients had

the idea, though they did not understand the physiological principle at the back of it.

In our Courts, Justice is emblematically represented as a blindfolded virgin, holding a pair of scales in one hand and a sword in the other. This might be construed as an emblem of civil law, in the scales of which documents are weighed. Such an idea has been suggested because in Greece and Rome criminals did not get much justice nor law, but were settled in rather a rough and ready style and sent to the galleys.

Astrœa,
the goddess of
justice.

In Grecian mythology, Justice is associated with the goddess Astrœa, who was the daughter of Astrœus, king of Arcadia; or according to others of Titan, Saturn's brother, by Aurora; or according to Ovid, of Jupiter and Themis. She descended from heaven in the golden age and inspired mankind with the principles of justice. The world grew so corrupt in the brass and iron ages that she fled and finally reached the Zodiac and entered the constellation of Virgo. She is represented as a virgin, stern but majestic, with eyes bound or screened; a sword in one hand and a pair of ordinary balances in the other. This was the Grecian idea of impartiality.

This is, however, not the only representation of Justice. We can go back, 1,500 years B.C., to the Papyri of the eighteenth dynasty.

In the Egyptian room of the British Museum there is the representation of the Hall of Judgment and the weighing of the heart of the dead.¹ The heart was considered to be the centre of life and emblematical of conscience, from which all thought and action proceeded. To complete the emblem the heart was completely stripped, as if to get at the naked truth. The Egyptians had arrived at a full appreciation of the conceptions of truth, law and rectitude. These were expressed by the word Maāt. Maāt was the daughter of Rā, the sun-god; and she assisted at the creation. Maāt was the goddess of absolute regularity and order, of moral rectitude, of right and truth. Her emblem was a feather, and so a feather is put in the scale as a counterweight to the heart.²

The
weighing
of the
heart in
the
Great
Balance.

¹ See the papyrus of Ani, British Museum, No. 10470; dating from eighteenth dynasty, about 1500 B.C.

² See the frontispiece.

A dog-headed ape—in fact a baboon—sits on the top of the standard of the Great Balance.

The god Anubis, with the head of a jackal, examines the pointer to make sure that the tongue of the balance is accurate. This is quite a different conception of justice to that of a virgin blindfold. The Egyptians used their intelligence in justice, and I fear we will be forced to do the same.

Beside the scales stands Thoth, who is the scribe to the gods. He holds his reed pen and palette with which to record the result of the trial. Thoth was self-produced; lord of the earth, air, sea and sky; the inventor of all arts and sciences; in fact, the creator of the world. He has the head of an ibis.

Beside Thoth is an ugly monster with the head of a crocodile, called Amām, the devourer of souls, or eater of the dead.

This vignette represents the weighing of the soul of Ani, the scribe. He is seen with his wife on the left of the Balances. When the soul was weighed, Thoth addressed the gods who were seated above the balances, and they ratified the sentence. Ani was then introduced by Horus to the presence of Osiris.

Osiris was judge of the dead. He was the god-man, who rose perfect in all his members. He was Eternity; the lord of everlastingness, having the power to transform souls and give eternal life. Such souls had the free right to wander through his realms for ever, to appear before Osiris at will and indeed were treated to cakes and ale.

The souls of the dead as well as the bodies were judged in the sky by the “weighing of the words—*utchā-metu*.”

The pictorial representations at different periods of Egyptian history vary in detail, but in all the balances are level and true.

Here is the speech of Ani, the scribe, to Osiris, the Eternal One, concerning himself and his future hope. Though a heathen, it contains a lesson for each of us.

“My heart my mother, my heart my mother, my heart my coming into being. May there be nothing to resist me at my judgment. May there be no opposition to me from the *Tchatcha*¹; may there be no parting of thee from me in the presence of him that keepeth the scales. Thou art *Ka*²

¹ Tchatcha are the chiefs of Osirus.

² My double.

within my body which knitteth together and strengtheneth my limbs. Mayest thou come forth to the place of happenings to which I am advancing. May the *Shenit*¹ not cause my name to stink and may no lies be spoken against me in the presence of the god. Good, good is it for thee to hear."

Thoth then addresses the gods who are in the presence of Osiris. He says: "Hear ye this judgment. The heart of Osiris hath in very truth been weighed, and his soul hath stood as a witness for him; it hath been found true by trial in the Great Balance. There hath not been found any wickedness in him; he hath not wasted the offerings in the temples; he hath not done harm by his deeds; and he hath uttered no evil reports while on earth."

The great company of gods reply to Thoth who dwelleth in Khemennu (Hermopolis): "That which cometh forth from thy mouth shall be declared true. Osiris, the scribe Ani victorious, is holy and righteous. He hath not sinned, neither hath he done evil against us. It shall not be allowed to the Devourer Amemet to prevail over him. Meat-offerings and entrance into the presence of the god Osiris shall be granted unto him, together with a homestead for ever in Sekhet-hetepu,² as unto the followers of Horus."

There appears some confusion in the address to Osiris, for it reads as if Ani and Osiris were the same persons. That is so; as soon as Ani's soul was weighed and proved, he became Osiris, just as those who are baptised become Christians, or part of Christ, or even Christ according to some believers. To many of us this latter idea seems very presumptuous, but I am told that many devout people regard themselves as Christs. This idea in regard to Osiris was entertained by the Egyptians some 5,000 years B.C. It is probable that there was some inspiration in the Egyptian religion, and that it was no heathen form of worship or belief. Some Egyptologists consider that God revealed himself to mankind at all

¹ The divine officials.

² Hetep was the god of the Elysian Fields of the Egyptians. They were surrounded by water and intersected by canals like the fertile Delta. The soul that learned the secret name of the god might live there, sailing on the canals, meeting his relations, and enjoying his life in every way. He was dressed in beautiful apparel and he lived in endless happiness.

ages. As a confirmation of this idea, they refer to the text in Acts,¹ which says, "Nevertheless he left not himself without witness." This is an answer to those who regard the Christian religion as primarily based upon the old, so-called heathenish ideas. It explains the similarity of thought running through the Eastern, Egyptian and Christian religions. It demonstrates that if there is Divine revelation to man, it must be in thinkable terms, adapted to the races and periods of any particular epoch. The Egyptians were inspired, in terminology and illustration, according to their particular customs and habits. So also with Buddha, the Jews and the Christians. If these views be correct, they will act as mainstays in the grand sum total of religion, and must increase the boundaries of toleration.

DESCRIPTION OF THE FRONTISPIECE

THE PAPYRUS OF ANI

On our extreme left Ani and his wife Thuthu enter the Hall of Double Maât, wherein the heart, symbolic of the conscience, is to be weighed in the balance against the feather emblematical of Right and Truth. In the upper register are the gods that sit in judgment, whose names are :—

Harmachis, the great god in his boat,
Temu,
Shu,
Tefnut, the lady of heaven,
Seb,
Nut, the lady of heaven,
Isis,
Nephthys,
Horus, the great god,
Hathor, the lady of Amenta,
Hu, and
Sa.

On the standard of the scales sits the dog-headed ape, the companion of Thoth, the scribe of the gods; the god Anubis, jackal-headed, tests the tongue of the balance.

On the left of the balance, facing Anubis are :—

1. Ani's "Luck."
2. The Meskhen, or Cupid with human head, thought by some to be connected with the place of birth.
3. The goddesses Meskhenet and Renenet, who presided over the birth, birthplace, and early education of children; and
4. The soul of Ani in the form of a human-headed bird standing on a pylon.

On the right of the balance, behind Anubis, stands Thoth, the scribe

¹ Ch. xiv, 16, 17.

of the gods, who holds in his hands his reed pen and palette with which to record the result of the trial.

Behind Thoth stands the monster called Amām, the "Devourer," or Ām-mit, the "Eater of the dead."¹

SECTION B.—THE ATTITUDE OF LAW

It is quite possible that my attitude towards the Law, as an institution, may be mistaken for an attack on a learned profession which, to say the least, is honoured and respected by us all. The lawyers themselves have in the last few years not only perceived the necessity of, but advocated very drastic changes in law. But are we to-day further advanced than in heathen times? We surely cannot be, if we continue to ignore the claims of Science.

In the Saxon days there were four methods in which the law dealt with the offender. In the first place he was an outlaw; secondly, there might be a demand for his blood even for trifling thefts; or thirdly, perhaps to maim him for life so that he could not be a danger any more. Finally, as a means of escape for the wealthy, there was the opportunity to atone by fines. Of fines there were three kinds—

Saxon
Law.

Bòt, the fine to the injured;

Wíte, the fine to the King; and

Wergeld, which was compensation to the relatives of the slain.

But the Saxons and heathen Teutons were a little in advance of 1910, for if the culprit, even a murderer, could not pay the fine they gave him 12 months' grace in which to pay, before they attacked him. In 1909 we imprisoned about 20,000 of the poor who could not pay their fines.

Christianity brought in the system of atonement or emendation, rather than the blood feud. As a result of this, however, there developed a fiscal—in fact, a commercial—side to crime. Certain crimes became punishable by fines, which were to be paid to the King, to the lords, or to prelates. Canute, or, as he was often called, Cnut, claimed certain rights and profits according to the crime, whether a murder, burglary, assault, highway robbery, and so on.

¹ See *The Book of the Dead*, by E. A. Wallis Budge, Litt.D. Kegan Paul, Trench & Trübner.

Norman
law.

We find in Domesday, or Dooms-day book, that different counties had different punishments in the Norman period. At Lewes bloodshed cost 7s. 4d. In Shropshire this was more expensive—40s. Homicide in Berkshire meant giving up the body to the King. In Oxfordshire the murderer paid the penalty with his life. Perhaps in another county it only meant a fine of 100s. This system led in the twelfth century to a complete revision, in which the number of crimes, which meant placing life and limb at the mercy of the King, was reduced. Most crimes could be atoned by fines, and the system of outlawry, to be described later, was turned specially towards bringing the offender to justice.

What is
Law ?

Communal or Social law should be built on Divine law and adapted to the individual by our knowledge of Natural law. It is, however, quite evident that the earliest source of social law was based on experience and custom, and this applies unfortunately in highly civilised communities to-day, whereas such principles are more fitted for primitive people. This was the basis of the Civil Law at ancient Rome and it is actually the basis of our Common Law. The Romans learned a good deal from the Greeks, and they in turn received their laws partly from Persia. Both Scotch and English have borrowed largely from the *Corpus Juris Civilis* which was a system of Codification compiled by Justinian I, so far back as 300 B.C. Justinian attempted to make a code of the whole law, both public and private.

Codes.

A Code is a collection of all the past Imperial edicts, rescripts and decrees. It is a systematic and authoritative statement of the laws of a country. It differs from a Digest, which is merely a collection of the decisions and rules of Common Law, and a very curious collection they must make. The Continental authorities are in favour of codes, whereby they can curtail ancient, erroneous ideas and traditions, and add some life and intelligence to the present laws. The Justinian Code and the Code Napoleon are the best known in history. Napoleon regarded his Code as a finer achievement than all his victories. At the time of the Revolution every locality had its own customs and laws, whereupon to avoid confusion, uncertainty and expense, Napoleon unified the laws by one code which was applicable to the whole country.

We have a criminal code in India which was formulated by Lord Macaulay in 1837 and adopted in 1860.

The main objection to a code is that it is supposed to retard progress and natural development. It would have, however, the advantage of breaking up the rusty legal machinery and if a Code was made, it might be revised every 10 years. Recently I saw a case tried in which common sense could have settled everything in a quarter of an hour. The Judge said the only thing to guide him was a previous judgment in 1857, and he did not agree with that. However he had to follow it, because it was a decision of a higher Court. To any scientifically trained mind this appears wrong. Should not lawyers, like as in our profession, think independently, guided by the latest knowledge?

The theory or principle of criminal law was *Lex talionis*; revenge for the past and intimidation for the future. The offender had to atone to the injured party, and to the community. The latter idea originated when a clansman was injured, the clan suffered by so much and claimed compensation. I put forward the same principle at the close of this chapter, in connexion with the huge birth-rate of illegitimate children. It is not right that the individual should have his fling and not pay for the consequences, but allow the community to pay.

As an example of *Lex talionis* there was the system of outlawry, which, though liable to be brutal, had a wholesome taste of vigour and virility about it.

Outlawry¹ was very hygienic. The outlaws forfeited the rights which their law-abiding neighbours could enjoy, and quite right too. It was very severe. It was in fact a death sentence, for any man had the right to knock the outlaw on the head. Bracton writes,² "Let him bear the wolf's head." Outlawry later on, in the thirteenth century, had the effect of making a man come forward for trial. It was every one's duty to capture the outlaw, as indeed in our day when a murderer remains at large. It was a capital crime to harbour this lawless and friendless man. He was deprived of every

Lex talionis, or outlawry.

¹ *History of English Law*, by Pollock and Maitland, vol. i. p. 476.

² *Tractatus de Legibus*, ed. 1569.

possession, every chattel ; every contract and every bond was dissolved.

But he might be *in-lawed* and then he came back to the community as a new-born babe—*quasi modo genitus*. He might acquire new rights, but he had no claim on the old. He began life afresh. He was a new person.

There was a very fine piece of social hygiene attached to this system, in that the felon's blood was considered corrupt, and a child born of him after the felony might not inherit from him or from anybody else. This was of course very hard on the child, but it puts us to-day face to face with a very pressing problem : What are we to do with the felon's children ?

Some years ago I had medical charge of an institution for the children of convicts. The histories were painful in the extreme, and whether by environment or whether by heredity, the children were hopeless. Hopeless is a very large word, but even those in charge regarded them in the same light.

The
hygiene of
out-
lawry.

I often wish we had this system of outlawry to-day. Most of us are tempted to do wrong, sometimes to do very cruel selfish acts, but a feeling of control or conscience arises—if not a desire to be law-abiding for fear of consequences. But there are some people who are devoid of conscience and so clever that they obtain their sinful ends without much risk of law and punishment. For these we want the hygienic system of outlawry, whereby even though Law looks on complacently, yet the public conscience being outraged will not pass it over.

As we stroll through the fashionable quarter we pass a fair curly-headed young man. He is well dressed but he is starving. It may be said that he should starve, for he has never followed any regular, honest occupation. He makes money anyhow, sometimes thieving or aiding betting men ; in fact, nothing goes amiss with him. Shall we therefore get rid of him, for he is a pest ?

But let us look at the other side of the picture. He is an illegitimate. The young man's story is one of sorrow and suffering, crowned by sin. His misfortune is due to the stress and poverty which his poor mother had to undergo. Infantile starvation deprived this man of his normal potential, so that

he arrived at boyhood too tired for school, too tired for a situation, even too tired for play. There he is. Offer him a situation and he gladly takes it, but he only retains it for a few weeks. He is too tired; his employer says he is too lazy; so he is out of work and on the streets again. The police give him a bad name and track him down.

He is lazy, not because he is wicked, but the circumstances of his early life deprived him of all potential. Is his wickedness his fault, or is it not a negative condition? Are such things to continue under the shadow of the law? His father is in that handsome façaded club. The boy is waiting, hoping to speak to him; for this youth is more fortunate than most of that group in knowing his father. His mother lives on the streets, so he has no home. But his mother was not always of that class. She was in her youthful days the educated companion of a lady of position. Now she is lying in a doorway looking like a bundle of rags. The rest of the history, dear Reader, you know quite well.

There is his father, descending the steps to his motor car. His servant is with him as a protection. He is a fine-looking man, a rich merchant, and prominent in politics. He is not religious, for he has nothing to gain in business or elsewhere by wearing that cloak. He is now in the car and off quickly, for he is very nervous. Once his son wrote him an injudicious letter, nearly involving a trial for blackmail. But the father failed to imprison him, which would have been an easy way out of the difficulty.

It is an interesting picture, but with too many shadows.

The father's social position is not even attacked; whereas he ought to be outlawed, and every decent man should be thirsting for his blood.

The law says an illegitimate child must put up with this. He has no claims, no redress. That is rather sporty of the law, and we like sport. Suppose the young man loses heart and in a fit of despair shoots his father? Is that sport—crime—business—or justice? Would not the healthy system of outlawry adjust things on scientific lines? It is not the youth who is the pest to Society; it is the father. Law is not just; in this case outlawry would be. We could always "inlaw" the fathers, if they satisfied the community as to

the treatment of their illegitimate children ; if, in common parlance, they " played the game."

Common
Law.

In former times in England, the Common Law was unwritten and merely handed down from generation to generation, and was slow to adapt itself to new conditions. There were in the courts a certain limited number of " forms of action " known to the judges, and unless a litigant could fit his case into one of these forms he had no remedy. Take as an example in civil law :—If A on the strength of certain statements by B transferred his lands or goods to B ; subsequently if he found B's statements untrue, he could not get his lands or goods back, because B was the legal owner and the only person recognised by law. It is doubtful if he could even get damages for misrepresentation. After an unsuccessful attempt in the reign of Edward I to render these forms of action more elastic, petitions to the King to exercise his prerogative in individual cases became so numerous that he turned them all over to his Chancellor, who was the " Keeper of the King's conscience " and who was only bounded by such conscience. This was the origin of Equity and the Court of Chancery. Thus there were two absolutely distinct and frequently antagonistic systems of law being exercised, often side by side. In the case just quoted, the Common Law Courts only recognised B ; but the Court of Equity said : as B obtained this land by fraud he must not be allowed to enjoy it, and therefore may hold it only on A's behalf, and account to A for all profits, etc. If B failed to account to A, then the Court of Chancery would lock him up for contempt of court, but the Court of Chancery had no power to take the land from B. This condition of legal affairs which was more characteristic of Central Africa than of a civilised country, gradually improved. But Law moves slowly, and it was only in 1873 when the Judicature Acts were passed that the old forms of action were finally abolished. It was enacted that law and equity should be equally administered in the High Courts. In the previous example if A got possession again of his land or goods, B could get an order from the Common Law Court to expel A, which necessitated an action by A in the Chancery Court to set the transfer aside on the ground of fraud. Now, however, A can set up fraud as his defence to B and claim his costs.

This may not appear to show much connexion with criminal law, which was theoretically influenced by "intention" or *animus furandi*, but it shows the whole style of thinking in legal matters. If we doctors thought and acted on these lines, if we were guided by traditional methods, we should soon thin the population. The same spirit, however, prevails in criminal law to-day. On the civil side there was no attention paid to motive. All that the law asked was, "Did you sell or convey the land?" The answer would be, "Yes, but——" and the law refused to entertain the "but." To-day criminal law asks, "Did you commit the crime?" and the defending Counsel, assuming the party to be guilty, if truthful, says, "Yes, but——" The judge may stop him as the word "but" is uttered, although as a matter of fact, the majority of the judges to-day are too humane not to consider any extenuating circumstances. It is now a personal matter, whereas if the scales of justice were true there would be an analysis, an examination of causation, which would make the sentence the subject of scientific accuracy. The elasticity of veracity will never appeal to the scientific mind, and it is this "but" which is the whole object of the present treatise.

Law is lopsided. It has a heavy list. Justice is the equilibrium of the community. There is no communal equilibrium if there is no peace; if there is poverty; if there is a constant stress between the rich and the poor, the weak and the strong. Justice professes to adjust these differences, not as best she can, but perfectly. If Justice does not and cannot adjust them, there is failure. There is in fact no justice, and we have to be satisfied with law. There has been for all ages a conflict of the strong against the weak, to enable the strong to continue dominant, whether for good or for evil. Strength lies in two elements, intellectual and physical, and the intellectually strong man rules the masses politically and in law. Theoretically the law should counteract this inequality and restore equilibrium. It is the purpose of the treatise to discover how far the law succeeds.

Law
versus
Justice.

What does Law say about justice? It says there are different kinds of justice. Is not the position illogical?

Justice
versus
equity.

What does Mr. Justice Stephens say in his stupendous work on Law.¹ He says that no one will define equity,

¹ Vol. viii.

and he himself does not offer to do so either. He says justice is the letter of the law; equity is the spirit or meaning of the law. I cannot find that he distinguishes between equity, justice, and law.

Evolution in law.

In a treatise such as this which deals with the importance of heredity, environment and early training, it would be absurd not to recognise the great difficulty of a lawyer perceiving any defect in the main principles of the extant law. He has been brought up on Blackstone and the stale, even if wholesome, remains of Roman practice; and all the inferences therefrom are accepted as infallible. To suggest therefore that much legal theory is based upon an erroneous view of life is shocking in the extreme; and yet that is what we in the medical profession as psychopathologists feel bound to proclaim.

It is frequently and quite truthfully hurled at the medical profession that its views are constantly changing. Though applied as a reproach it is in reality a compliment. We are on a voyage of discovery and eagerly absorb what is new. The pathology of degeneracy is comparatively new, but the legal profession will not depart from dusty tradition concerning it. What we give as truth and fact, upon which to build an intelligible and righteous law, they interpret as sympathy and sentiment.

In the early part of last century it was considered correct procedure to hang for petty theft; and the practice was recognised as sound and proper by intelligent and, for that period, right thinking men. To us the very idea savours of barbarism. Later it was considered just to hang the insane. Now such a thought is revolting to every lawyer, although as a fact we are still continuing a similar practice, so long as the degenerate or unfinished are executed.

If we can establish as a science the condition now termed degeneracy, the same argument will relieve that class of responsibility and remove the capital sentence.

What we plead for from our legislators is to construct more good laws; to re-construct them; and continually remodel them on the latest accurate scientific data.

If it were considered public policy to hang a lunatic in 1860, it is admittedly wrong in 1900 to do so; and if it be

thought right in 1910 to hang a miserable, brutal degenerate, let it be recognised before 1915, that it is unscientific to do so, although it may be shown that it is eminently desirable to extinguish him painlessly, and perhaps to do so before he actually commits the murder.

All three classes, the normal, the insane, and the degenerate, meet and interweave at their borders.¹ It is this fact that the lawyer will not, perhaps cannot, realise. Specially instructed advisers ought to partake in the administration of justice, much in the same way as experts, or assessors, do in complex questions of civil law. If a remedy were sought on these lines, many of the errors of criminal procedure would disappear.

The unfinished man not allowed for in law.

It is usually said that a man is either responsible or irresponsible; guilty or innocent, and there is no intermediate state. But surely a criminal may be guilty as far as present judicial procedure serves, but being a degenerate, irresponsible. We have a campaign before us as regards the degenerate, which will be just as tough a struggle as that in earlier years in connexion with the legal responsibility of the insane. We have more hope of victory because the lawyer of to-day is humane. The intelligent public are now doing our work—work which we have neglected in the past. What is our response? Shall we lead or follow?

SECTION C.—THE INEQUALITIES OF LAW

Passing now to the manufactured article, our present legal methods show disastrous failures.

The manufactured criminal.

There is first the vexatious plan of charging a criminal with two or three crimes at the same trial, passing a rigorous sentence for each and then commuting them, or as it is called technically, letting them "run concurrently." It is a primitive, commercial idea, that each crime creates its own separate debt to the community, the price of which is reckoned in life and labour. When the total debt appears to be beyond the reasonable capacity of the criminal to pay, the judge, acting as a liquidator in social bankruptcy, accepts for the State a

The absurdity of piling up sentences and then reducing them.

¹ See Fig. 2, p. 11, and Fig. 3, p. 14.

composition of "so much in the pound," which is actually in pounds of flesh. Thus I observe the case of a man who receives in all 31 years penal servitude, but it is reduced by this formula to 10 years. It happened in this way. The criminal, an old hand or "lag," was convicted of two burglaries, for each of which he received 7 years, but the 14 years were reduced to 7 by the two sentences "running concurrently." The man escaped from prison and committed another burglary, for which he received a third sentence of 7 years; after returning to prison, he savagely attacked a warder, for which he got another ten years; but, said the judge, all sentences shall run concurrently, so that the total time in prison will be ten years. If he behaves himself a quarter of the sentence will be remitted.

The absurdity of repeated imprisonment for chronics.

Our daily papers yield us abundant proof of the hopeless failures of the Law in the way of curative treatment of the manufactured criminal. He is a chronic. The Law is powerless to protect Society from him. It is time the problem was examined scientifically and radically. The newspapers furnish us daily with instances which obviously condemn this principle. Here are two cases.

An old chronic, a "lag," at 76 has had 43 years in sentences, and now receives 3 years more; and until he is 81 he will be in the hands of the police. His early sentences seem unduly severe. Perhaps he was a difficult case from the beginning. For such as these we require a colony. As he did not commence crime till he was over 30, it is more than probable that he could have been saved permanently from becoming a criminal by more reasonable methods.

In another case the man, an old man, has had 53 convictions. He got a very trivial sentence of 21 months. This also is a case for a colony.

Here is another example of this principle which came under my own observation. The Law ruined a simple-minded man's career from the outset. A very pleasant old "gentleman" of 76 has been nearly 40 years in prison. His people were well-to-do tradesmen, but had a reverse when he was 15. He had a struggle with poverty but kept straight, until he got into "swell" company, who led him into debt. He then began to steal and for the first offence, which represented

only £1 in value, he received one year. The second crime was stealing a watch, for which he got 7 years. Here the sentence fitted the crime without regard to any other circumstance. After this he spent nearly the whole of his life in prison ; ¹ yet the total value of his thefts did not reach £10. Altogether he has been badly used, for he has no cruel vice in him. He is not so weak in mind as weak in will. It is monstrous that British law should be capable of such irregular clumsy practices.

It is almost waste of time to read the lists of sentences some unfortunate brother has had to submit to, but there may be instruction in hearing how criminals express their experiences.

One man says that he was picked up by two " 'tecs " when quietly standing on the curb, not even contemplating a theft. Because he had already 17 convictions, and perhaps 20 years in sentences, he promptly received 3 years' penal servitude. This is of course a precautionary measure for the protection of property, but what a poor palliative !

Another pickpocket says he is so well known, that as soon as he walks through the City, the police " chevvy " him out. We thank the police, but can't we do something better for the man ?

A lad of 16, who had been " in business " sometime, received his first sentence of 4 months for stealing a purse. In less than a year he was " pinched " again, having in the interval thriven well on other persons' money. This time the sentence was 9 months. In another year, still pursuing his art, he was again " pinched," though he claimed to be innocent, and received another term in prison. And so it has gone on for 25 years. He says : " I had no real wickedness in me. It was bad company. If a friend had spoken to me as you are doing, when I came out of prison first, I would have gone straight." Why was there no friend at hand in Christian England ? What is the use of having a State in control, if it is so indifferent to its own children ? Poor man ! with a sigh he says, his is a dying industry, as ladies now have no pockets. " Snatchers " who grab at

¹ This is the ideal of the Lord High Executioner in Mr. Gilbert's *Mikado*, and should be more at home in the world of comic opera than in a Court of Justice.

purses are "no class," mostly loafers out of lodging-houses.

On the other hand, the captain of a gang of hooligans, only got 4 weeks' "hard" for knocking down an old gentleman and taking his watch. He was a merciless ruffian, as well as a criminal. He told me that his gang had stolen 23 watches, and in many cases had used great violence.

These cases demonstrate the principle of applying a certain sentence to a certain crime, quite irrespective of the character or type of the accused.

It is empirical for the sentence to fit the crime.

This principle of making the punishment fit the crime is the grossest empiricism which could be practised. It certainly never can have any curative effect. The element of revenge, the crudity of which is somewhat disguised by calling it punishment, enters more or less sub-consciously into all our present methods.

The vice of unduly heavy sentences.

If minor offences, which are not sins, are dealt with as crimes, the punishment often has very serious consequences. Imprisonment of young men often manufactures hardened criminals; whereas a reproof, or caning, in addition to the present system of probation for first offenders, may arouse control and self-respect in the wrong-doer.

Many criminals have told me that one good flogging for their first or second offence would have turned them out of the avenues of crime. Some have said flog a man when he goes in and in case he has forgotten it, flog him again just before he goes out. Convicts usually agree that it is the only way of putting down violence.

I have always held the opinion that pain, the appeal to their animal natures, is the most powerful deterrent to crimes of violence. Some judges, lawyers and pseudo-humanitarians disagree with this, because flogging is now practised with undue severity.

I find the more experienced prison surgeons are in favour of flogging, as a deterrent. They say criminals are particularly sensitive of their own skins. It should be administered in reasonable doses. A hundred years ago, 1,000 lashes was a common, and frequently a fatal, dose. Now we give two or three dozen. One dozen at a time is enough. Instead of this prompt and scientific method of dealing with crime

which would make crime an unpopular "industry," we ruin many a decent man by long periods of incarceration, which are very trying to the nerves. In fact, old chronics often say that the monotony completely "breaks" them. This monotony includes many things, such as the uniform temperature week in, week out; the long periods of silence; the uninteresting and unprofitable occupations; the dinginess and dimness of their cells, and other details.

A burglar, now over 50, who has spent much of his life in prison, told me that he was driven into crime by the severity of his first sentence. He was only 18 years of age, and was imprisoned a month for begging; in fact, for receiving only a penny. This was not a sin¹ for he was starving, but it was treated as crime. He was so upset at the disgrace, that he would not go home and afterwards joined an expert criminal, whom he had met in prison.

The *Daily Press* gives us every week most intricate legal problems, that are not of a kind to increase our confidence in the present system.

To take an actual case, a drunkard killed a man and the judge passed the nominal sentence of three days. The reason was partly on account of the alcoholic tendencies of both parties, but chiefly because the victim was old and delicate and it did not take much to kill him. What is the moral effect of this verdict? By contrast I present another case, also in 1909, on all fours with the last; a chronic drunkard rather brutally murdered another drunkard, who was a very old man. He was awarded 10 years' penal servitude, but on appeal his sentence was reduced to 3 years.

The uncertainty of sentences.

In another case, a stalwart young man brutally beat an old lady of 91. She died in consequence some three months later. He received a sentence of 5 years in prison for the assault; but after the lady died he was brought up on the charge of man-slaughter. The judge inflicted a sentence of four years, concurrent with his former sentence, so that the second sentence would expire before the first.

Truly the law is nothing if it is not grotesque.

¹ "Remove far from me vanity and lies; give me neither poverty nor riches; feed me with food convenient for me; lest I be poor, and steal."—Proverbs xxx. 8, 9.

A brutal
sentence.
Ten years
for two
pence.

Consider now a case of an opposite character. A starving man stole two penny loaves from two different shops. He received 5 years' penal servitude for the first penny loaf, and 5 years' for the second penny loaf, not to run concurrently, but to follow on each other!!! The prosecuting counsel tried to stop the case after the first sentence was given, but the judge compelled him to proceed with the second charge. The prosecuting barrister gave me these sickening details.

Recently my attention was called to a case where a man got 7 years' penal servitude on the charge of stealing three pairs of braces. It is believed the man was innocent and the evidence against him appeared on close inquiry to be very doubtful. He was an unfortunate man who had spent more than 25 years in prison for very trivial offences. It was a particularly hard case. The doctor of one of the prisons said to me that he was a nice old man, quite harmless and very severely dealt with. He said he was quite fond of the dear old convict.

The same judge gave another man 5 years for stealing 10 rabbit skins. When on another occasion he gave 5 years for stealing twopence, it excited indignation in Parliament; whereupon the judge, since deceased, posed as a most injured person. There is a great want of scientific method about the law. It has neither rule nor principle, nor even humanity to direct it. The scientific treatment of all petty crime is segregation, with wholesome living, in a colony, even if for very long periods.

The re-
markable
history of
Williams
II.

In my former book I gave a full account of Charlie Williams X.H. 511, whom I described as the King of Burglars with the brain of a Cabinet Minister. I then gave him an *alias*—"Joe Smith."

Here is another Williams—John Williams, or as I call him Williams II; his age is 61 (Fig. 5).

Williams I had only been in prison 33 years, but this dear man has had sentences amounting to 40 years. We have reason to think he was innocent of some of the charges.

His grandparents were opticians. The business descended to his father and might have come to him, but he was too sporty and ran away from home when in his teens. On his

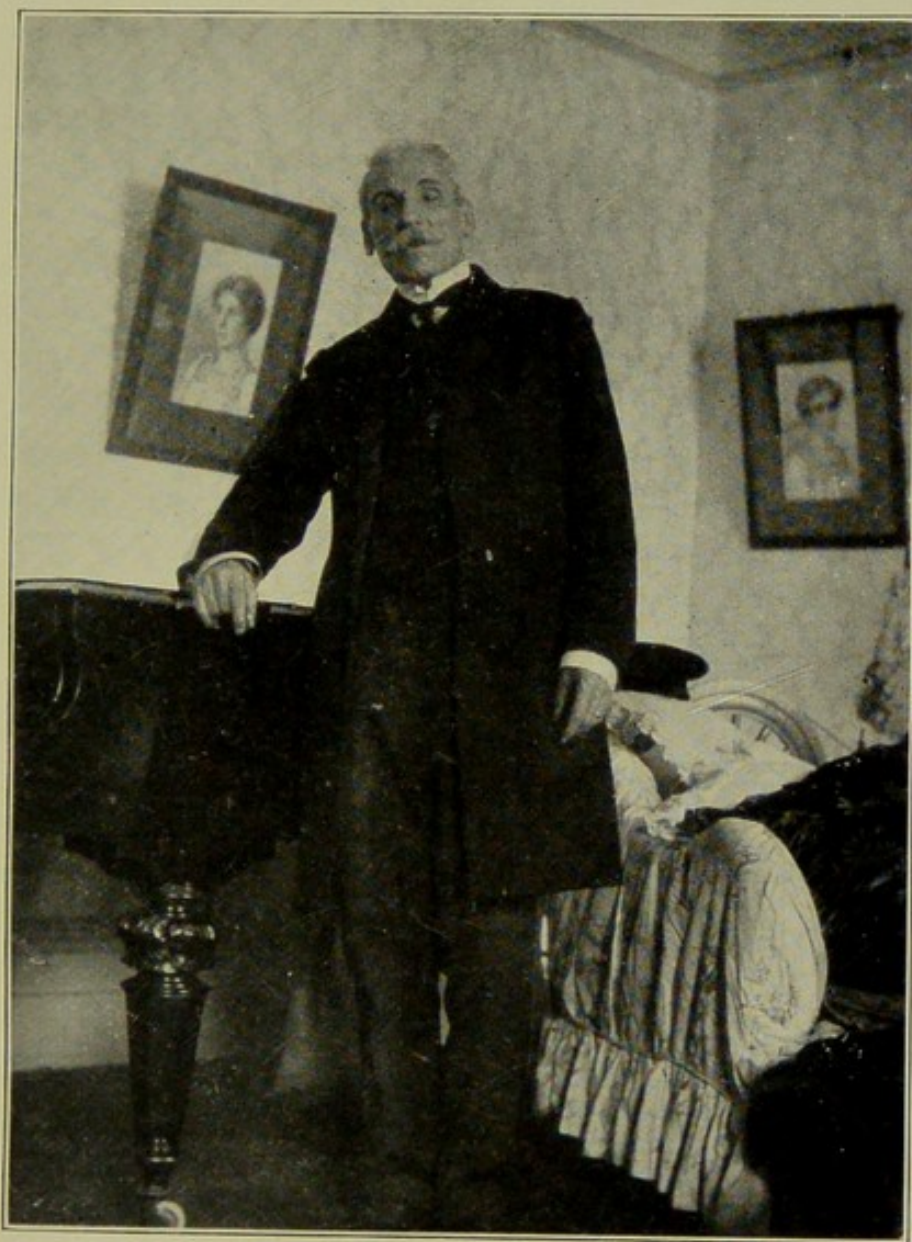
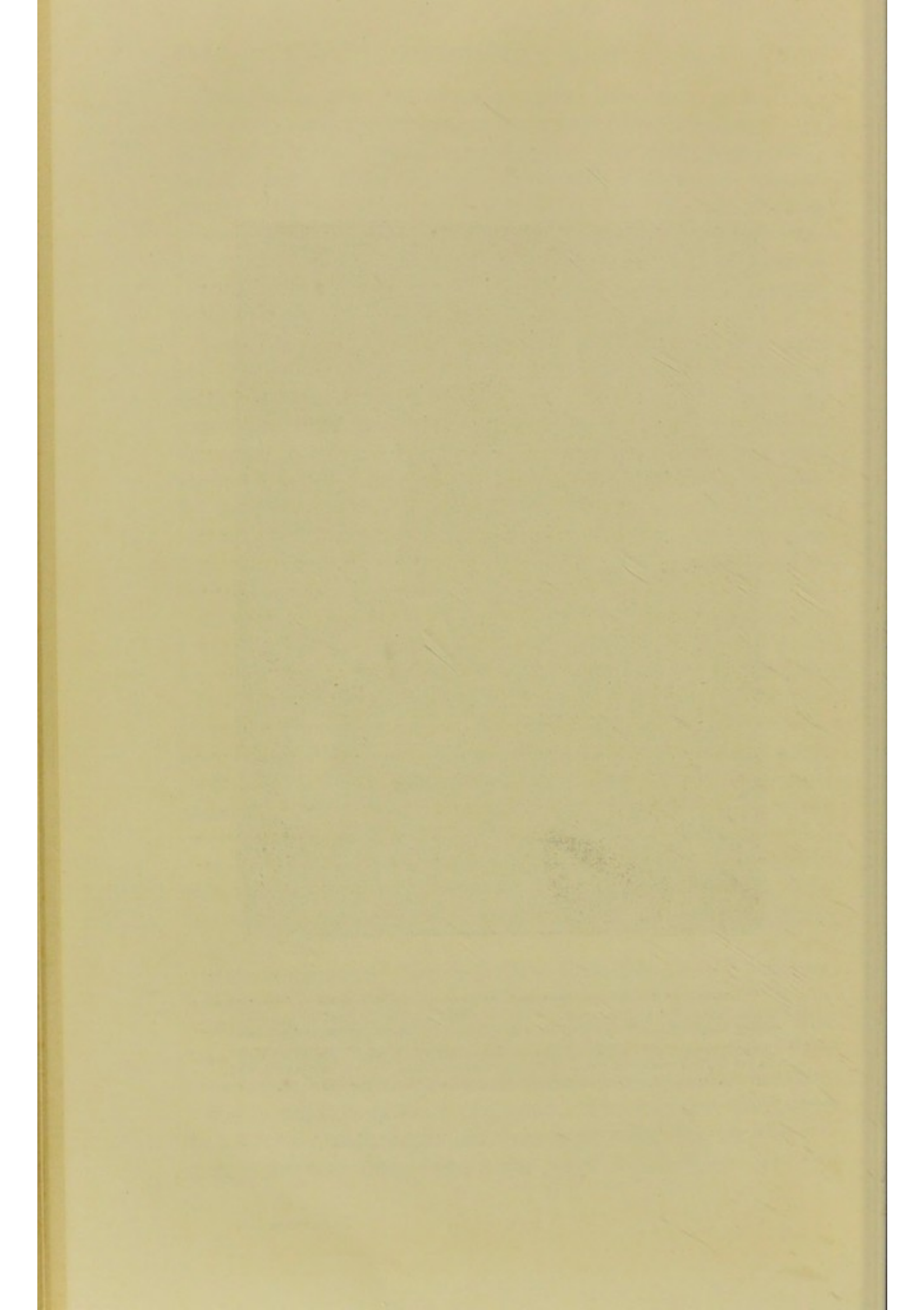


FIG. 5.

Williams, the Second, an ex-burglar, who has spent forty years in prison—a sportsman. For a breach of discipline in prison he says he received as punishment, eighteen days bread and water diet, and three months to wear cross irons and chains, day and night, riveted on to his ankles. This photograph is taken in the Author's drawing-room. The Director-General of Prisons, in Belgium, told the Author that they had not employed chains for prisoners for 550 years.



mother's side there were strong sporting instincts. Williams learned how to spar and box, and the acquired art was of frequent use in his craft, but at the same time was the cause of heavier sentences.

There is no hereditary alcoholism. The family tree is howsoever not quite satisfactory, as there was a good deal of infant mortality.

This man was the only criminal of the whole family. He was late going to school. This probably explains his undamaged memory, which goes back to the age of 3.

Williams II had good opportunities, even attending Charterhouse school; but he did not like school and often played truant. He worked for his father between the ages of 15 to 19 and then ran away, for his father, a good man, was too harsh and stern. The boy was attracted to gay company and got among the "masons"—i.e. cardsharps and betting men. This led to a little mishap, for a party of them went down to Dover to see the big review, and within 20 minutes of his arrival he was arrested as a suspect. It was a heavy penalty for mixing with bad company and landed him in prison for three months. Unfortunately this innocent though misguided youth made acquaintance with criminals in gaol and joined a gang on regaining his liberty. This is just where our prison system fails, and requires complete rearrangement.

He had not been out of prison a year, when he was arrested on suspicion for a robbery, of which he says he was quite innocent. The price of this misfortune was 5 years' penal servitude and that before he was 21 years of age. The poor mother died of grief while Williams was in prison. She was a good woman. However, before she died, it was clearly shown to her that her son was innocent. When he came out he returned at once to his father, but was full of devil. Quite natural! Society had "done him," he now "swore vengeance" on any one who had money. He went deep into crime. Worse luck for him, before a year was up he was caught when housebreaking with two others. He did not give the show away against his mates, who were old gaol birds and skilled. One of them some years afterwards was placed in an asylum; an interesting fact, showing that crime and insanity may shade into each other, as in my diagram of the

three circles (p. 11). For this little outing he got 8 years' penal servitude. He went first to Pentonville and then to Chatham.

He was only out of prison a few months when he was again caught. It was really a burglary at Sydenham with two experienced hands. They got the "stuff" away and made a few hundreds. He was arrested in Hoxton and resisted the police, for which the sentence was increased to 20 years, or life. When Williams II came out he joined in business with a noted horse stealer and got a month for receiving a stolen horse. This seemed rough luck as it meant going back on his ticket or life sentence.

He actually went back to prison for $6\frac{1}{2}$ years, of which time he was 4 years and 10 months in hospital.

Not content, after his release, he again went on the make. This time he went alone to commit a burglary at Highbury New Park. He was caught and sent back on his licence, and actually had 6 or 7 years in prison, being liberated again with 3 years' police supervision, which has not expired. He never carried a shooter, but knew how to box, and of course had a jemmy and other tools.

Williams II was taken over by the Salvation Army at the request of the police, and was converted shortly after under the influence of Adjutant Halsey. When taken over by the Salvation Army he did not know where to turn for a friend. Do they not fill a gap in the nation's duties? (Fig. 6).

Before General Booth came along there was no genuine, sincere interest taken in criminals. There was a sort of righteous Calvinistic idea that criminals were self-made; nothing could be too severe for them; their stories must not be listened to, much less believed.

But to return to Williams, his moral character is strengthened and he has no more thirst after crime. He has however had his temptations, in times of bad luck, and feared he would fall away.

He never was a drinker. He could take his drop and carry "it like a gentleman." He was always turned out well and "dressed like a gentleman." He is a great favourite with the police and very kindly treated at Scotland Yard.

Though opposed to the present brutal flogging, yet Williams



FIG. 6.

Williams, the Second, ex-burglar, with Brigadier Playle of the Salvation Army, and the Author. He says that in one prison he was confined eight weeks in a punishment cell, which only measured 8 feet by 5 feet. It evidently got on his nerves. His stories of prison life are very pathetic, and in fact horribly revolting. Where the law fails, the Salvation Army and similar bodies succeed.



is strongly of opinion that half a dozen lashes to a first offender would very sensibly thin the list of second offences.

If we now turn to what happens around us every day, we see that the Vagrancy Act is severe almost to brutality. I use this expression in reference to the imprisonment of juveniles or respectable workmen on tramp, not because of harshness in prison, for that seldom exists now, but because it stamps an honest worker or a boy at the very commencement of their career and damns them in view of future honest employment. It also makes prison familiar to them, and they find out that it is certainly more comfortable than the workhouse. The Law in reality places before them, in a not disagreeable manner, the worst consequences of criminal life and thereby often turns them into criminals.

The fallacies of the Vagrancy Act.

The Law defines the offence or crime of sleeping out in the following words :—

LODGING IN OUTHouses, etc.—Every person wandering abroad, and lodging in any barn or outhouse, or in any deserted unoccupied building, or in the open air, or under a tent, or in any cart or waggon, not having any visible means of subsistence, and not giving a good account of himself or herself.¹

Here a great difficulty appears to the layman and I maintain there is room for improvement. Many a boy, and I speak from personal investigation, is thrown on the world without any guardian or protector; a run of bad luck happens, he has no money for food and none for a bed. If he goes to the workhouse he has to do what many magistrates describe as an unreasonable amount of hard labour, as if poverty was a crime for which he was responsible. Is it not natural that he may crawl into a field, or into a shed, or behind a wall till day arrives? The Law accuses him of "guilty mind," and usually declines to accept his story. It is quite true that there are fines for these minor offences; but if they cannot pay 4*d.* for a bed, they can hardly pay 5*s.* or 10*s.* in fines and costs. Failing payment there is no alternative but prison.

The frigid scepticism or incredulity exhibited in judicial procedure is to me appalling, not to say cruel. These events occur over and over again. There is a severity about the

¹ Vagrancy Act, 1824, s. 4.

treatment of these simple offences, which is incomprehensible when we profess so much humanity.

Recently I showed a boy at a meeting of the Sociological Society. He was a roamer on the streets, who had never known either father or mother, and he went into the workhouse when weak from starvation. He failed in his senseless task of picking oakum, 4 lb. a day, and received a month in prison. He was sent back again to the workhouse, and again failing in his task, received a sentence of three months. This case was authenticated by a court missionary, who said that the magistrate expressed strong disapproval of the law and in fact of the sentences.

We must not forget that the steady increase of unemployment¹ forces a large number of honest people to commit offences against the Vagrancy Act; nor must we lose sight of the fact that we imprison 14,000 youths every year for minor offences.

Until Society realises its responsibilities matters will not mend. We do not look to the law for social hygiene. Its function is purely administrative to the offender. Prevention is no part of the office of Law, though deterrence may be. Deterrence is supposed to be effected by fear, but experience as well as common sense shows the absurdity of this idea. Prevention, by correct mode of treatment, in fact by what we ask for—justice, is the only rational way of dealing with crime.

In case it may be urged that I am not up to date in my criticisms, I find in the *Evening Standard* and *St. James' Gazette* of January 12, 1910, the following report:—

An infant of 15 months was charged at the Tower Bridge Children's Court with being destitute and without proper guardianship, and a similar charge was brought at the Westminster Children's Court against a child of 16 months.

If such law is made in earnest and regards an infant as chargeable with misdemeanour, then those responsible for framing such a law may best be described as themselves "without proper guardianship."²

¹ Seventy-one per 1,000 working men in 1909, as per Board of Trade report. As the population grows and trade leaves our shores, matters will worsen.

² See chaps. xiv and xv as to the method of dealing with such cases.

The machinery of the law is quaint ; it is even ridiculous ; it is expensive ; it is vexatious ; it is old and rusty ; is it not actually beyond repair ?

Here is a case from *The Times*, in which there is a subtle legal distinction between stealing a dog, and stealing its collar. This may be explained by an old and rusty law which did not recognise possession in relation to a dog. If a man steals the collar he may get 3 years or more penal servitude, but if the dog be *déshabillé* of its collar then the sentence is 18 months or less. A dog lover surely would mourn more for his dog than for 50 collars.

Is law
ridicu-
lous ?

A DOG THIEF.—A man pleaded “Guilty” to stealing a dog. The detective-sergeant stated that the prisoner was first convicted in 1864, and out of his 62 years he had spent over 30 years in prison. The prisoner denied having stolen the dog’s collar in the present instance, and the judge said it was evident that he was well acquainted with the law on the subject. If he had stolen the collar he could have been sent into penal servitude, but as he had only pleaded to stealing the dog he (the judge) could only order him 18 months’ hard labour.

The dog’s
collar.

This is rather by the way, and only a lawyer—if even he—can hope to make plain to the lay mind the comfort in retaining the collar, when a thief has relieved you of your favourite companion. But it is just this same quaintness or taint in our law, in more vital and widely applied matters, which any one of ordinary intelligence can appreciate, and can not only hope, but also help to amend by an infusion of the humanitarian spirit, fortified by common sense and accurate knowledge.

The law at present moves in a circle, in a vicious circle. It makes its own machinery, for which purpose the Houses are flooded with lawyers. It interprets its own complex provisions, so that no man can foretell their effect. It treats its victims to a large extent mechanically, according to the “rules of the game,” rather than with common sense, or common humanity, and leaves them wrecked and derelict.

An indict-
ment
against
Law.

SECTION D.—THE GUILT OF THE NATION

The per-
secution
of politi-
cal pri-
soners.

In accordance with the title of my subject, present British methods, I cannot pass over the severe sentences upon political offenders.

The following quotation was taken from *The Times* of January 4 or 5, 1910 :—

Nurse Bryant, who was sentenced to a month's imprisonment on December 6 at Haslingden on the occasion of Mr. Harcourt's meeting, was released yesterday morning from Preston Gaol. She bore the mark of handcuffs on her wrists, and was unable to stand owing to weakness. She had refused prison food or to wear prison clothes. The authorities had her forcibly fed after 3 days' hunger-strike. She was also put into a canvas dress which was strapped on to her. She was in irons for 2 days and in a punishment cell for 17 days. She wrote on the wall of her cell : "Those who would be free, themselves must strike the blow."

When similar cases occur in other countries we cry out and hold religious meetings for protest. This woman's crime was political, but the party in power, perhaps rightly, are strongly interested in excluding woman from political freedom, on account of their conservative tendencies.

What was her crime ? Disturbing a political meeting. Of what moment is that ? It is a form of British sport—"pull devil, pull baker." Who is going to be vicious and spiteful over politics ? It is not worth it. The party who imprisoned her are not themselves free from blame for organising disturbances at political meetings.

What then completes this nurse as a criminal in the eyes of the present Government ?

The defence of the Government and its legal supporters, though frigid, is correct. They say that there must not be one law for the rich and another for the poor. These ladies have broken the laws of the country. They have thrown missiles, broken windows and caused obstruction to the police. They must be treated as criminals. Quite right !

Ferrar broke the laws of Spain by conspiring against the authorities, therefore he was a criminal and deserved punishment. The hundreds and thousands of executions of political prisoners in Russia are for criminal acts. Quite right !!! There can be no such thing as political crime by this argument,

however altruistic the motive. Nevertheless our shores are open to people doing far more physical injury than the suffragettes. We welcome them as heroes.

I am neither political nor sentimental, but aiming at a correct adjustment—justice. Miss Selina Martin, a nurse, has thrown a missile and been imprisoned. Two boys were fined 5s. each for pelting foot-passengers with snowballs from the top of a tram. This was in 1909. Why not fine Nurse Martin 5s. if justice be impartial? In 1910, a woman, for exactly the same offence, actuated by political impulse, was only fined 6s. The case will not stand criticism.

A nurse, a lady by birth, devotes, sanctifies her life to the sick poor. The scenes with which she is familiar teach her that there are many cruel, unjustifiable wrongs, which never will be corrected till women can bring their influence to bear on legislation. Miss Martin is primarily a political prisoner. As a nation we object to exceptional severity to political prisoners. I therefore publish her reply.

SUFFRAGIST "ATROCITIES."

Telegraph, July 13, 1910.

In reply to the Home Secretary's denial of the statement made by the Women's Social and Political Union concerning "atrocities" committed in Liverpool Prison, Mrs. Pankhurst and Mrs. Pethrick Lawrence repeat that their assertions are true, and are based upon the written letter of Selina Martin herself, as follows:—

"We arrived at Walton Prison on Tuesday, the 21st (i.e. while still on remand), and the following morning I broke my windows, fourteen in all, and barricaded my cell, and managed to keep the officials out for some time, but eventually the principal wardress got in with others, when they fell on me and beat me unmercifully. They pulled me off the bed and threw me on the floor. Then the doctor came and told me he would not let me go without food, but would feed me right away. He then ordered me to be dressed in my own wet clothes, and I was taken to a cold, damp cell without ventilation, and was handcuffed behind and left on the floor. At night I was taken to a larger cell, and kept in irons. Thursday night I was thrown down, then turned over, and frog-marched up some steps, letting my head bump on the steps as I was carried. I was then forcibly fed, after which I was dragged to the top of the steps and thrown down."¹

The reader may accept it or disbelieve it, but let him think what these women are fighting for. Is it for themselves?

¹ In the Belgian and Dutch prisons violence is never permitted towards prisoners, however refractory.

Is the right of voting desired merely as a matter of political sport ? It is certain no women would go through such physical pain to procure mere sport or power for their sex.

I heard Mrs. Pethrick Lawrence, at a meeting, describe an incident which should convert the most disinterested reader. A suffragette was conveyed in a prison van along with a poor girl charged with attempted suicide. The girl was in much pain, from a corrosive poison, but the suffragette was not allowed to soothe the miseries of that, the victim's last day on earth. The poor girl, who died that night in prison, had been seduced and was pregnant. Her seducer had gone on to some fresh attraction and deserted her. She drank poison on his doorstep ; shame preventing her returning home.

Now, dear Reader, please don't close the book and accuse me of being a moral crank. I am saying nothing against the man seducing the girl. I am quite willing for you to put all the blame on the girl. I do however appeal to you, as a person of honour and chivalry, that the man must play the rules of the game. He has gratified himself ; it is for Society to claim redress and satisfaction. It is not for the girl to claim her rights, for in fact she has none. It is for the men and women of the country, good men and bad men alike, to stand by and hand in the bill. I don't prescribe the items of the bill ; that offers no difficulty. It is all a matter of facts. The bill is to Society. I can fill in some items.

Why is this handsome refined child of 14, in rags, selling newspapers on the streets. He "never had no father"—but he had, for we can see good blood flowing through his veins. If Society could have handed in the bill, that child would not now be shivering in the streets, or sleeping on the Embankment by night. Nor would he be so undeveloped. Starvation and deprivation have curtailed all his chances. Let Society be able to hand in the bill and these terrible evils will cease.

That is why Miss Selina Martin and Lady Constance Lytton suffer this mal-treatment, and if necessary more will suffer ; I venture to think they are willing to suffer again.

Time will roll on. The party in power that has made such blunders will be forgotten. The militant tactics of the suffra-

gettes, which most of us really dislike, will be forgotten ; but the day must surely come when, quite apart from party politics or sectarian quarrels, Society will unite on the main question, if only for the sake of race preservation and send in the bill.

The bill is correct. It is a bill of expenses to the Nation. Here it is :—

	£	s.	d.
To loss of home and situation, due to the mother
To expenses of confinement
To expenses of the infant
For education and shelter by the State
To cost of apprenticeship and maintenance till the age of 21 or until self-supporting

We must remember that the State will, judging by present conditions, be compelled to send out 40,000 of these bills per annum.

There is no sentimental nonsense about ruin, virtue or vice. It is a matter of business and what is more of the physiology of the nation. If the seducer won't pay for his offspring, who should ?

I am completing a chapter on " British methods as they are," in the sincere hope that in 20 years any one alluding to these problems may have to describe them as " British methods as they *were*."

CHAPTER VIII

THE RELATION OF PHYSIOLOGY TO JUSTICE

SECTION A. THE GERMINAL ELEMENTS: Physiology the pivot round which justice must revolve—The criminal entitled to compensation rather than punishment—Justice is biological—The germinal elements—The Chromosomes and Chromatin material—The Zygote—Somatic cells and germinal cells—Pangenesis: wrong—Weismann and the germ plasm—The continuity of the germ plasm.—SECTION B. THE DETERMINATION OF SEX: The nourishment theory of Yung—W. Heape's theory—Dusing's experiments—The nutrition theory is doubtful—Value of nutrition to the individual—Sex may be determined in the ova—Castle's theory of sex—Doncaster, Correns and Bateson on sex—Giard's observations on parasitic castration—Males becoming females; Orton's observations—The application of biological truths to humanity—The Accessory Chromosome—Is sex mixed?—The male is bi-potential—Hermaphroditism.—SECTION C. THE HUMAN GERMINAL ELEMENTS: Development of the human sexual elements—The idea of singleness in sex is incorrect—The remarkable history of Chevalier de Beaumont—We are all more or less hermaphroditic.—SECTION D. MISFITS IN MARRIAGE: The equilibrium of sexing—Marriage; religious; civil—How the claims of the Church arose—A marriage bureau necessary—Marriage and misfits among the poor—Marriage and misfits among the middle classes—Divorce—Things as they are—No divorce for desertion—The lawyer and physician to work together—Résumé.

SECTION A.—THE GERMINAL ELEMENTS

Physio-
logy the
pivot
round
which
justice
must
revolve.

ALL questions which concern Humanity, normal or abnormal, criminal, degenerate, psychopath, or even the details of judicial procedure and the principles of justice, do and must always revolve round the pivot of physiology. Physiology has her laws which yield to no pressure and cannot be infringed without due penalties exacted up to the hilt. Whenever, and in whatever condition of life, we accord to her laws, happiness and prosperity follow. But if we infringe them and ignore her principles, loss, disaster and confusion ensue. It is for this reason that Law is a failure. Has Law banished crime, or has it merely applied labels?

What is Justice but the balancing up of one vital force against another? The balance of the community is upset

by some misdirected force, and it requires a counterforce to restore the equilibrium of the community. The counterforce does not mean any force, or force in any direction. The understanding of the disturbance is essential to restore the social equilibrium.

It is only by a careful study of physiology, the laws of development, growth, nutrition and heredity, that we can at all aspire to an intelligent scheme of justice.

If the community infringe these laws as regards her young, the balance is at once upset. Law does not readjust matters by striking down still further with the sword—it increases the maladjustment. It is merely one blind force, and a stronger one against another. The equilibrium of the community can only be restored by compensating those previously damaged, not by punishing them. It is the purpose of this work to show, that many of those we punish are in reality entitled to compensation.

The criminal entitled to compensation rather than punishment.

The *fons et origo* of justice can only be biological and carries us to the mystery of development, the germinal elements—the ovum and the spermatozoon.

Justice is biological.

The human ovum is $\frac{1}{100}$ to $\frac{1}{120}$ of an inch in diameter, and would accommodate many thousands of spermatozoa, though it only requires the services of one to mature. One solitary spermatozoon, $\frac{1}{600,000}$ of an inch in diameter, is attracted, probably chemically, to the ovum and pierces its wall.

of-
fertilized
of

That minute object, the human ovum is enveloped in a more or less permeable membrane, and contains two constituents—the nucleus and the general contents, or cytoplasm.

The germinal elements.

The spermatozoon also contains a nucleus, but the cytoplasm is very small in extent. When the sperm enters the ovum, the two nuclei join and development commences. According to the view of Délage, the function of the ovum is nourishment, building up the embryo; that of the sperm is activity, vitality, resistance—in fact, virility. But this is obscure.

Not only the germinal but every living cell of the body has a nucleus, which is the vital part. The cell exists for the nucleus, and the nucleus lives for the cell, neither can exist without the other. The nucleus contains chromatin matter; so called because it becomes more visible by certain stains, notably the aniline dyes. These nuclear masses appear

Chromatin material and Chromosomes.

powdery, or in wavy threads during the resting stage, at other times they contain rods. This latter pattern occurs during cell division, or karyokinesis, and the rods are called Chromosomes. The rod-like changes represent a condition of cell activity, while during the other appearances the cell is passive. In Fig. 7A which is the section of a growing lily root, cell nuclei are seen in all stages. At the upper edge are large oblong cells of cuticle. Inside are square cells;

a shows the resting stage—Telophase;

b, the Prophase, where the chromatin is forming up into threads and collecting at the equator of the cell;

c shows the Metaphase, in which the nuclear membrane has disappeared and the rods, or Chromosomes are splitting up, one half going to each pole.

d is the final stage, when the two halves have separated to form two cells, the membrane has reappeared, and the cells are in the resting stage.

Fig. 7B is a photograph of the bean root and shows the chromosomes separating to the two poles of the cell (*c*).

Fig. 7C shows the ova of the worm *Ascaris*. One nucleus (*c*) has chromosomes, just forming in the prophase stage. There is a polar body (*e*) travelling to the edge of the ovum; the two other nuclei are in the resting stage and also show two polar bodies. Different animals and plants have different numbers of chromosomes in their nuclei. Man has 16 chromosomes; the grasshopper has 12; the snail 32; the ox and the guinea pig have 16; the lily and the trout have 24; and so on.

Many biologists believe that there are two distinct kinds of cells: somatic or the cells of the body; and germinal or the cells of reproduction. For example in the case of man, when the sperm enters the ovum, its nucleus fuses with that of the ovum to form a single cell, which is technically called a Zygote. All sexually produced animals develop from a single cell of this type. The Zygote is the source or origin of the embryo; which results from a process of cell division, each Zygote dividing into two cells, then 4, 6, 8, 16, 32, 64 and so on.

Assuming that two kinds of cells occur in the embryo; one kind, the somatic, forms the embryo, while the other cells are germinal, from which the ovaries and testes ultimately

24

The
Zygote.

Somatic
and
Germinal
Cells.

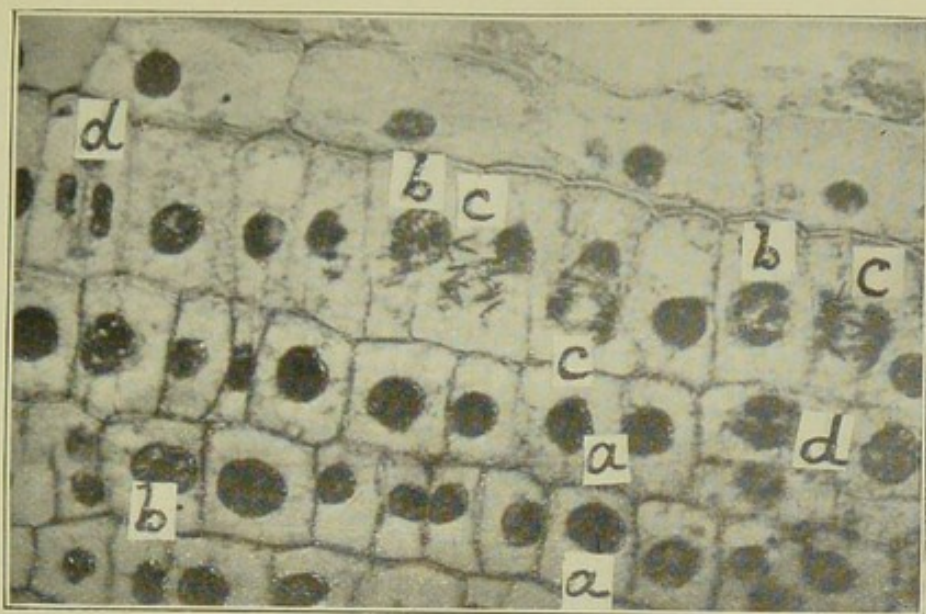


FIG. 7A.

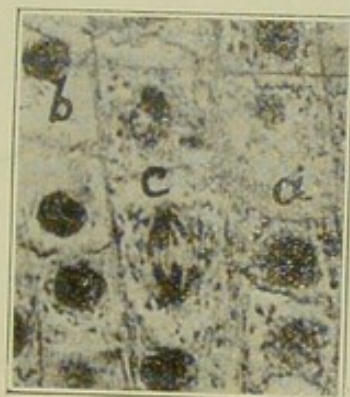


FIG. 7B.

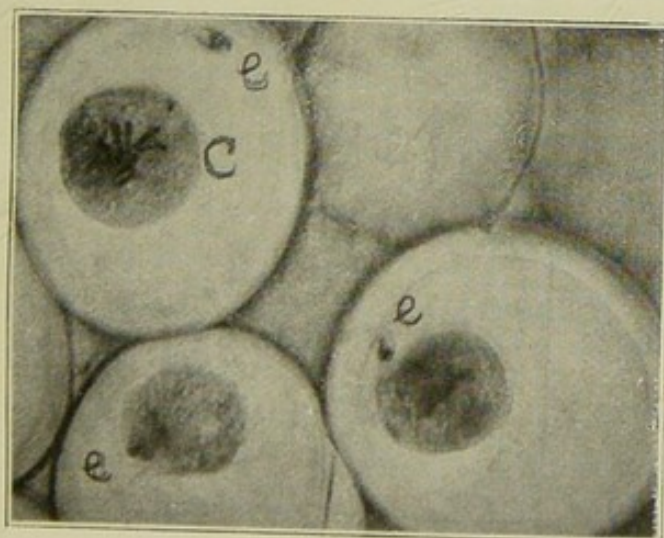


FIG. 7C.

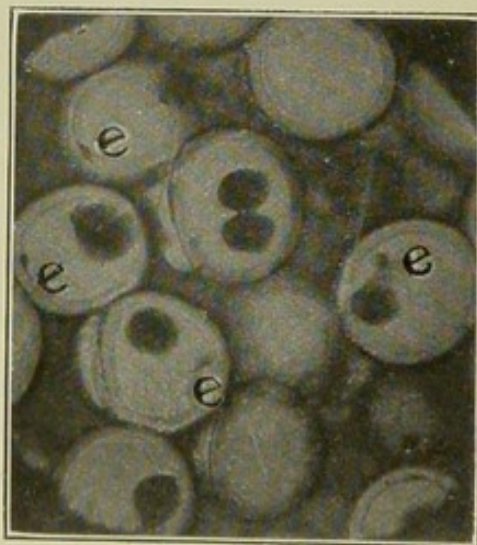


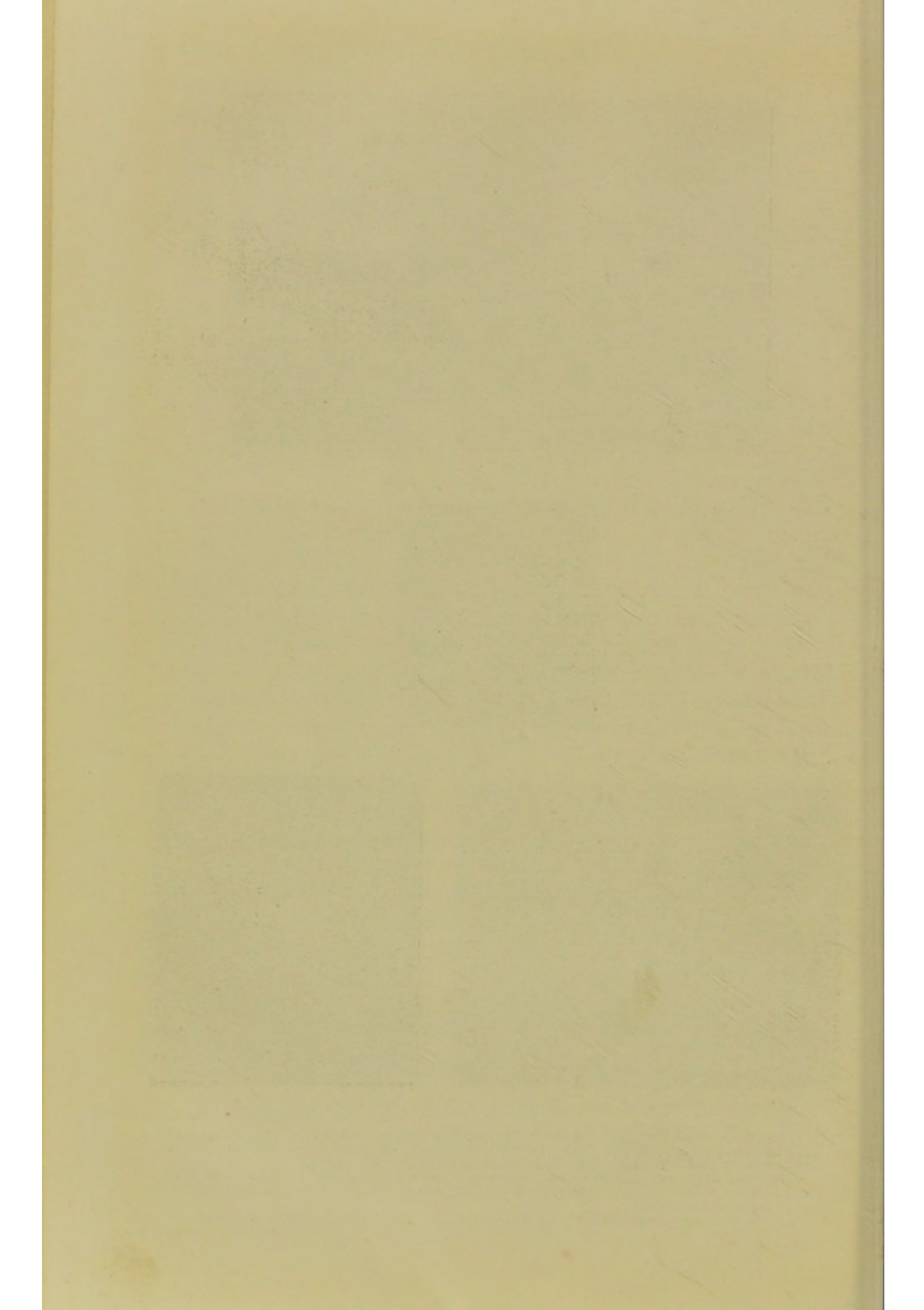
FIG. 7D.

Fig. 7A is a section of a growing lily root; Fig. 7B is that of a bean root. They are stained and highly magnified (400) to show the different degrees of activity of the cell nuclei, as described in the text. The upper layer of large oblong cells in 7A is the cuticle.

Fig. 7C shows the ova of an *Ascaris*—a thread worm. *c* shows the chromatin rods in the nucleus; and *e* the polar bodies, thrown off from the nucleus and escaping from the ovum. These will interest the student of embryology.

Fig. 7D, a lower magnification, shows polar bodies, *e*; and a nucleus divided into two.

[To face page 146.]



develop. In this way at every fertilisation there is a double process ; first the formation of an embryo or body ; secondly the separation or localisation or, as Weismann and other observers consider, the continuation of a germinal substance.

The former description of the chromosomes in the nucleus refers to the somatic or body cells. The primary germinal cells, which in one sense are immature, divide and sub-divide into ova or spermatozoa. When this occurs the chromosomes divide, so that the ova and spermatozoa get only half the original number. Thus in the trout which has 24 chromosomes, its sperm and ovum have each got 12 chromosomes. In the case of man, with 16 chromosomes, there are in the sperm and ovum only 8 chromosomes. But when the sperm enters the ovum, the original number is restored, as each contribute half. The human ovum and sperm, each bring their 8 chromosomes, when they unite to form a zygote or fertilised ovum, restoring the original number of 16 chromosomes—the same number as in the somatic cells.

We must bear in mind the two kinds of cells :—

- (a) germinal cells, with half the number of chromosomes, (8 in man) ; and
- (b) somatic cells (soma, the body), which have the full complement of chromosomes in the nuclei (which are 16 in man).

Darwin enunciated the theory of Pangenesis, according to which each part of the body gives off representative particles, which go to form the ova and spermatozoa. Pan-
genesis
wrong.

The ordinary person may think that as adult life approaches, we build up inside us the germ cells of the future race. This is not the case. The child already contains the germinal matter for the next generation before it is born.

Weismann's theory is diametrically opposed to this. He divided the cells into Weis-
mann and
germ
plasm.

- the somatic or body cells and
- the germinal or reproductive.

He suggested that the germ plasm is separate from the somatic plasm, and is continuous from generation to generation. Darwin thought the germ plasm was an extract from the parental tissues ; but Weismann regarded the germ cell as coming direct from the parent's germ plasm.

The
continu-
ity of the
germ
plasm.

Weismann uses the expression—germ plasm—to indicate the continuous chain of substance composed of the germinal tissue of successive generations. He started the theory that this was a continuous living chain; in fact, eternal so far as the race of mankind is eternal. Weismann thought that as each embryo is formed, some of the germ plasm is reserved for the reproduction of the next generation. He did not mean that actual germ cells could be demonstrated as such; but he arrived at the hypothesis, that some of the vital organic matter in the nucleus of the ovum was reserved for the next generation. He called his theory the Continuity of the Germ Plasm.

The germinal chain is like a huge tree always growing; a branch here is strong and throws off twig after twig; another is weak and perhaps dies off; but in the main the growth is persistent and continuous. Délage has likened the germinal chain to a strawberry runner, and the plants it gives off to the individuals. The simile is not inapt.

SECTION B.—THE DETERMINATION OF SEX

The speculation as to the evolution, or determination, of sex has gone through many widely different phases.

The
nourish-
ment
theory of
Yung.

Yung¹ thought sex was determined by nourishment. He found that among tadpoles the proportion of females to males was usually 57 per cent; but if he fed one group on beef the proportion of females rose to 78 per cent. Another group was fed on fish, when the females increased to 81 per cent.; and finally frog flesh raised the percentage to 92. In an experiment of this kind there is one weak point, the mortality among the males, and the uncertainty which infant mortality involves.

W.
Heape's
theory.

W. Heape² has come to the conclusion that nourishment has much to do with the excessive production of one sex or the other. If nourishment be abundant then more females

¹ See Geddes and Thomson, *The Evolution of Sex*.

² See "Proportion of the Sexes produced by Whites and Coloured Peoples in Cuba," by Walter Heape, M.A., F.R.S., *Roy. Soc. Proc.*, Series B, Vol. 81, 1909.

are born, but if it be scanty the more delicate female ova or embryos perish, and more males are born.

"Dusing's ¹ results (1891) show that while want and privation are constantly correlated with an increase of male births, prosperity is associated with an increase of female births; that while starvation and an unfavourable climatic condition are inimical to the development of females, a plentiful supply of nutritious food, and specially favourable physical conditions, result in the survival of an increased proportion of that sex."

Dusing's
experi-
ments,

Nourishment does not of course refer only to the quantity of food, but to its quality and the power of absorbing it.

Heape ² says that "the variable metabolic activity of the mother, acting upon the ovary, induces a struggle for existence between the ovarian ova of different sexes, and affects the proportion of male or female ova which ripen and are produced for fertilisation.

"It is worthy of notice that these same extraneous forces must affect the proportionate production of individuals possessing various kinds of different characters, quite other than sex, which are associated with metabolism, and when better understood may have valuable bearing on the means of selection of healthy ova and for preventing maturation of ova bearing the active germs of disease."

As soon as we plunge into minute detail, we expose the flank to the strongest attack from those who wish to hold theory in abeyance till established as fact. The extended research of many other observers does not tend to support the idea that nourishment plays any part on the determination of sex. We know, however, and it is recognised by medical men, that nutrition is an important factor in the development of the individual.

The
nutrition
theory is
doubtful.

It has always been a fascinating mystery to me how certain families produce only males or an excess of them—and the same in regard to female children; but I have never been able to detect any relationship between nutrition and sex. I have, however, in an extensive practice of more than 20 years' duration, found attention to the nourishment—the super-

Value of
nutrition
to the
individual

¹ *Loc. cit.*, p. 275. I am indebted to Dr. Tebb for these details.

² Abstract, p. 37, *Loc. cit.*

nutrition—of the pregnant mother a most important factor in the vigour and viability of the child, especially where there was any predisposition to tubercle or neuroses.

Here is the photograph (Fig. 8) of a very plump baby, aged 15 months, weighing 20 lb. ; she weighed $6\frac{1}{2}$ lb. at birth, which is the average weight of a healthy male child.

The mother was exceedingly delicate and the result of prenatal super-nutrition was a matter of agreeable surprise to those specially interested.

I have had much hesitation about showing this photograph for obvious reasons, but it illustrates my contention that nutrition is everything in the prenatal period. Neither parent was strong, so that the little girl has nothing to thank them for on the physical plane. Mentally both her parents are of very good stock, therefore she has now everything in her favour. Any delicate parents can do as well as this, provided there is no active disease.

Now for a contrast refer to the photograph (Fig. 80) on page 359, Chapter XVII, where we see an infant who has been starved prenatally and post-natally. At the age of 4 years she only weighs 18 lb., instead of the average 36 lb. ; actually less than this infant so much younger. She suffers from rickets and hydrocephalus, and starts life heavily handicapped as compared with this more favoured baby.

To nutrition each one of us owes : first, his form, the degree of perfection to which he can attain ; second, his power of resistance, not to one disease but to many ; and, thirdly, his mental character, whether he be dull or clear, vigorous or weak, sane or insane, stable or unstable, moral or immoral.

The key to every social problem of race improvement, and I might say of race regeneration, is the physiological care of the germinal tissue. Education should tend that way, and knowledge on this subject should be extended and diffused through all classes. If due care be attached to the germinal tissue we shall rear a clean, pure, healthy, virile, active, even moral stock ; but if the true principles be neglected, then the race will chronicle many tragedies and show a steady decline both morally and physically.

But of late years the foregoing ideas of sex production have been largely supplanted by the theory that the sex of

Sex may
be deter-
mined in
the ova.

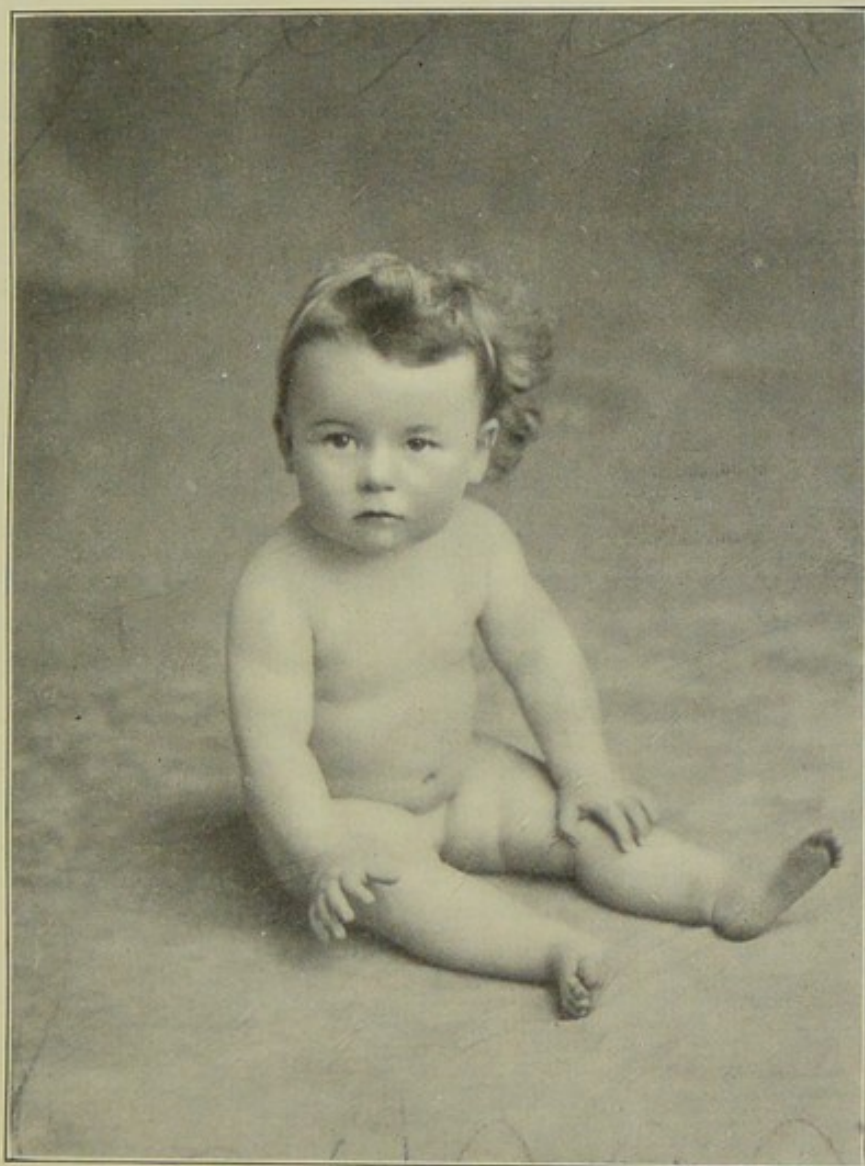


FIG. 8.

A child of delicate parentage, to show the value of prenatal super-nutrition. There was no anxiety as to the mental plane; hence in similar cases the importance of levelling up the physical side, which can only be accomplished before birth.



an individual is already determined in the germ cell from which it develops.

Sylvestri¹ showed in the case of two kinds of insects² that the sex was determined in the ova. These insects are parasitic upon other insects, laying eggs in them. Each egg divides or segments into smaller cell groups, each group in turn forming an embryo. Thus in *Litomastix*, each ovum produces 10 to 20 embryos, while in *Ageniaspis*, there may be 1,000 embryos, but all the embryos from one egg are of the same sex.

The theory of the causation of sex has grown in general favour, as a result of the success which has attended the attempt to describe sexual phenomena in Mendelian terms.

Castle's
theory of
sex.

W. E. Castle³ supposed that each sex was a Mendelian zygote of constitution ♂ ♀ (male and female); that is to say, that half the germ cells, whether they be ova or spermatozoa, bear the male character; and half bear the female character. In conjugation the only unions which were fertile were those between gametes bearing opposite sex characters. In this way heterozygotes only are produced, and the quality in the numbers of the two sexes was accounted for, by assuming that dominance attached sometimes to maleness and sometimes to femaleness, and as often to the one as the other.

Doncaster⁴ in his first attempt to interpret his classical result with the Currant moth employed the theory of Castle.

Doncas-
ter,
Correns
and
Bateson
on sex.

Correns, however, struck a new line in interpreting his results with the Bryony. He assumed that one sex was heterozygous⁵ and the other homozygous. He regarded the male as heterozygous.

Bateson, while agreeing with Correns that one is heterozygous

¹ *Annali R. Scuola Agric. Portici VI*, 1906, and *Bollettino R. Scuola Agric. III*, 1908.

² *Litomastix* and *Ageniaspis*.

³ W. E. Castle, Harvard, Cambridge, Mass., U.S.A., January, 1903. Gamete and zygote are terms constantly used by Mendelians. Gamete is a general term to represent the germinal elements, the ovum and the spermatozoon; when these unite they form a zygote, which in turn divides into two daughter cells. The zygote contains twice the number of chromosomes to the gamete, as just explained.

⁴ L. Doncaster, *Science Progress*, July, 1909.

⁵ Heterozygous means that one zygote is male-producing and the other female-producing. Homozygous means a pure or single sex.

and the other homozygous, regards the female as heterozygous and the male as homozygous; so that we merely take it that both are agreed that, expressed in terms of sex, one sex is a potential hermaphrodite and the other is pure.

Giard's
observa-
tions on
parasitic
castra-
tion.

A much surer and more direct insight into the nature of the difference between the sexes seems to me to be afforded by the phenomenon of so-called parasitic castration, described by Giard¹ in certain species of crabs. He found among certain crabs, that the entrance of a parasite produced results, which he compared with those of castration. The whole matter has been recently worked out in great detail by Geoffrey Smith.²

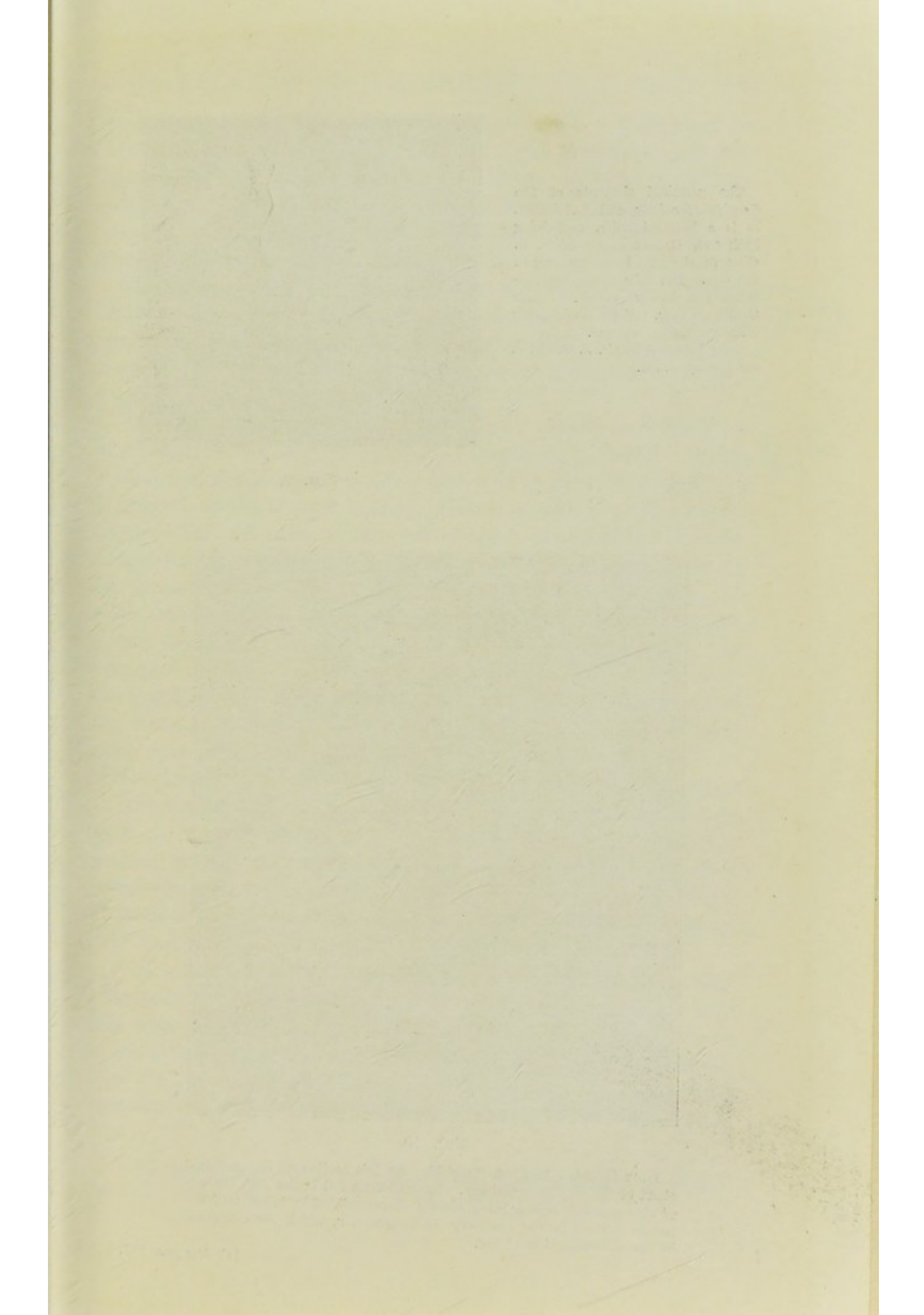
In one of the spider crabs, *Inachus mauritanicus*, the male has a large claw; in the female the same claw is relatively delicate in build. Another difference between the sexes consists in the possession by the male of a narrow abdomen without swimmerets; while in the female the abdomen is broad, and bears underneath eight feathery swimmerets to which the ova are attached.

The parasite is a *Sacculina*. A larva attaches itself to the base of a hair in the young crab, and undifferentiated cells penetrate the shell, entering the blood stream. These find their way to a point just behind the stomach of the crab and anchoring, develop into a tumour. Something is secreted which prevents the formation of the chitinous or horny material, leaving a hole at the moult where the parasite entered. The parasite grows right out at this opening, forming an outside tumour. The wonderful feature is, that the whole sex character of this male crab is transformed. Its claw does not develop to the size characteristic of the normal male. Instead there is a small diminutive claw, of the size which is characteristic of the female. The narrow abdomen becomes broad as in the female; and what is more remarkable the eight swimmerets, characteristic of the female, absent in the male, develop under this infected crab's abdomen. Thus the male takes on the secondary sexual characters of the female.

If it happens that a female crab is infected by this parasite, the swimmerets are slightly diminished in size. There is

¹ *Acad. de Sciences, Paris*, 1886-7.

² *Quart. Jour. of Microsc. Science*, February, 1910.



The germinal elements of the *Crepidula fornicata*, a kind of limpet. It is a hermaphrodite, containing both ova, *O*, and spermatozoa, *S*. Observe the nuclei and nucleoli in the ova. The tails of the spermatozoa are barely visible. Their bodies are long. The round smaller cells are unripe sperms.

I am indebted to Mr. J. H. Orton for this specimen.

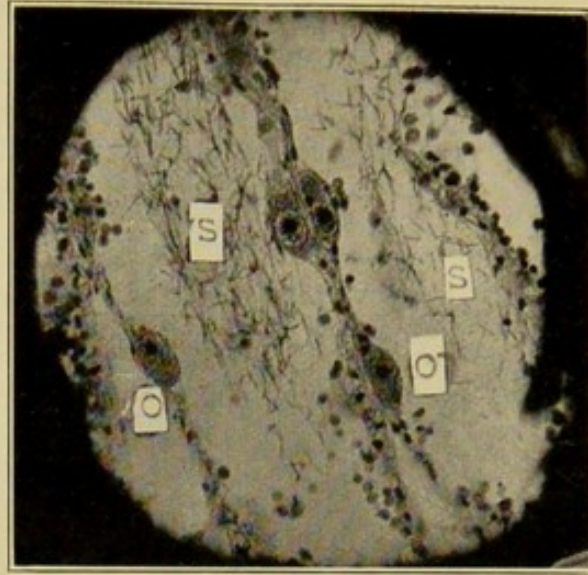


FIG. 9.

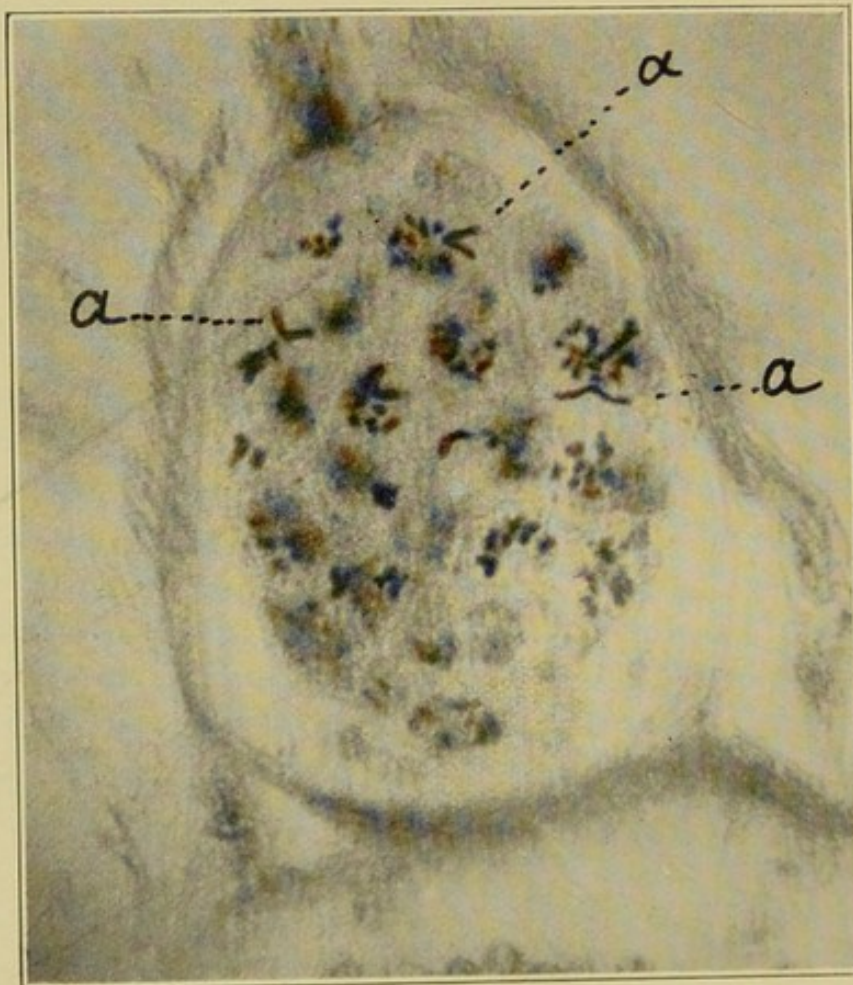


FIG. 10.

I am indebted to Prof. Darbishire for this section of the germinal gland of the *Gryllus*, or cricket. Each of these cell bodies with clusters of chromosomes represents a mother sperm cell. The interest of the picture centres in the accessory chromosomes, *a*, which are concerned in the determination of sex.

therefore no important change in the female. This however is not the whole story about the male. The gonads, or primary sexual organs, are changed in structure, in correspondence with the changes in the secondary sexual characters. Instead of forming male sperms, they now form both ova and spermatozoa.

These experiments support the view that the male is a potential hermaphrodite, and the female is pure. The male can go almost the whole way in the development of female characters; but the female can only approach maleness in a very slight degree.

Males becoming females.

Further evidence which supports this view is afforded by the observations of J. H. Orton on *Crepidula fornicata*.¹ This mollusc to the popular mind is like a long narrow limpet and is known as the slipper limpet. When young it settles on an oyster shell or some similar substance. It is then a male. Later another male mollusc settles on its back, and so on till in some cases twelve of these molluscs are adhering to each other's shells, and construct what is called a chain. When a chain of these is examined, say a group of ten, the bottom four are found to be females, to possess a uterus only; the top four are males and possess only male genitalia; whilst the two in between are hermaphrodites, and possess both male and female genitalia.

Orton's observations.

Mr. Orton, who has investigated this subject, finds that at the beginning the young mollusc has male genitalia, but after a time rudimentary female genitalia appear. The animal passes through a stage of hermaphroditism, after which the male organ atrophies and the female uterus develops. Thus the molluscs at the bottom of a chain after a short time change from males to females.

It is a remarkable fact that all the young forms are males. There are no females among them. When these develop and still appear to be pure males, the microscope reveals ova in the germ gland, alongside of spermocytes and spermatozoa. This most interesting condition is represented in Fig. 9, which is a microphotograph taken from one of Mr. Orton's specimens.

¹ "On the occurrence of Protandric Hermaphroditism in *Crepidula fornicata*," *Proc. Roy. Soc.*, Vol. 81, B, 1909.

There are six ova (*o*) and crowds of sperms (*s*). The small round dark cells are immature sperms.

The
applica-
tion of
biological
truths to
hu-
manity.

It is not such a "far cry" as might appear from the lower forms of life to mankind. The same laws of physiology obtain. Does oxygen act in a different way in man than in the fish, snail, or insect? In all alike the absorption of oxygen is essential to carry on vital functions, and it is a question of detail whether the oxygen is extracted from the air or the water, or how the extracting apparatus, gills or lungs, are constructed.

There are certain first principles in physiology which govern functions, whether in lowly organisms or the higher mammals. Among these none are more striking than those which relate to fertilisation. The anatomical detail or structure is a secondary matter, being a question of adaptation. The governing principle is the same whether the result is a snail, an insect, or a human being.

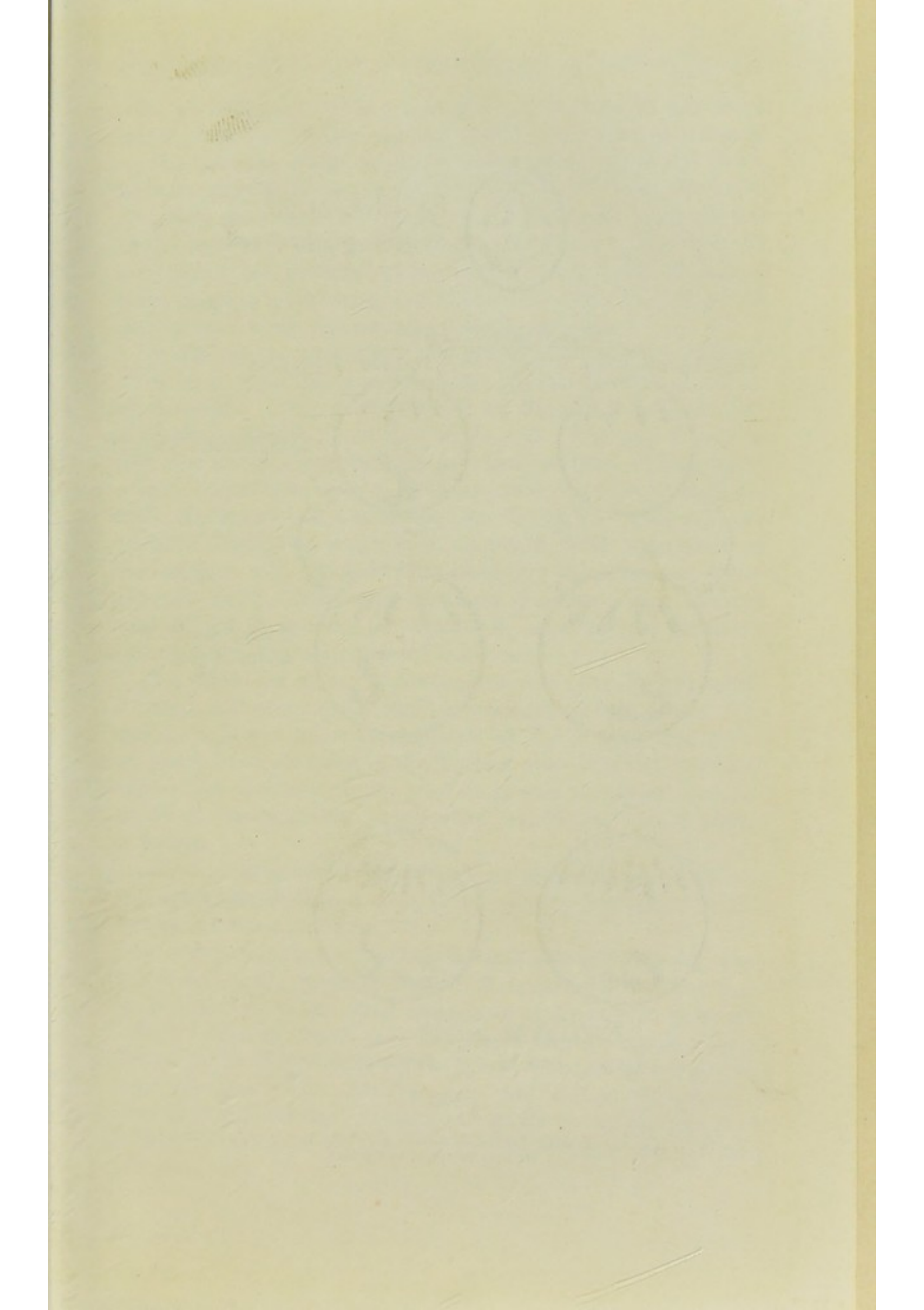
The
Access-
sory
Chromo-
some.

Confirmation of the view expressed above, that one sex is a potential hermaphrodite, whilst the other is pure, has come to hand from a wholly unexpected source. The Mendelian assumes that half the germ cells of the heterozygous sex contain a certain factor, whilst the other half lack it. This is no more than an assumption. Microscopic examination of a hybrid pea has not as yet revealed any sign, by means of which those bearing the dominant can be distinguished from those bearing the recessive characters. The American school of cytologists, headed by E. B. Wilson of Columbia University, have found that half of the total number of the spermatozoa of certain insects possess one more chromosome, which behaves in a different way in karyokinesis from the rest. The other half do not possess this extra chromosome.

This is the so-called "Accessory Chromosome." It is found that all the ova possess it and that the somatic cells of the female have two of these chromosomes, while the somatic cells of the male have only one.

Fig. 10, for which I am indebted to Mr. A. D. Darbishire, is a photograph of the male genital organ of a cricket—*Gryllus*. It shows spermatids with their chromosomes. The accessory chromosomes, marked *a*, are well shown in some of the cells.

We are thus forced to the conclusion that the spermatozoa



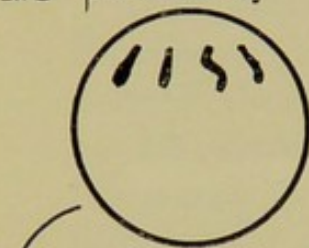


1st Division of
sperm mother cell.

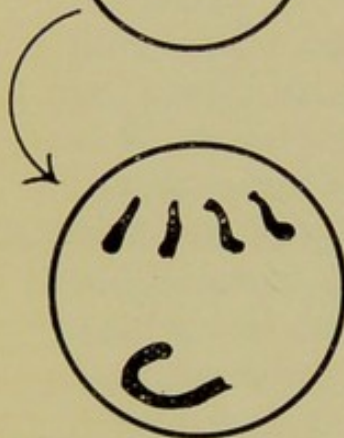
Spermatids

Male producing

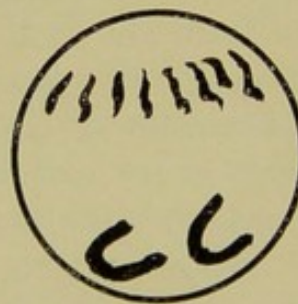
Female producing



Mature Sperms



Mature Ova
unfertilized.



Fertilized Ova

Male and Female.

FIG. 11.

The theory of the production of sex and the relationship of the Accessory Chromosome ; which is fully explained in the text.

with an accessory chromosome give rise to females and those which lack it produce males. That is to say, the female zygote gets one of the accessory chromosomes from the ovum and the other from the parental spermatozoon, from the union of which she resulted. On the other hand, the male got his single accessory chromosome from the ovum from which he developed, his parental spermatozoon as already indicated being without an accessory chromosome. This is more easily understood when represented diagrammatically.

In Fig. 11 the upper cell is a sperm mother cell in process of division, which like a male somatic cell has only one accessory chromosome. This is represented by the thick, dark, curved chromosome in the lower half of the cell. This cell is seen in the second row after dividing into two germinal cells or spermatids, or mature sperms. The accessory chromosome passes with the lower half and is seen to the right. This cell can produce females on union with an ovum. The upper half of the mother cell, which has no accessory chromosome, forms the cell on the left; and can only produce males when it unites with an ovum, for there will only be one accessory chromosome—namely, that of the ovum.

The third row shows by contrast mature ova, as yet unfertilised; and every ovum has an accessory chromosome. The sperms and ova unite as indicated by the arrows, and arrive at the condition shown in the bottom row—that is, fertilised ova. The fertilised ovum with only one accessory chromosome produces a male, while that which has two produces a female.

These observations support the view that one sex is a potential hermaphrodite and the other is pure; and point to the female as the pure form.

It is my opinion, from observation of erring humanity, that sex is not really pure, that there is no absolutely pure male or pure female in the adult stage. In every female there is a latent maleness; and in every male femaleness is hidden. When we know this much to be true we should do away with antique laws. We ought to pay the closest attention to breeding and all that it involves, so as to restore the race. Going the pace as we do, it is a wonder there are so many normals born.

Is sex
mixed?

I have a theory, supported by years of observation, that when Nature's plans and methods are thwarted serious results occur. Délage and others have shown that if the ova of starfish are damaged, monstrosities or dwarf forms occur. Physical injury produces physical deformity. But there is a more serious aspect, the interference of the proper arrangement of the chromosomes. Though this cannot be demonstrated, the possibility of such happening does not require a great stretch of imagination. Supposing the male ovum receives more than its share of female characters, or qualities, we get an abnormal male; but suppose the male ovum does not get its proper share of female characters, then it is a deficient male—deficient in properties which would complete its character as a normal male. Imagine what an adult male form, deficient in femaleness, is. Can we not easily infer that some physiological accident may at the time of conception make a "Jack the Ripper," or any other of these murderers who cause such sensational crime? Is it not probable that these horrible brutes, who mutilate women and who delight in brutalities, are accidents of Nature? Working on physiological as well as religious lines, is it not our duty to study these sexual problems more closely, and laying aside sentiment, sterilise freely, so as to purify the race?

The male
is bi-
potential.

The male is perhaps a sort of hermaphrodite,¹ or in strictly scientific terms bi-potential. This ought to be embodied in the creed of the divorce authorities.

Hermaphroditism.

This theory of bi-potentiality of sex is no fanciful idea. There are more than 1,000 cases reported of so-called Hermaphroditism by Neugebauer.

There are several cases published by surgeons, where operations have been performed for hernia, and an organ representative of the opposite sex has been found in the sac.

In one case a man was operated on for inguinal hernia and a solid body was found, which proved to be a rudimentary uterus with an ovary attached. He had female characters—a beardless face and high-pitched voice.

In a case of the opposite kind, a woman, there was found a testicle which on microscopic section showed normal testicular tissue. She was of rather masculine type.

¹ Hermes, a man; Aphrodite, a woman.

These are just two out of many to demonstrate my point.¹ Who amongst us, who passes as a man or a woman in the eyes of mankind and the laws of England, can be certain that he or she is not represented by the characters of both sexes, in his or her internal organisation? Think what it means when we know that the ovaries and testes are not solely employed in forming germinal substance, but that their very juices, spermine and ovarine, acting on the nervous system regulate our lives, feelings and ideas. There is more behind it than would fill this volume, and no order or justice can be obtained in our law courts when physiology is ignored.

SECTION C.—THE HUMAN GERMINAL ELEMENTS

When the foetus is but a very few weeks old, the germinal cells are collected in the form of a gland, in front of the developing kidneys or Wolffian ducts. This simple reproductive gland has no visible definite sex, but develops into one or other. It is difficult to suggest any reason, or produce any further evidence to explain the selection; for we must not forget that all the anatomical characters of sex may be determined, and actually predestined at the time of conception; but the original germinal chain must always remain hermaphroditic, ready to support either anatomical development. This is clear from the observations on the lower forms of life.

Develop-
ment of
the
human
sexual
elements.

If we follow the development of the sex gland, we find that ducts are formed in connexion with it. One arrangement of ducts, the Müllerian, develops into the Fallopian tube,² the epithelium forming the ovaries; while the other arrangement of ducts and epithelium, the Wolffian, forms the seminal tubes of the testes. Thus we get sex division. As an evidence of the likeness of sexes, each embryo is at first built on the same anatomical plan. Those parts not required by one sex atrophy, being of the opposite character. In the male the homologue of the uterus is found in the prostate gland. The primary germinal cells, in the ovaries and testes, pass through four stages before they develop into mature sex cells, but

¹ These and many like them are authentic, being collected from medical journals.

² The Wolffian tubules atrophy in the female.

this does not specially affect our subject, for we are more concerned with conception.

The idea of singleness in sex is incorrect.

Nature does not vary her principles. If she establishes that the sperm of a crab contains femaleness, and similar relations obtain in the pollen and ova of plants, not to speak of insects and other animals, then the singleness of sex, whether male or female, threatens to become a myth to be relegated to the traditions of the past.

The lower forms of life are more plastic and pliable, and yield results which cannot be observed, but may be inferred to exist in higher forms. Cases of decided fusion of the two sexes into one are not uncommon in the human family. We ought almost to regard these mixtures as a third sex.

Was there fusion of sex in the case of Rosa Bonheur? What do her portraits tell us? Her outward form and features were strongly masculine, and she dressed as a man.

Or of what sex was Le Chevalier d'Eon de Beaumont, whose portraits I show? (Fig. 12, A, B, C.)

The remarkable history of Chevalier de Beaumont.

The life of Chevalier d'Eon de Beaumont is an instance of what is termed, "error of sex," and is peculiarly interesting from the part he played in the history of Europe. He was born on October 5, 1728, and baptised at Notre Dame, Tonn re, as a boy. When 4 years old he was publicly dedicated, as a girl, to the Virgin and wore the robe of the sisterhood till the seventh year, when by the father's wish he returned to boy's clothing.

In 1755, D'Eon, aged 27, then in the French diplomatic service, was sent with Charles Douglas to the Russian Court, to try to renew friendly relations with Elizabeth, Empress of Russia. D'Eon is supposed to have been received by the Empress in female attire, and having ingratiated herself with the Empress was appointed lecteur or reader to her Majesty for some months. It is, however, known that D'Eon was invited to join the Russian service as a man. It is not quite clear at what period she resumed male attire; but the portrait when she was 25 was in female attire (Fig. 12 A).

In August, 1760, D'Eon de Beaumont left St. Petersburg for the third and last time. He was ill and shortly after developed smallpox in Paris. Still in male attire, he undertook

A.



In the year 1753.

B.



In the year 1770.

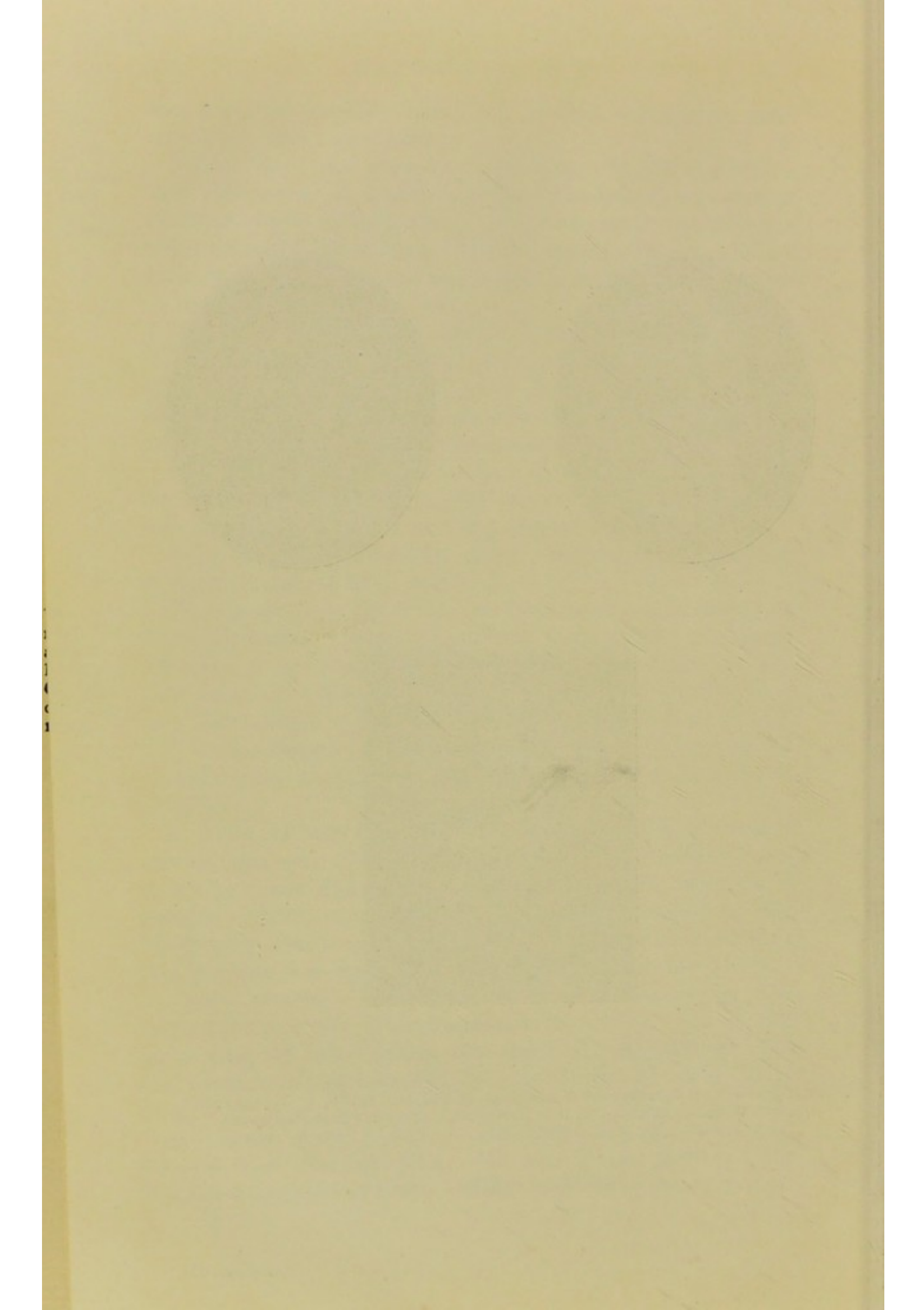
C.



In the year 1782.

FIG. 12.

Chevalier d'Eon de Beaumont, whose remarkable life has been written by Captain Telfer, R.N. (Longman, Green & Co.), from whose work I have taken these photographs.



active service with the French, against the Prussians in 1761. At the end of the Seven Years War, he was sent to England to conclude the treaty of Peace. When in England George III interviewed him and sent him back to Versailles. He was then made French minister to England and obtained the coveted knighthood of St. Louis. He was recalled to Paris to receive diplomatic orders, and Louis XV wished him to resume female attire, as he would thereby be of more use in the English Court. The English Government, however, refused to allow it. As a result Louis XV, M. de Praslin, and de Pompadour, tried to imprison him in the Bastille; but after this he was pensioned by Louis XV.

In June, 1763, he was said to be hiding in London in woman's clothing. In 1764, his worst and most jealous enemy, Vergey died and the Chevalier was then firmly established as a secret correspondent in London for the French Government. In London he beguiled his leisure with literary work. He at times lived at Leicester. At that period a newspaper article commented on "our ignorance of his sex." In 1769 he was freely discussed, and it was the general opinion that D'Eon was a woman, but in a portrait done in 1770 (Fig. 12 B), he is in male dress. As a proof of this, many wealthy families made advances to him, with a view of marrying a daughter, but were always repulsed by him. The famous club scandals began about this period, involving Brooks, Whites and others. Gambling policies were effected concerning his sex. Large sums were lost and made over him.

The Chevalier saved England, France and Spain from war concerning the Falkland Islands.

Louis XV was told that D'Eon was a female; his attention being called to his effeminate appearance, blue eyes and small features.

Louis XVI ordered D'Eon to wear female attire, if he wished to remain in France. This he gladly agreed to, intending the change to be permanent and wished to retire to a convent. In 1782, when he was 54, he was painted as a woman, by Sir Joshua Reynolds (Fig. 12, C). Fresh gambles were commenced about his sex, and he had an offer for marriage, this time as a female.

He died in London in the year 1810, at the age of 82, in

great poverty, and was buried in the churchyard of St. Pancras. Here is the report of the autopsy.

"The Times," Friday, May 25, 1810.

LE CHEVALIER D'ÆON.

This celebrated and well-known character, who for some time officiated as Minister from the late Court of France to that of Great Britain, died last Tuesday, at a very advanced age, at *his* residence, in Milman Street, Foundling Hospital. The Chevalier, it will be recollected, was for many years asserted, and implicitly believed to the last to be a female, of which sex for several years past *he* (for so we may now speak) wore the attire, etc. However, this curious question, and which will even now excite no small degree of interest in various circles, was on Wednesday set at rest, the body being dissected in the presence of some professional gentlemen, and the Earl of Yarmouth, Sir Sydney Smith, Hon. Mr. Lyttleton, Mr. Douglas, and several other persons of consideration. The following is a correct copy of the certificate of the professional gentleman who operated on the occasion:—

"I hereby certify that I have inspected and dissected the body of the Chevalier D'Æon, in the presence of Mr. Adair, Mr. Wilson, and Le Pere Elizee, and have found the male organs in every respect perfectly formed.

"(Signed) T. COPELAND, Surgeon, Golden Square."

Another account which we have received, states the Chevalier to have been 85 years of age; and some time before his death to have been in an infirm state of health. He had made a will, in which he had appointed Sir Sidney Smith his Executor, but it never was signed. It is about thirty years ago that the strange doubts were entertained as to the sex of this singular personage and many wagers laid on the question; from the period of the supposed decision of that question, the Chevalier put on female attire. On his decease, it was unexpectedly discovered that the Chevalier was a male. Under these circumstances, the companion and friend of the Chevalier, Madame Cole (also about 85 years of age) deemed it right to send for a surgeon, that the same might be properly authenticated to the world.¹

Is there not something more behind this case than appears on the surface? What can have been the cause or physical basis of his female instincts?

Here is another case (Fig. 13), still more curious, in which there was some doubt as to sex in childhood, but the individual was brought up as a girl. At the age of 20 there was still a doubt, but male instincts prevailed, and she changed over to a boy. The question cannot be settled by the visible anatomy

¹ For further reference see his life, written by the late Captain Telfer, published by Longman Green & Co., and from whose book these photographs were taken. His history was also written in 1861 by Jourdan of Paris.

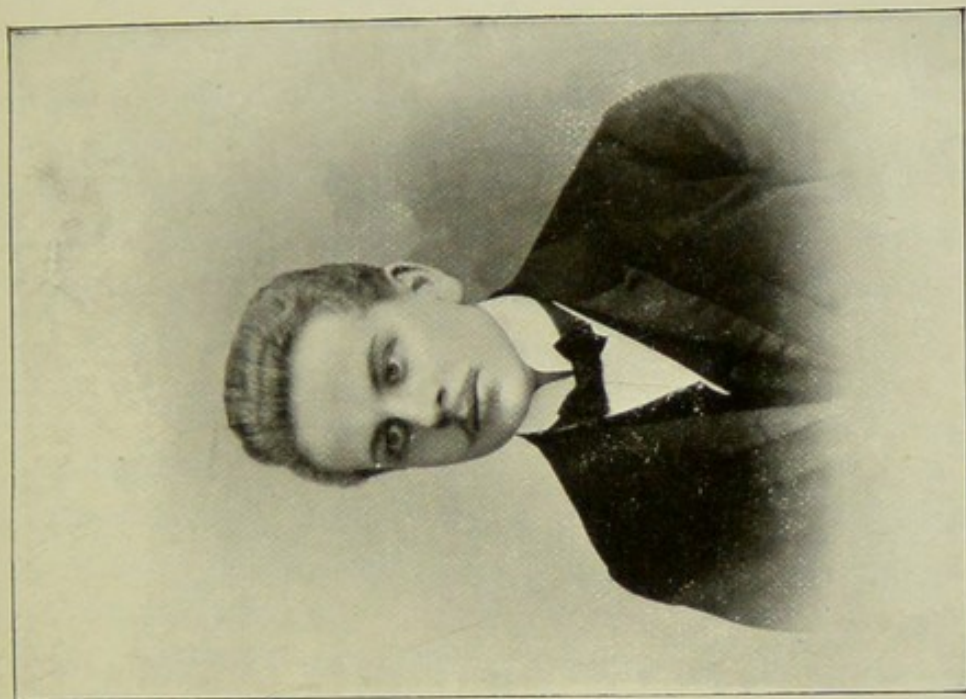


FIG. 13.

A Hermaphrodite.' Until the age of 19 it appeared impossible to determine the sex of this young woman, although observations had been made on the girl since the age of 8. At the age of 21 she changed her name and adopted male attire—becoming a waiter. But even now the sex is not only imperfect, but mixed. Though apparently a female she had strong male instincts and qualities. I am indebted to Dr. Neugebauer, of Warshau, and Dr. W. Klinkhardt, of Leipzig, for these photographs.



which is mixed, and doubt continues. The instincts are dual.¹ He or she is hermaphrodite.

Are we not, most of us, perhaps each of us, potential hermaphrodites?

Psychologically we are hermaphroditic. Do not brave-hearted men carry with them the tenderness of womankind? Here the maternal mental characters have passed into the male. In fact without them we should regard the male as incomplete. We are dual in mind—male in courage, energy and attack; female in tenderness and sympathy. Women, likewise, are courageous in danger, energetic and ready for attack in defence of offspring, partaking of maleness.

We are all more or less hermaphroditic.

SECTION D.—MISFITS IN MARRIAGE

A balance of sexing properties appears to be essential to produce normal individuals. It is when this equilibrium is disturbed that we get abnormal factors—masculine women and effeminate men.

The equilibrium of sexing.

The disturbed equilibrium drives out the normal ego and lets in all sorts of lower emotions—in fact, even what has been ably defined as the “beast.” It is thus that we can perhaps understand brutal males, even though we may not explain them. It is thus that we can understand the weak emotional woman who falls, or more correctly runs into temptation. She is only discharging the duties of disturbed functions. This disturbed equilibrium is to a large extent the key of the divorce courts, and accounts for the many misfits in marriage.

Marriage is in the main physiological. The normal male who combines virtue and courage, when allied to the normal female, meets with virtue and sympathy. What a grand future there is in store for the child when such has preceded his conception! The courage of the male protects and provides for the offspring, while the sympathy of the female brings about the care, nurture and nourishment, which means a successful and proper life. How easy does a pathological state arise when the male lacks in either virtue or courage. All sorts of miseries gradually appear in the home. But the

Marriage:

¹ See Neugebauer's *Hermaphroditismus*, Fig. 240, published by Dr. Klinkart, Leipzig.

same appear where the wife has not a due appreciation of her partner, and has not that sympathy, which was included in the term "helpmeet," when the hypothetical Eve appeared in Genesis.

Religious, When divorce cases are measured by physiological, rather than by Norman, Roman, or even Ecclesiastical laws, then do we clearly perceive the true nature of this social disease. Marriage is regarded by the Church, especially the Church of Rome, as a permanently binding moral and spiritual agreement. No doubt this is the true ideal of marriage, but what is included under the term "society" has entirely changed the conditions. We might almost say that there are two kinds of marriage, the ideal or religious, and the secular or civil; though how to define and label them requires much thinking out.

I have no wish to minimise the important bearing of religion on marriage, more correctly on married life, or on any other part of our human existence; but I wish to clear the air as to the legal control by a spiritual body over a physiological function, which has many complex bearings, both pathological and psychological.

Civil. The civil marriage might be described as based on common sense, affection, or some other emotional attraction, and may be entirely devoid of religious duty or sentiment. It often has a dash of the commercial spirit about it, something to gain, either in wealth or position. Where civil marriage becomes merely a bargain or a speculation, much unhappiness may result. If devoid of religious influence, the higher *morale* and sentiment rest entirely upon the personal equation, which is a very variable quantity.

There is no question that marriage consists of three levels: the animal, the emotional, and the intellectual or social. If any one plane is displaced the marriage becomes an anxious speculation. My advice to young maidens is that the man must display three qualities: he must be good; there must be affection; and there must be a worldly competence or a disposition towards thrift.

How the claims of the Church arose. Let us see what claim the Church has to dictate on the subject of marriage. It is hardly necessary to go back to the heathen days when possession by capture was the preliminary to marriage. It was somewhere about the seventh century

that the Church of Rome, under the leadership of Archbishop Theodore, commenced to agitate against consanguinity in marriage, incest and divorce. Yet the Church went softly so as not to meet too much opposition from the heathen Germans and the Danes, the latter being especially cruel in their treatment of wives and children.

The Christian King Cnut encouraged the ecclesiastical movement and the bishops were appointed to judge the adulterers. William the Conqueror attempted to separate the lay from the spiritual tribunals, and when this occurred the spiritual tribunal claimed full control of the marriage law. This, then, was the earliest period when the Church arrogated this power to itself, and constructed an elaborate system of jurisprudence concerning marriage. Thus in case of fine for adultery the man's fine went to the King and the woman's fine to the bishop (*Leges Henrici*). If questions arose in the civil courts concerning legitimacy in reference to inheritance it was always referred to the bishops to be decided. It is quite clear that the interest which the Church took in marriage was entirely of a secular character.

Marriage was very insecure. Thus there were two kinds of espousal:—

Sponsalia per verba de futuro, in which by verbal promise between the parties they became man and wife; and

Sponsalia per verba de presenti, in which they could likewise by promise at this very moment become husband and wife. These forms of marriage were legal and perhaps are to-day; at all events they are freely practised by the lower orders.

As religion got more hold on the people, Christians sought the blessing of the Church on their marriages. To encourage this feeling the Church sanctified the veil and the ring. Gradually the Church began to regard ordinary marriage as fornication, and to insist on a priestly benediction to the ceremony.

In 1200 A.D. Archbishop Herbert Walter commenced the system of "bans," announcing a prospective marriage three times in church and claimed that no marriage was valid unless it was done in a church, *for the sake of publicity*, and by a priest. Pope Innocent III at the Lateran Council likewise insisted on marriage in church, for the very same reason.

The English Church followed up the same customs and

according to Bracton, no woman could claim her dowry unless she had been endowed at the church door. It is quite evident that the ceremony of marriage in church had at the beginning no connexion with religion, *per se*; it was not thereby a religious custom. It was only performed in church, as already stated, for the sake of publicity, and for no other reason. The bishops in deciding legitimacy were in reality only carrying out the function of registration.

Bracton¹ narrates a curious case which illustrates these points. In 1254 a certain William de Cardunville died and there arose a question as to his lawful heir. William had espoused one, Alice, at the church door 16 years previously and of several sons and daughters, one son, Richard, 4 years old, was alive. Alice naturally put forward her son as the lawful heir. But William many years previously had lived with a woman Joan, and she had by him a son, also called Richard, who was 24 years old. Naturally Joan claimed William as her husband in the court Christian, depending on the affidation that had taken place between them. Joan won in the Ecclesiastical Court, which pronounced a divorce between William and Alice.

The Church made such confusion of the marriage law that it was driven to formulate "possessory marriage" in which actions were allowed by one party to make certain the marriage tie. In all these cases, what was called valid marriage must be proven, and they were only valid when done publicly in face of the church. Hereby the Church gained increased power.

The Church later on took up the question of divorce. While it made the marriage tie indissoluble, yet if two infidels married and one joined the Christian Church, that partner could at once be divorced from the infidel. To an ordinary thinker, who knows the instability of the emotions, it seemed a severe punishment on the poor infidel, who after all might be quite faithful according to his or her own lights.

Without in any way depreciating the religious solemnity of marriage, it is time the whole affair was handed over to the medical profession. We deal with disease and death; we stand at the threshold of life and yet marriage, which means

¹ Folia 304.

potential life, happiness or misery, success or failure, blessings or curses, is handed over to the Church. What does it mean? The Church is necessarily devoid of all biological knowledge. While it forbids marriage on account of near relationship, it permits the union of diseased individuals, whose offspring necessarily are handicapped from the day of their conception. If we could adjust these difficulties physiologically, the necessity for divorce would probably disappear. Divorce is abnormal, and the causes are abnormal and will so continue, until disease is dealt with as disease and not as sin.

Instead of talking of divorce, a destructive policy, we should direct attention towards healthy marriage. The increased luxury of to-day engenders numerous selfish appetites, so that many a man would sooner have a motor car than a wife or a child. But women must bear their share of blame, for they often give the idea that marriage without pleasure has no place for them.

A Marriage Bureau necessary.

There is evidently great need for a Marriage Bureau, as I have before suggested,¹ so as to bring healthy people together who are anxious to have children or even companionship. It would have to be under State control, but with close medical supervision.

Often the working people in Wales and Scotland ignore legal or valid marriage, as do the criminal classes. On the whole it works satisfactorily. In Scotland the illegitimate become legitimate by the marriage of their parents. Among the working classes, the two detracting factors in married life are the alehouse and the woman's tongue. I don't know which precedes the other, or how to get rid of them. Here, again, the curse falls on the children, from the hour of their conception. We owe a great duty to the working class, to teach them when to procreate. That is to say, if a woman be anæmic, consumptive, or in any unhealthy or worn-out condition, she should not become pregnant. Similarly if the father is drinking moderately hard there is a terrible injustice to his offspring. There is nothing worse for the nation than to have these large donations of unhealthy children from the lower classes. We must patiently demonstrate to the masses that it is better for themselves to have 3 or even 5 healthy

Marriage and misfits among the poor.

¹ *Education, Personality and Crime*, p. 117.

children, of full size and weight, than 8 or 10 weakly children, who when added together weigh no more than the smaller number would do if healthy.

Divorce being an expensive luxury is not contemplated by the poor. In fact, many of those who work among the poor say there is no desire for it, and if it were made easy or cheap would create an artificial appetite, which does not now exist. Those of us who know the poor more intimately than the social and religious workers repeatedly see cases where divorce or separation is desirable. There are many cases where the husbands are lazy, work but little, perhaps not at all; the wife chars, slaving from morning till night, obtaining barely enough to keep the family above starvation. With a fatal regularity one sickly child per annum is added to the family, much against the desire or inclination of the wife. In fact to obviate risk, the poor suckle their miserable offspring for 2 years or more; which is a cruel form of starvation and should be a criminal offence.

Marriage
and
misfits
among
the
middle
classes.

Among the lower middle classes, the opposite condition—desertion—plays sad havoc with the family. In this level the wife is frequently unfitted for menial work; she is less strong physically, and less able to fight the battle of life. Very few of the well-to-do have any idea of the terrible sufferings these poor people pass through, where the husband or father deserts wife and family. Such cases are extremely common and so far as I can gather are only settled on a financial basis; that is to say, the man is only liable, in hard cash, for maintenance. After that the Law looks on * * * * *

Do we not know of cases where the husband deserts wife and family for irregular practices, making sufficient allowance to keep down scandal? Though there is no physical cruelty to entitle the woman to divorce, no pen can depict her misery; especially where her "lord" tortures her by removing the children. It is to cases like these that the law offers no adequate relief.

A woman in such case, devoid of means, is totally unable to carry through the legal process of separation. There should be a State official, whom she could approach without preliminary expenses, to take up her case as a duty to the community and see it through; to do justice to the wife and the

children. The State should collect any financial allowance or alimony, as it is in reality a debt to the State—in fact, to the people.

It will be seen that I am treating of divorce more especially from the woman's side, but this is not entirely one-sided, for men have so many outlets as compared with women, who are shut up in the house all day. Moreover, the Law recognises the male as being polygamous, and allows him to commit adultery ; whereas it regards a woman as being strictly monogamous. This, as is well known, is not correct in fact, nor is it just.

The only way to approach the subject of divorce, or separation, is to look at things as they are, and inquire if they shall continue or not.

Divorce.
Things as
they are.

An adulterous male, not cruel in the legal sense, but in every way a brute, is not only a bad husband but a bad parent. Is he to be tolerated ? Is there to be no deliverance for the wife ? Is there to be no softening of home influence ? Only a most barbaric State could tolerate these things. The woman must be set free, and the husband must be made to contribute to her maintenance. Call it divorce or call it separation ; that is immaterial, being largely a question of labels. I should have no objection to the lethal chamber for such males. They are poisons to the community.

Take another case, an actual case. A woman has been deserted by her husband for 16 years, at the same time as a neighbour was relieved of his wife. Left with a young family she was cast down from comfort to poverty. She has toiled for years and raised her family successfully ; but at what cost ? Her health is ruined, and the remainder of her life is to be in suffering. Once a handsome woman, she had a chance of marriage, but the law would not allow it. Are such things to continue ? In an extravagant country like this, is there to be no State assistance for the genuine poor ?

The Law will not grant a divorce to the woman on account of desertion alone. There must be either cruelty or adultery ; and as to the latter it is clear that this is often very difficult to prove.

No
divorce
for
desertion.

This argument looks a little bit of a jumble and requires a good deal of thinking out, but would place things on a better

footing than at present. In all cases where allowances are ordered for maintenance, the State would collect the sums, and no care for this should fall on the wife. The man who sins in these matters, sins against the community quite as much as against the individual. The community therefore has a right to judge and punish, and should punish adequately.

There should be no encouragement to divorce, nor undue speed in carrying it out. Everything should be done to try and settle the home. Parents should have their interests focussed on the children, so as to divert from their personal quarrels. Conciliation committees of wise, clever men and women, with humane instincts, would attend to these affairs.

If all efforts fail, divorce is not only desirable but a necessity, and then it should be cheap. Instead of paying £30 (the minimum cost) into the Law Courts, the £30 could be spent with greater advantage on the home. The home is sure to require all it can get in the way of money.

When we consider the poor, divorce should be free, just as medical advice and skilled operations are free. Under no circumstances should divorce to the poor cost more than 5s.

Divorce now should be turned over on its side. Up to the present everything has been against the woman. The scales of justice as usual are a little lopsided, so we are fairly entitled to push the scales the other way. Man being polygamous is very apt to wish to change his wife, which ought not to be permitted. The call for divorce will often come from the woman. It is her turn now. If she has to bear the whole burden of the home, or suffer desertion, then the Law should protect her, and absolve her from the man who is a dead weight and does nothing to support her. In all these matters the physician should be listened to; he should advise, and direct.

The
lawyer
and the
physician
to work
together.

The lawyer has no claim for the sole management of divorce or matrimonial troubles. The lawyer is as ignorant of sex problems and mysteries as the layman. The physician in such matters has to consider the question of misfit and incompatibility, as well as the many psychological and physiological difficulties. There are cases, better described as incompatibles, which often do not reveal themselves until after marriage. Such occur when there are great social differences, or where

one partner, usually the wife, is morbidly religious and too critical ; or when one partner has morbid habits or excessive temper. It may be that the sexes are not pure. The male may be partially female, which would aggravate the wife ; or there may be a fair quantity of maleness in the female. Matrimonial troubles often occur at the change of life. The cure is sympathy and patience. If this cure be not carefully applied by the husband, then instead of 5 years of unhappiness, he lets himself in for 15.

All these matters the physician understands and can cure, or alleviate. On the contrary the lawyer, not having a lifetime of technical knowledge and experience, approaches the subject with the impulse and emotion of a layman. Where the physician soothes and heals, the lawyer unintentionally opens up wounds and disaster ensues. There is publicity, disgrace, permanent destruction of a life's happiness, and possibly ruin to a number of children.

It is time that as a civilised community we changed the constitution of the divorce courts. When there is no offspring, divorce may be tolerated. When there are children, divorce should, if possible, be withheld until they are self-supporting. Among the poor, similar relief should be given. In all cases of misfit, or incompatibility, we must at once endeavour to restore family life for the sake of the children. This alone may effect a cure in the parents. Résumé.

All these difficult questions of sex could be answered and the conditions involved improved, if we would pay attention to the physiology of the subject and instruct the people, both rich and poor. In the main all these questions, which present so many aspects, can only be settled by the conjoint sympathetic action of the three professions. We can at all events act together to level up the general tone of Society on these subjects.

Undoubtedly marriage, with the ennobling and refining influence of family life, is normal and physiological. By contrast let us see how the degenerate or unfinished man regards marriage. At the colony of Merxplas (Ch. XV), in the year 1909, out of a population of 4,505, 2,978 were unmarried ; 130 were divorced ; 693 separated ; while only 704 were married or widowers.

CHAPTER IX

DEVELOPMENT AND ITS DANGERS

First principles must be sought for—The evolution of the human species—The brain in evolution—The effects of arrested development—Definition of the term reversion—Definition of heredity—Congenity—The meaning of predisposition—Racial resistance to certain diseases—Is degeneracy congenital or inherited?—Consanguinity in marriage—The importance of the male—The senile sire—Filial regression—The transmission of psychological characters—Must educate the masses as to procreation.

First principles must be sought for.

IN the last chapter we have made a study of the germinal matter and of fertilisation. The opportunities for investigation in the higher types of the animal world are denied us, but observations among the lower forms of life enable us to establish principles, which apply throughout the series. We must not fix our attention on the many interesting details, so much as upon the broad general outline of the subject. In a problem of a geological character, while noting the detail of the strata, we are led to correct conclusions by a knowledge of the forces which placed those strata in their present position. The same forces which twisted the masses of volcanic origin, upheaved and contorted the muddy and sandy layers previously deposited in peaceful lakes. The key of every geological problem, and indeed of every scientific problem, lies in first principles. The geologist carries the key about with him, always ready to be applied. So does the scientist. In biology however we are just on the threshold, having a certain amount of doubt and hesitation as to our keys. This fact we are bound to acknowledge. We must be ready to admit any fallacy of argument, regretful of the paucity of detail, on which to found our rules and principles.

The properties of living matter are nothing short of miraculous; but as the possibilities grade up so do the risks. It requires but little imagination to realise what a small amount of misdirected force may accomplish in the way of disor-

ganisation. Thus, D  lage¹ cut the egg of a sea-urchin in two and obtained a larva from each; while by shaking a developing ovum in a tube full of water, two animals appeared instead of one. E. B. Wilson by shaking the developing ovum of a lancelet obtained four animals, instead of one.

The injury and risks to the human ovum are by no means hypothetical. Compare the gay woman of Society, who gads about when she should be resting during the earlier period of pregnancy, with the more sober-minded mother, who takes every care for the sake of her unborn child. The latter adds virility to the nation, while the former brings reproach on the upper classes from the degenerates she bears. Or contrast the poor Jewish mother, the way she is sheltered for the benefit of her offspring, with the Christian mothers, who have to slave in factories and potteries during the whole of their pregnancies. We all know what weedy children the latter produce, not to speak of the high infant mortality.

If we carry the matter to its logical conclusion, the same disturbance which produces monstrosities and physical deterioration in lower forms of life, not only apply to the higher forms, even to the human, but may be the cause of mental and moral disasters in the case of mankind.

This much we do know, that there is not one principle for germinal material of the plant and another for the animal; that the same laws which govern life in the lower animals must apply to the higher; and the subtle forces with their far-reaching effects, which are observable among simpler kinds, must have more distant and distinct influence when applied to complex organisms.

An inquiry, such as this treatise is devoted to, is wrapped in mystery. It is indeed wrapped in uncertainty, although biology is founded upon certainty and fixed laws. The uncertainty arises because we are not cognisant of all the hidden forces, nor of the full application of the forces which are already known. In the former chapter we got as far as the fertilised ovum, which is a perfect cell, yet a simple cell, formed by the union of two cells, sperm and ovum. It is a wonderful thought to contemplate that though the human ovum is so small a body ($\frac{1}{100}$ of an inch in diameter) yet it is endowed

¹ *L'H  r  dit  * (Paris).

with immense potentialities for good or for evil, for success in life or for failure, for vigour or for weakness, even for righteousness or for crime.

The
evolution
of the
human
species.

When the journey of life commences, this ovum, by a constant division of the cell and cells, builds up an embryo, which, as it were, passes through or dips into the many lower, previous forms of life. In scientific parlance, the human embryo represents, or re-represents, the past chain of evolution. If we made a complete analysis, we should probably find each distinct type or form of animal life represented during the growth.

Huxley, when I attended his lectures, placed the *Tunicata* at the top of the Invertebrata, because it had a suggestion of a spine, bridging over the gap to the Vertebrata. In the embryo this is represented by the noto-chord during the first few days. The fish too is represented in the human embryo, in what we call the visceral or branchial arches. So with the kidney, in the first month of foetal life; one cellular organ, the pro-nephros, corresponds to the kidney in the young amphibian; while another renal structure, the meso-nephros, is represented in the kidney of the fish.

The simple auditory organs, the otocysts of lower forms, occur during the first week of foetal life; while the development of the circulation, of the skull from cartilage to bone, and even the segmental arrangement of the organism, are repetitions of what exist in the lower animals. Surely these facts supply confirmation of the opinion that man stands at the upper end of a continuous system of evolution.

The community looks upon man as a sort of superior creation, dropped down from the heavens; and therefore it expects a good deal from him. This is quite the reverse of the truth. Man has appeared after a steady process of ascent, and the marvel is that he should be so good; and there is no great wonder when he relapses either in structure or function.

The
brain in
evolution.

In no part is the path of evolution so striking as in the human brain, which at first resembles that of a fish, and a lizard, and at the fourth or fifth month partakes the lower mammalian type.

Man and ape stand above the lower animals in many particulars, one of which consists in the development of the fissure

of Rolando. A great deal of investigation is being carried on in this undiscovered territory, which all tends to show that the brains of the apes are not very far removed from our own. It is not a mere difference in kind, but in degree or amount.

Thus in the human foetus the area of sensory vision—the calcarine fissure, at the fifth or perhaps sixth month, is in the same condition as in the higher apes. If development proceeds on normal lines, the human foetus improves greatly in structure and simultaneously in function. But we find in a certain percentage of lunatics,¹ in the fellaheen of Egypt,² in certain Chinese and aboriginal people, that their visual areas are not up to the normal type, sinking back towards what we find in the anthropoid apes. It is unnecessary to point out that the people alluded to are of very low intelligence, which undoubtedly is partly due to this particular arrested development. They are, figuratively speaking, no more than six month foetuses; but as their bodies and limbs are normal, they are treated as normal.

Vision is the highest intellectual function; not only seeing but being able to understand and sort out what we see. If we are damaged on the visuo-sensory plane, we cannot see or obtain enough material with which to develop normal ideation, which fact in itself accounts for a great deal of what we call crime.

I was recently talking to a man, who had earned a great reputation for laziness. There was a very marked pause between the time of my asking a question and his answering, although his hearing was good. His vision was behind normal speed; that is to say, his ocular apparatus had been passed as normal, but the visuo-sensory part worked very slowly. When I pointed out a blackbird to him, it took nearly two minutes to properly make out the position, shape and colour of the bird. I compare his visuo-sensory area to a very, very slow photographic plate, which demands a long exposure and then may produce an under-developed picture. Yet this poor man's physical "reversion" had brought him twice in contact with the law, costing him one year in prison, with many added punishments for repeated failures in senseless

¹ Pointed out by Dr. G. A. Watson. ² Described by Elliot Smith.

tasks. This is not justice, whatever the lawyer may think. It so happened that a social organisation saved the victim from a third punishment, and he was placed in a simple environment to which he could respond. His laziness was then replaced by industry and even energy. I cannot leave this poor man without referring to the fact that he has a very large family.

The effects of arrested development.

If an arrest occurs—not in what may be styled evolution—but at the later period of development, as for example after the seventh or eighth month of foetal life, though the defect might not be so apparent, yet the damage to mentation would be extremely serious. I hope in this treatise to place before the reader some phases of this important subject; particularly the arrested development of the pyramidal layer of the grey cortex, as found in a degenerate.

Nature is the architect and designs the type. Nurture is the builder, carrying out the details of the plan—the structure. The architect may fail and there is a reversion or arrest in evolution. Such is shown in my former book,¹ where a poor imbecile woman had only the mentation of an animal, and had a brain of much lower type than that of the ape. Her brain only weighed 8 oz. instead of 44 oz. Imperfect or unfinished structure may be the result of arrested development—to put it figuratively to the bankruptcy of the builder. To this calamity we owe most of our misery, and to this side of the problem I wish to direct special attention.

In an investigation of this kind, open to the severest criticism, we must be clear as to our terms.

Definition of the term reversion.

I mentioned the term “reversion.” Different writers attach different meanings to this term; some do not allow that reversion exists. As I take it reversion is a throw back towards or to the original type, and does occur. Thus, if you cross two kinds of white peas, the offspring may be purple, like the primitive type. This is a throw back or reversion, and there is a great tendency to it in Nature.

On the other hand, the imbecile woman, and the lazy man, are not reversions, because they never reached the proper level. The white pea was raised above the primitive level and fell back to it.

¹ *Loc. cit.*, p. 76.

These two human beings were instances of arrested development; but many would consider that as they were arrested during their progress along the chain of evolution; they exhibited a so-called reversion at that point where the chain snapped. Either view will apply according to the particular vista of the scientist.

The important part of this chapter is to recognise the dangers to the ovum after fertilisation, or conception, during the nine months of intra-uterine life. Here again we run up against terms and definitions, which have caused much confusion. We have to deal with heredity or inheritance, predisposition, and what is meant by the adjective congenital, for which we ought to coin the word "congenity."¹

Whatever is in the ovum or the sperm previous to conception is inherited.

Definition of heredity.

Herbert Spencer defined heredity, not as a force, but as a term for the genetic relation between successive generations. By the term inheritance, he includes all that the organism is, or has to start with, in virtue of its hereditary relations.

The two opposing opinions, at present in the ring, are:—

First, that the body, or soma, has nothing to do with the germinal matter, except in relation to nutrition and perhaps toxin poisoning; while the other opinion is that the soma may influence the ovum or the sperm.

The former opinion prevails and wears the appearance of strength and accuracy. Nevertheless in matters of so-called inexact science, obstinacy may lead into error. The latter opinion lives in an atmosphere of doubt and hesitancy which spells weakness; nor has it much material evidence to support it. Darwin's idea that each part of the body contributes something to the ovum and sperm is not in favour, if indeed it is accepted by a few.

Many organic diseases as insanity, hæmophilia and neuroses, which show no signs at birth, but develop at later periods in a most unwelcome manner, support the idea of transmission by heredity. They undoubtedly pass in the germ plasm.

We can make heredity a little clearer by considering the scope of congenital conditions. Many diseases, which have been considered inheritable from parent to child, are now

Congenity.

¹ French term, *congénite*.

regarded in quite a different light. They have been traced to infection at or after conception. When this happens it is not germinal, but a matter of environment. Environment has its influence quite as much before birth as after.

Tubercle is the most typical of congenital affections. The father may be affected, the mother may be free, and the child is tubercular. It looks like an inheritance from the father. It is however a direct infection from him, either impregnating the ovum, or infecting it in the uterus. Syphilis may be conveyed in the same way. Or the mother may be tubercular, and the ovum (otherwise free) is infected in the uterus.

Dr. Sambon demonstrated how hens' eggs may be contaminated in the ovi-ducts by diphtheria, before the shell and albumen are secreted around the yolk. He informed me that he had found organisms and even diphtheritic membrane inside the shells of fresh eggs.

Smallpox and scarlatina may be transmitted by the mother to her unborn babe. This is an infection through the placenta; the toxins being actually in the maternal blood.

The
meaning
of predis-
position.

Now that congenital infections have been explained the question of predisposition arises. Families who develop tubercular diseases are supposed to be specially predisposed to tubercle. Something has devitalised the individual's body, that he falls a victim to infection very readily. We are surrounded by sources of tubercular infection, but some of us can resist them.

This predisposition is considered to be something acquired; but may it not be a disinheritance through a cycle of changes, probably chemical, of some protective agent? Nature provides us with barriers of resistance. Medical science is directed towards inquiring into the nature of these agencies, and we know that the leucocytes share in this activity.

Racial
resistance
to certain
diseases.

In some diseases repeated attacks strengthen a race against a particular disease—as in measles, which is mild to Europeans but fatal among the dark races. Some treat this question on the principle of the survival of the fit, or resistant. There is more in it than selection. The whole race acquires a certain immunity. It is a question of physiological chemistry.

On the shores of Chili, the natives die of phthisis, while Europeans go there to seek cure. On the other hand Europeans

succumb to typhoid, while the natives are scarcely affected by it.

Though tubercle makes terrible ravages among Europeans, yet as compared with other races, we probably have a certain amount of racial resistance.

Smallpox furnishes another example of racial resistance. In Malta it affects the natives very mildly, but the same form attacks the English with great severity.

What does this racial resistance consist in? Is it congenital? Is it absent in the ovum but acquired during the latter part of intra-uterine life, when the foetal tissues are bathed in the "resistant" maternal blood? Would that furnish protection for a life-time? It does so in the case of intra-uterine smallpox. Or can it be germinal, and an inherited resistance? Are the ovum and sperm, so acted upon, for instance by the measles or disease resisting blood, as to absorb a quality which protects the next generation?

There is some appearance of support for the theory of an inherited germinal resistance. For instance, smallpox has lost a good deal of its virulence, even to the unvaccinated, among nations which have submitted to vaccination; as if the repeated vaccination of generations had in some way modified the germinal matter. We must have benefited as a race by vaccination, or unvaccinated cases of smallpox would assume special virulence, as in the pre-Jenner period. Is it congenital, in the womb, or germinal, before conception? Some diseases, even tubercle, may lie hidden for two or three generations and then reappear. Does not this wear the aspect of heredity even if it be the inheritance of a weakness or negation? The subject is still unexplored, and my point is that we must not let the pendulum swing too far in denying the influence of heredity. We must not forget that the blood-forming bone marrow, and every constituent of the blood is primarily derived from the ovum; and the chemical properties of the toxic blood may perhaps act upon the ova of the next generation.

Is it not possible to state it in this way:—

1st generation: ovum, blood, toxin (smallpox, measles, tubercle, etc.).

2nd generation: ovum resistant to toxin; blood resistant to toxin; another fresh dose of toxin during life-time.

3rd generation: ovum twice as resistant to toxin; blood twice as resistant to toxin, and so on.

In this way a race might acquire toleration, immunity, or resistance against a disease, which otherwise would stamp out the race. It is well known to medical men, that 50 years ago measles was very fatal to the coloured races of South Africa. There is the classical case of a ship coasting West Africa with measles on board, the disease was wafted ashore and more than decimated the inhabitants. Is measles as virulent to the natives now as then? Travellers can tell us. If it is less virulent—why? Is it the survival of the fit, of those who have a natural resistance, or does my theory of acquired racial resistance explain it?

I only offer this suggestion to show that there may be a closer relationship between the soma and germinal material than is at present recognised.

Is degeneracy congenital or inherited?

The question of degeneracy being transmitted is by no means a settled question. We require to know how far it may be transmitted from parent to child.

We know that infectious diseases, and alcoholism, affect the nutrition of the germ plasm and in this way produce degeneracy. Does not this suggest rather more dependence of the germ plasm on the soma than is generally admitted? If a person be convalescing from an infectious disease we know that the offspring may be delicate; but under some great sorrow or mental strain, there is likewise a weakening of stock, where infection and toxæmia can be excluded. In practice we meet many delicate persons whose weakness is traceable to this cause; so that we must not ignore it, even if we cannot explain it.

If the soma had no influence upon heredity, then a physically healthy imbecile woman, of an average family, ought to bring into the world as healthy children as her brothers or sisters. Does this happen? In other words admitting the woman to be of good stock, she is an accident, her brain is affected; but the germinal material, being independent of her poor body, ought to bring the same good stock into the world. We require a large number of cases to clear this up, and I think observation does not support the hypothesis.

On the other side of the picture, all our general knowledge

and experience show that if we improve the individuals both physically and mentally, we improve the offspring in the same direction. If these were simple questions of environment, and not of stock, or heredity, then we could at will produce Kelvins and giants of intellect from the uneducated masses and even from degenerates, which appears to be a *reductio ad absurdum*.

¹ Horsebreeders find that habits or qualities are transmitted. Thoroughbreds fail if their ancestors have been pampered, or their training and tests have been omitted. Such neglected stock transmit effeminacy and negative qualities.

Darwin's great work, on the fertilisation of plants, has proved beyond all dispute that self-fertilisation is not so beneficial as cross fertilisation. Flowers fertilised by their own pollen produce fewer seeds and smaller fruit, tending in time to sterility. I expect if degeneracy were an object of inquiry information would point that way.

Consanguinity in marriage.

The pollen of another plant of the same variety is prepotent over the plant's own pollen.² If one flower be fertilised with pollen from another flower on the same plant the weakening effect is nearly the same as in self-fertilisation. I introduce the term weakening effect purposely, so as to obtain the physiological application and inference with regard to humanity.

The reason I do so is because Darwin writes, "The difference between the self-fertilised and crossed plants cannot be attributed to the superiority of the crossed, but to the inferiority of the self-fertilised seedlings, due to the injurious effects of self-fertilisation."³

Incest is rare and usually sterile. Nature evidently provides against it. But there are cases recorded where the offspring were malformed and imbecile. It is quite evident that Nature opposes marriage within the family circle. Every strong, well marked family is a variety, perhaps a sub-variety. It is much more natural to make further sub-varieties by crossings, rather than fertilise within a variety. This is why relations are wise not to intermarry, for if there be any constitutional weakness it may be accentuated. The Church discovered

¹ *Horse Breeding*, by B. von Oettingen (Sampson Low).

² *Cross and Self-fertilisation*, p. 391.

³ P. 437.

this by observation, and drew up rules as to degrees of consanguinity.

The importance of the male.

The tendency of biologists is to fix their attention on the ovum, but surely Darwin's work lays emphasis on the male element—the pollen or the sperm. To get the most favourable results in cross fertilisation, the plants which are crossed must present marked differences.

"It is really wonderful what effect pollen from a distinct seedling plant, which has been exposed to different conditions of life, has on the offspring in comparison with pollen from the same flower or from a distinct individual, but which has been long subjected to the same conditions. *The subject bears on the very principle of life*, which seems almost to require changes in the conditions."¹

The whole vista of marriage is enlarged by Darwin's wonderful research. If slightly altered conditions improve individuals and benefit the crossings, then there is reason to expect still more improvement where plants and animals have been exposed to very different surroundings.² This is apparent all around us. It exemplifies that environment can influence development. We are discussing pollen, but we can apply the inference to humanity.

The senile sire.

This brings us to another subject which is too important to the race to be omitted on account of any false delicacy. I allude to the marriages between young girls and old men. It is not physiological. If it ended in this we should not be justified in interfering in private bargains. It is the progeny we are concerned about. They are often stunted in form or weak-minded. In most cases they are, what we call, old-fashioned. The young people are robbed of physiological youth and it is very hard on them.

It is well known that breeders will not mate an old sire to a young mare. The offspring are weak. On the other hand they may mate a young stallion to an old mare with good results. We can only understand the problem scientifically by knowing of Darwin's discoveries. The male element is evidently of the greatest importance to the offspring. I fear that just now the ovum is receiving more attention than is due to it. Here is a fresh study open to us, the offspring from senile males. Another subject for investi-

¹ *More Letters*, vol. ii, p. 406. The italics are mine.

² Darwin's *Variation under Domestication*, 2nd edition, vol. ii, p. 127.

gation is whether the male or the female children are most affected by an old sire. The medical profession might canvass every member with leading questions on this subject.

From our present knowledge we should make wise laws, to prevent such acts as do not accord with the laws of Nature or physiology. If every child of 15 understood the physiology and fertilisation of the vegetable world, there would come a period of more wholesome marriage and indeed of race regeneration.

We have great hope for the nation, if we understand the law of "filial regression," as discovered by Sir Francis Galton.¹ Galton demonstrated that there is a continual tendency in Nature, especially in the human family, to return to the mean of any stock, or any quality. That is to say, if six fathers stood 6 ft. high, and six stood 5 ft. 6 in., the offspring of each group would tend towards 5 ft. 9 in. The tall fathers would not have tall sons only,² and *vice versa* the dwarf fathers. The offspring tend toward the mean. To be accurate Galton made the mean stature, 5 ft. 8½ in., and he found the deviation of the sons to be equal to one-third of the deviation of the parent. There is not then a sudden complete return to the mean or average, but it is gradual. Galton also pointed out that a son is not the product of his father alone, but of a large ancestry—1,024 ancestors, if we go back 10 generations. This produces a sort of levelling down, and levelling up, of the population to one common racial standard. Herein lies our chance of success—to do some levelling up with the masses. But we must remember that it can only be done on physiological lines. Pauperisation, and the removal of the stimulus of competition, destroy; whereas we want first to nourish and then to rouse to energy. Socialism employs the reverse process. It aims at ameliorating by the weakening methods of pauperising. Parliament increases the mass of degeneracy, when in a socialistic frame of mind.

Filial
regression

There are many amongst the poor and even degenerates, who have some good stock behind them. Thus if we take a

¹ *Natural Inheritance*, 1889.

² See a case of tall sons through three generations, which contradicts this theory, chap. x, p. 198.

human wreck of to-day, it is quite reasonable to suppose that his grandfather was good, and previous ancestors of sufficiently good average or mean. It might be wise to remove the degenerate permanently; but if he has offspring, we should endeavour to work them up to a higher level—in fact, restore them.

Karl Pearson expresses it thus:—

“A man is eventually the product of a population of this size (1,024 ancestors in the tenth generation), and their mean can hardly differ from that of the general population. It is the heavy weight of this mediocre ancestry which causes the son of an exceptional father to regress towards the general population mean; it is the balance of this sturdy commonplaceness which enables the son of a degenerate father to escape the whole burden of the parental ill.”¹

The
trans-
mission
of
psycho-
logical
char-
acters.

Great dispute ranges around the question whether psychological characters are inherited. Biologists say that character is entirely a matter of environment and imitation. We cannot offer any ocular proof, but general evidence is in favour of its inheritance. Children who have never seen their parents have grown up to resemble them mentally. It is also generally observed that the more intelligent people beget intelligent children, and *vice versa*—always allowing for the fact that supra-intelligent people often have dull children, as if they had exhausted themselves in that particular direction.

A remarkable case of this kind came under my observation, many years ago, where a young lady, of illegitimate birth, was absorbed into a middle-class family. She was the daughter of a peer belonging to an old family, by a handsome maid-servant. The parents are dead, and the girl never knew of her ancestry. Nevertheless her superior haughty manner, her *fierté*, her whole style was a most interesting study. None of it was due to imitation or influence; she was superior to the children around her. It was innate. Why, indeed, should it not be? If certain qualities belong to certain families or individuals, it would require a new set of laws to provide for their non-transmission to offspring.

But there are many cases like these. It is a matter of common observation when a dissipated father deserts the family, a son who has never known the father, in spite of all precautions and care, grows up just the same loose, immoral

¹ *Grammar of Science*, 1900, p. 456.

style. Surely there is something in the German saying, "a chip off the old block."

But if we come to first principles, where the brain is recognised as the organ of the mind, and we know that every brain differs just as every face differs, so must every mind or character differ. When types of brains are formed or evolved, surely the offspring must grow to the parental type of brain.

Here is an interesting family history, in which alcohol and suicide affected three generations. The families were intellectual, of fine physique and well provided with this world's comforts. The grandfather, A, was an alcoholic and committed suicide. He had four children, B1 to B4. B1, an officer, committed suicide. B2 was alcoholic.

B3, extremely intelligent but very neurotic, died at the age of 68 of apoplexy. He left five children—C1 to C5. All of his children were healthy, of fine physique but neurotic. They were conspicuous for poor memories and tended to alcoholism. C5 committed suicide.

B4 was also intelligent. He married a wealthy woman and had two children, C6 and C7. He died in an asylum. C6 and C7, being wealthy, had no stress to fight against and held their own. C6 married well, but C7 remained celibate.

Does not this tableau suggest a true germinal inheritance of some structural and material defect, as yet beyond our ken, but distinctly manifest in the unstable psychic conditions?

The moral of all this research and knowledge is, to educate the people up to better ideals of life, and to a higher type of hygiene—the hygiene of procreation.

People must be well fed, especially in infancy, and mothers during pregnancy. Alcohol must be removed from the dietary. It is a poison of the worst kind.

People affected with tubercle should not marry; and syphilitics should be most carefully guarded, both as to cure and non-procreation.

It is only by this means we can improve the race. The State has criminally neglected its duty and probably will continue to do so. The poor injured humanity that we crush and imprison, instead of being punished for what they cannot resist doing, should be compensated for their neglected childhood and ruined lives.

Must
educate
the
masses
as to
procrea-
tion.

CHAPTER X

THE PROBLEM OF HEREDITY OR THE CONTINUITY OF DEGENERACY

SECTION A. BIOLOGY AND SELECTION: If the answer be affirmative the situation is almost hopeless—Biological phenomena must guide us—Natural selection—Artificial selection—The human races or race—Man's place in Nature—His pedigree—The negroid races—The missing link—The negroid characters—The relation of the negroes to the white races—The Jews—After the Dispersion—"The blood is life"—Nature always trying to repair damage—Breed in animals and man.—SECTION B. MENDELIAN PRINCIPLES: Mendelism suggestive but not final—The fundamental principle. What is in "the blood" may reappear—Mendelism and hereditary disease—The germinal mystery of bleeders—Mendelism as applied to human family—Heredity of mental qualities.—SECTION C. DEGENERACY: A more accurate view of degeneracy required—It resembles an imperfect rudder—Many criminals are not degenerates—Are wicked men really normal?—The cause of wickedness negative rather than positive—Variations—Mutations—Sports and Reversions.—SECTION D. NATURE AND NURTURE: Environment reacts on heredity—Bad heredity *de novo*—Degeneracy due to social environment—The Jukes family—How disease becomes a starting-point for degeneracy—Cases to illustrate both the questions asked for—Case of four generations A, B, C, D.—SECTION E. THE ROYAL COMMISSION ON THE FEEBLE-MINDED: Cases—Is feeble-mindedness spontaneous as the Royal Commission suggests?—Secret taints—The purity of the Quakers—Degeneracy follows in the wake of civilisation—Women working to keep men—The Royal Commission aimed at quantity rather than quality of evidence—The two important questions in degeneracy—How can we arrest the descent of degeneracy?—The pith of the problem.

SECTION A.—BIOLOGY AND SELECTION

If the answer be affirmative the situation is almost hopeless.

It is of the greatest importance to us, to-day, in the present generation, to ascertain if the degenerate not only can but does transmit his degeneracy to his offspring. If such be probable, or even possible, we are now running up an enormous bill for those who follow us. A bill, whose enormity cannot be imagined much less expressed in figures. Amongst the items of the account are chronic poverty, starvation, disease, misery, crime, vice, cruelty to children and women, illegitimacy, sexual immorality and depravity, the crushing and holding down of the weak and the far-reaching, inter-penetrating

effects of unbridled selfishness. The justification for these broad statements will be abundantly found in the earlier chapters.

The social or national effects of degeneracy are all included in one word—decay. Whether you view them from the commercial side, or politically, or Imperially, there is only one word which defines the situation, and that word is—decay.

With such an alarming statement and the expression of such a hopeless situation, some of my critics may, in a moment of thoughtless malevolence, unjustly describe me as a sexton. This, however, is the reverse of the facts, for I have spent my whole life in a calling diametrically opposed to such a functionary. Is it not the duty of the healer to warn and forewarn, especially as regards incurable or mortal diseases ; and are we not now, nationally, in the tight grip of a mortal disease—degeneracy ?

We have decay rapidly advancing within ; we have political lunatics forcing the pace ; and we have jealous neighbours awaiting their opportunity, cutting off little bits here and there ; and yet we sleep ! It is only in the faint hope to attract attention that makes me write in these, not too emphatic, words.

In dealing with lower animals, where we can regulate and circumscribe the conditions, observation often leads us, *à priori*, to the truth. We amass what appear to us as facts and make fairly correct inferences. But in the extraordinary complexity of human affairs some little thing, some small factor, is overlooked which upsets all our calculations ; and besides what we do know, we must always leave room or doubt for what has not yet been discovered.

It is only by a clear understanding and accurate knowledge of biological phenomena that we can unravel the problems under consideration. The same laws which govern the lower forms of life rule our destiny. Our artificial habits are always dragging us away from natural law, while at the same time we endeavour by Acts of Parliament to obtain sanction for our errors, in the vain hope that the laws of man can override the laws of Nature. Disaster is the result. It shows itself before us in the shape of degeneracy and national decay. This is where Parliament and the powers that be, even the

Biological
pheno-
mena
must
guide us.

elected of the people, are of no value to the race, on account of their ignorance of first principles.

Natural
Selection.

Darwin believed that the main factor in determining the cause of organic evolution among animals and plants lay in Natural Selection.

A. R. Wallace¹ called it the theory of the survival of the fittest; which involves a progressive evolution by the elimination of the unfit. As a matter of common knowledge and experience, there is a terrible slaughter of the unfit, in the lower animal and vegetable world.

There are many factors which favour protection of individuals, but this interesting part of biology does not concern us here. There is, however, one factor of great importance especially in man, the inbreeding of good qualities. This is in fact almost essential in the competition of life. It is the key-note of the problem before us in this treatise. Domestic animals, like horses, cattle, pigs and poultry, are governed by the same principles. Certain qualities are necessary to keep up the survival of the best breeds. It is not a matter of beautiful coloration, and mimicry of surroundings, as with the insects. It is a matter of equipment; readiness for attack or defence.

Artificial
selection.

The breeding of domestic animals under the direction of man is a matter of artificial selection. If an animal does not breed true, or its offspring has any defects, the breeder throws the animal out. As much as possible he pairs animals showing good qualities. A mare may throw off foals which are weak in limb or delicate in constitution. Such cannot be used for breeding. The defective animals must be stamped out. The same with the sires; after trial many may have to be rejected. Artificial selection has produced good milkers among cows. Improvements in stock are likewise obtained among pigs, poultry, pigeons, dogs and other useful animals.

Before quitting this important subject I shall allude to one historic example, that of the Chillingham cattle. They are wild, and always breed true. They are supposed to have been enclosed in Chillingham Park, near Wooler, since the reign of Henry III. Bewick and other naturalists consider

¹ *My Life, a Record of Events and Opinions*, vol. i, p. 361.

them to be the same as the primitive, diluvian *Bos primigenius* ; the wild ancestor of most of our breeds in Europe.

These cattle are small and white, with black or red ears. The muzzles and hoofs are jet black and the horns, which are rather small, are most beautifully curved. They are exceedingly handsome animals.

Tamed, domestic cows have, when in season, been turned into the park and admitted the bull. The progeny have invariably resembled the sire. The young not only are after the wild type, but actually retain the fierceness of their sires. If this fierceness of the bull is at all a psychological quality, it rather favours the transmission of mental qualities. One of the cows of this wild stock was tamed and crossed by a country bull of good pedigree. The progeny resembled the mother, being entirely white, but the ears were brown instead of red and the legs were mottled.

These interesting experiments show that the qualities of the wild cattle were dominant in both male and female parent. There is then a strength in pure breeds, which we cannot and must not ignore, even if unable to explain it. There is also an indication that the male parent carries on the characters of the stock. I suppose something of this kind passes down actually and physically in our more purely bred families. If this be so, then there is something to be proud of even in a family name, and socialism errs in desiring to destroy breed. In the case of the female white cow, crossed by a pure bull of another breed, the progeny had brown ears instead of red, and mottled legs instead of white. The dominant characters were not so strong in the female as in the male, and this is what we observe when the daughters of good families marry. Their traditions may be carried on for a time, but, as generations proceed, are swamped by the fresh male blood. Probably this physical fact has been understood, though not expressed, by the great Human Family ; and that is why sons are more appreciated than daughters.

This problem concerning the Chillingham cattle is either a case of a character being prepotent, because it has bred true for a vast number of generations ; or a specific case of Mendelian dominance, which is held to be independent of the number of generations that the character has existed.

It is important to remember the difference between these two factors, prepotency and Mendelian dominance. Prepotency, in the ordinary acceptation of the term, would seem to relate to a whole individual, and to consist in the power he has of impressing the sum total of his characters on his offspring.

Dominance is a specific attribute of unit characters; and a dominant character behaves in a perfectly definite way on crossing.

The following is an example of prepotency in an ordinary middle-class family. The father was conspicuous as regards height, feature, colour and complexion. His sons resembled him. He had a child by a servant, and this, a boy, resembled him quite as much as his own sons. The sire was evidently prepotent over the two mothers. Now that the boy is in his teens this resemblance to his father is more marked.

The
human
races or
race.

When we look round the peoples of the globe we see many races; some prepotent like the Jews, or virile hybrids like the English; while the aboriginal tribes and negroids are evidently at a lower stage of evolution.

Forty years ago it was thought that man descended from three pure races, white, yellow, and black; and that soil and climate did the rest. A. R. Wallace, in the sixties, expressed the opinion that man came from one race and that natural selection was responsible for making different races.

Metchnikoff¹ actually thinks man owes his origin to a sudden variation of some anthropoid ape. Some lucky ape produced offspring with new properties; conspicuous among them, were a large cranium and a brain of abnormal size leading to an extraordinary development of intelligence.

Man's
place in
Nature.

Man's place in Nature is still an object of great interest to the anthropologist, and concerns not a little the criminologist. We have to relegate to tradition and to the poetry of past ages, that man has fallen, or that he was made but little lower than the angels. The truth is man has risen.

The latest idea is that we all came from one common ancestor, which appears to confirm the Biblical allegory of Genesis.

The
negroid
races.

It is generally thought that ancient man was of negroid type. The black races of West and Central Africa, of the Pacific Islands, and of Australia and Tasmania are considered

¹ *The Nature of Man*, p. 57.

to be negroid. Palæolithic man was negroid. The famous Gibraltar skull is narrow and high and exactly corresponds to that of the present Fiji native. The same occurs in the skeletons of the Grimaldi race, found near Mentone. The latter are supposed to be 60,000 to 80,000 years old, perhaps older than the Neanderthal remains. It is Professor Arthur Keith's opinion that the ancient men of Southern Europe were negroid.

Among these black races the Tasmanian is the most primitive type and the Australian aborigine an advanced form. The pigmies of the Congo are probably the progenitors of the whole of the black people.

An attempt has been made to force a missing link between man and ape, the *Anthropopithecus erectus*. Schwalbe¹ considers that the remains found near Java, a part of a skull, a lower jaw and a femur, are nearer to the ape than man. In any case the material seems too limited for deciding such an important problem.

The
missing
link.

There is a transition along the whole animal kingdom from one series to the series above, but there is still quite a respectable difference between man and ape. The ape in some details resembles the early human foetus, and so does the negro. But there are many important differences. One of the special features of the negro is the prominent, central, frontal boss. In the European there are two frontal eminences, in the negro only this one. It is caused by a fusion of the narrow frontal bones.

The
negroid
charac-
ters.

The orbital plates are not horizontal, or at right angles to the frontal bones, as in the European, but fall away downwards at an obtuse angle. This has the effect of pushing the whole face forward, causing the prognathism which is such a feature both in Negro and Chimpanzee.

The negroid is devoid of the frontal superciliary ridges or brows; and the skull is narrow and very high.

It would appear to me to take a lot of soil and climate to change those large fleshy prognathous jaws of a negro, and the many other conditions, to a European. We are rather apt to carry the specialisation theory too far.

¹ G. Schwalbe, "Studien uber Pithecanthropus erectus," *Zeitsch. f. morph. u. anthrop.*, vol. i, pp. 16-240, 1890.

The
relation
of the
negroes
to the
white
races.

Negroes are inferior to the white races. The negro's brain is of simpler pattern and inclined to the foetal type. As a man he has still the build of a European boy. His mental characters are essentially juvenile. Nature intended him to be cared for by the higher races, which however does not justify bondage or cruelty. Slavery is an abnormal condition, but it is not in accordance with biological principles that the black man should be on an equal footing with the white man. The negro is a lower development, and I think the more we explore the criminal and the degenerate, we shall find that in their "unfinished" condition they are reversions to the simple type—as it were to primæval man. If this be true we should recognise it and not measure them by such high standards. In dealing with the criminal we must always retain this view, not as a possibility but as a reality; not as an excuse but as an explanation.

The
Jews.

We may learn a great deal by studying the history of the Jews, who are an inbred, prepotent race, thereby strengthening their good qualities. They have gone through many periods of persecution, at times almost to extermination. They show a stamina, such as we Christians are quite ignorant of. If we take a Jew, poor from years of distress and persecution, we do not find him a degenerate. If he obtains a chance of self-improvement, he naturally takes his place on a higher social level. This versatility is due to their power of adaptation—an essential character for survival. They may be crushed, but they are not destroyed.

It is quite different among the Christians. When poor Christians are persecuted, as in slum life, they degenerate so that they cannot rise, even if their surroundings be improved. Their children may rise, or more correctly be lifted up, but it is a process of time, perhaps a generation. It is possible that the alcoholic tendencies of the Christian, in contrast to the teetotalism of the Jew, is a very important factor in holding the Christian down.

The precise origin of the Jews is somewhat obscure; but at the time of the Dispersion they all started fair. All differences between tribes had long since been eliminated with the exception of the tribe of Levi. By verbal tradition the Cohens (Cohin) had kept themselves select and aimed at continuing

the priestly office. A distinguished Rabbi informs me that the Cohens are very hasty tempered and imperious.

After the Dispersion all differences among Jews are ascribed to their differing environments. The Jew is usually, if not always, a little above his surroundings both intellectually and ethically. This is easily demonstrated in a district like Whitechapel. The poor Christian youth is a dangerous hooligan and a criminal in nine cases out of ten; whereas the poor Jewish lad is well behaved, diligent, often learning a trade. In fact the young Jew is preparing to fulfil the promise and prophecy of Moses, "The Lord shall make thee the head and not the tail; and thou shalt be above only, and thou shalt not be beneath."¹

After the
Disper-
sion.

The Jews who settled in Arabia became scholars, for it was a seat of learning. Those who went to Spain and Portugal became merchant princes, statesmen and scholars, because the Moors were a highly cultured people. When the Moors were driven out of Spain by the Roman Catholics this prosperity was soon cut short; and after the reign of Ferdinand and Isabella the Jews migrated to Holland. These courtly, well educated Jews from Spain and Portugal considered themselves so much above the German Jews that they lived quite apart, forming a separate community. In this way they were regarded as the aristocracy of the race. Spinoza was one of this class.

For some time they occupied a similar lofty position in England, for one, Manasseh Ben Israel induced Oliver Cromwell to assist them to form a wealthy colony over here. I cannot persuade myself that the more favourable environment alone developed the finer qualities; for I find other records in which it is stated that the early Jews in Spain intermarried with the Moors, and it is well recognised by the students of Jewish history that there was a great deal of concubinage amongst the Moorish women. I think we must ascribe this aristocratic strain as due to a "refresher" from the allied Eastern, or Moorish, blood. We know that such a refresher does much to improve the quality of any prepotent race, which is commencing to degenerate from too much inbreeding.

¹ Deut. xxviii. 13. The word "and" at the beginning of a sentence or clause is used for emphasis.

But the refresher must come from a nearly allied race. This is a good example. The children of the concubines were always well treated and absorbed into the family. The Jews never neglect any child. This one factor is indeed the key of their supremacy. There can be little doubt that this was a properly well bred and blended aristocracy, such as we had in olden days, but more recently seems somewhat out of repair.

Let us now see what happened to the other Jews, who after the Dispersion travelled into Eastern Europe. There they also had concubines, which was equivalent to intermarriage. But the Teutonic strain was very remote and different from the Jewish, and instead of improving the race, is considered by the Jews themselves to have lowered it. This is the origin of the fair or ruddy complexioned Jews of Eastern Europe.

These social barriers are now being broken down by a new liberalism, and the Jew stands or falls by his merits, whatever his immediate origin. The old aristocratic families are losing their position.

The Jewish people represent to us to-day one of the best examples of artificial selection. They have shown that too much intermarriage weakens the stock; for insanity, neuroses and tubercle are rife among them. It is at these times that some suitable, nearly allied, foreign blood is required, by way of marriage, to restore stability. But it must be remembered that the new strain of blood must very nearly approximate the decadent race. An opposite or different type would make a cross or hybrid.

Dixon, an American writer, says that mulattoes (who are hybrids) tend to sterility at the third or fourth generation, unless they are refreshed by new blood, which may be of either blend—black or white. If it be from a white man then the negroid characters necessarily grow less and *vice versa*.

After any race or breed of animals has been refreshed they must be again inbred, apparently with a view of casting out the foreign element. It is a large subject and those, who think themselves fitted to undertake our legislation, should be acquainted with it.

"The
blood
is life."

When Moses¹ said, "For the life of the flesh is in the blood," he had little idea that he was expressing the most important

¹ Leviticus xvii. 2.

truth in relation to the whole of humanity; both physiologically, pathologically and even psychologically.

This axiom should be written in large letters at the top of every work on Sociology; over the portals of every University, and indeed over the entrance to the House of Commons.

"The blood is Life"; this is the solution of human degeneracy and of crime. It is the answer to what is to-day misnamed—socialism.¹

It was always a puzzle to me how Moses could give such a clear account of the "creation," or more correctly formation of the earth and its geological record; for the first chapter of Genesis, in broad outline, is confirmed by our later astronomers and geologists. I am however well informed by a very learned Rabbi and by a distinguished archæologist, that Moses was treated as an Egyptian prince and educated at the College of Thebes. This College would for learning and research have rivalled many of our best Universities. It was here, too, that Moses learnt Hygiene and also Law. We are not yet up to date in Hygiene, and certainly not in Law. We can learn through Moses much of what was evidently taught at Thebes; and learn it to our profit. The Jewish customs are to-day vastly superior to our own, and more sensible.

Fortunately Nature endeavours to right things, or else to stamp out the family by sterility. For this reason degeneracy cannot be traced back through many generations. But a stock may be so unstable and neurotic that for generations it may throw off degenerates. This is well exemplified where I describe a union of cousins accentuating neuroses.² From that one union in about 130 years, there was an issue of 329 individuals with 49 disasters, mostly in the way of degeneracy and insanity. Nothing could correct the stock, at all events for three generations, as there was continual intermarriage.

Nature
always
trying to
repair
damage.

To sum up, almost everything centres round the word

Breed in
animals
and man.

¹ There are two kinds of socialism: first, the good which follows altruistic lines and helps the weak and fallen; secondly, the modern socialism, where the masses wish to live on the classes, the reckless on the thrifty, the born-tireds on the industrious, and the won't-workers on the diligent.

² See *Education, Personality and Crime* for a remarkable family tree, p. 40.

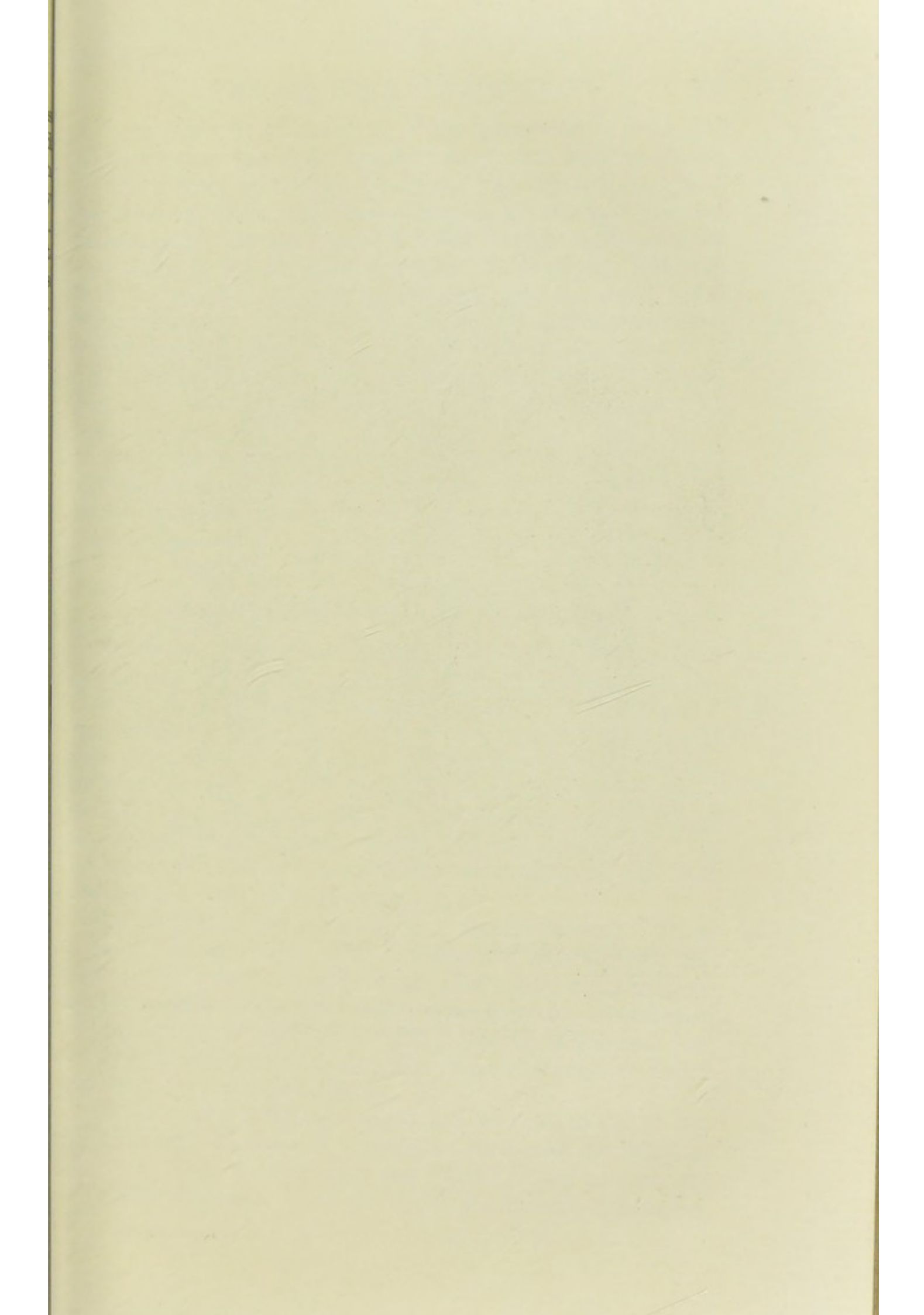
"breed." To some this word is very objectionable, but this is only because its meaning is misunderstood. In our land there can hardly be pure breeds, when we are mixed with Celts, Romans, Normans, Danes, Saxons and almost every variety that can be thought of, not to exclude Eastern blends.

There are not breeds among us in the same way as amongst the lower animals ; but in our mongrel nation certain families stand out prominently. These are evident by strong characters which appear to be heritable, and we find important family names surviving through hundreds of years. But here it is the males who carry on the family name, and perhaps the characters or traditions. It must not be forgotten that there are as good breeds among the middle classes and even amongst the working classes as among the upper ten.

Occasionally families perish through too much intermarriage, or the stock becomes weak and the family characteristics die out. The family name was then to be carried on by some collateral branch. The dilution of the aristocratic blood by promiscuous marriage from the ranks is a very doubtful advantage. It must completely alter the type, for it is not on the lines of artificial selection. The ancient families have a useful influence and give quality to the nation. Long may they continue. By contrast compare ourselves with our democratic cousins—the Americans.

When we come to middle class, rich or poor, Smith, Jones or even Brown, breed is the important factor on which everything turns. All our thoughts must pass in that direction. Smith and Jones might each be of highly neurotic constitution, or affected with tubercle, and if they paired would raise up a weak stock. The breed would be bad and unstable. Nature, if she had her way, would eliminate the stock by sterility. Nature is often thwarted by man. On the other hand, supposing Jones were neurotic and brilliant, and Smith instead were lymphatic, easy going, fond of life, then the future Jones-Smith breed would be good and well balanced.

The term "breed" applies as much to a Smith or a Jones as to a Hapsburg or a Guelph. We must, even the poorest and the humblest, assimilate this idea of "breed" with pride and dignity, endeavouring to improve our own breed and those around us, by applying ourselves seriously to the question



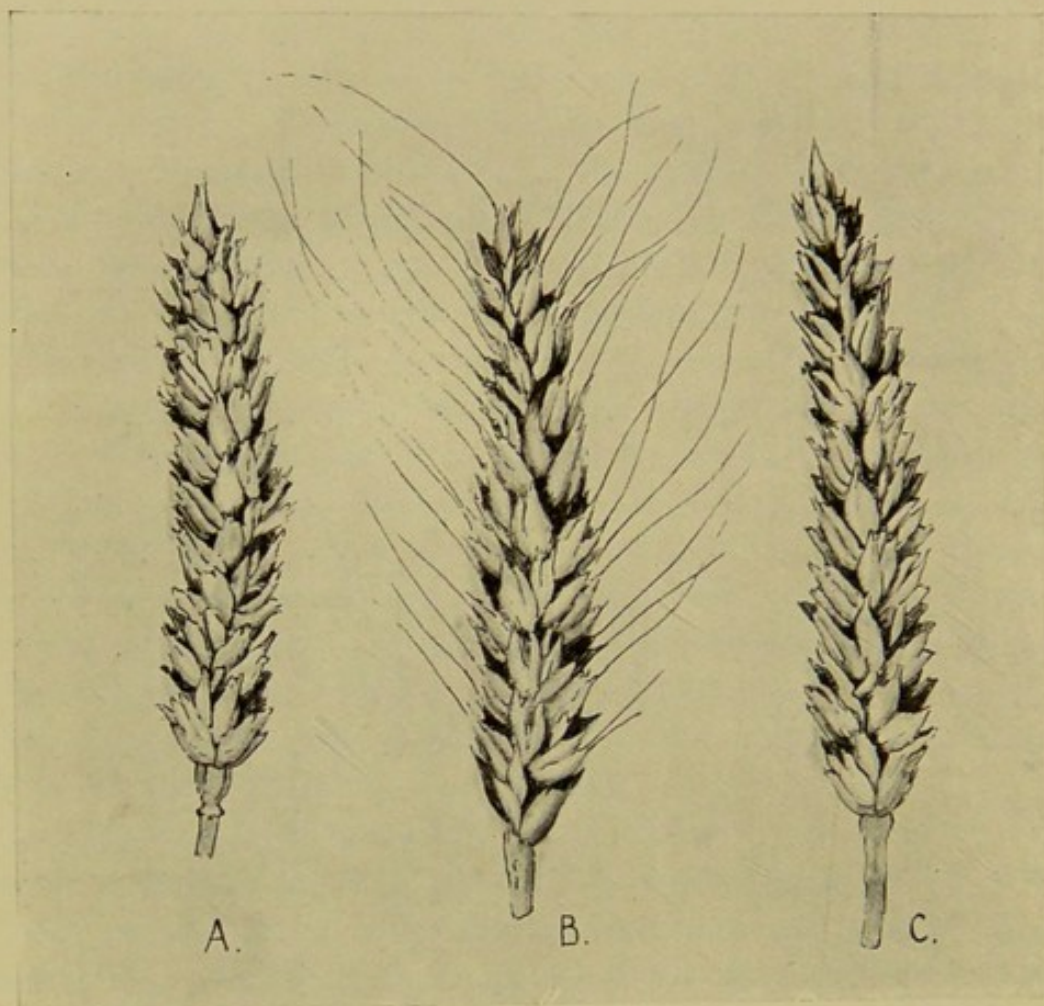


FIG. 14.

Mendelian phenomena in wheat. (After R. H. Biffen.)

A. Stand-up wheat.

B. Bearded wheat.

C. The hybrid, showing that the beardless condition is dominant over the bearded.

(By the courtesy of Professor J. A. Thomson.)

of marriage. It is the duty of our profession to lead, and raise up some splendid "breeds" among the working classes.

The subject of "breed" is dealt with by oculists. It is well known that, since the education of the poor became compulsory, they have failed in their eyesight and spectacles are daily becoming more common. It is partly badly lit and improperly designed schoolrooms; partly small indistinct print and dirty books; but chiefly a question of stability, in other words, of breed or stock. Improve the quality of the children and their eyes will be equal to the great strain put upon them. Lower the breed and failure to stress is at once apparent.

Wise selection in marriage is then the watchword for successful issue, and race regeneration. It is also the chief way by which to cast out degeneracy, or any other taint. Unfortunately we shall never stop tainted people from marrying.

SECTION B.—MENDELIAN PRINCIPLES

Mendelism has done a great deal to explain the mode of inheritance of varietal characters in plants and animals, but it is by no means of universal application. Gregor Mendel, the Abbot of Brunn, told us what to expect if we crossed two peas differing in respect of certain characters; a pea for instance with green cotyledons and another with yellow; or a tall pea and a dwarf pea. We know what to expect in the case of two particular varieties of wheat (see Fig. 14); or in other kinds of wheat, where one is liable to the rust disease and another is immune.

Mendelism
suggestive but
not final.

The characters are inherited in a regular manner. When a plant bearing one of these characters is crossed with one bearing the other character of the same pair, one character always appears in the first cross or generation to the exclusion of the other. Mendel called that character dominant, and it may be represented as D. The other character he called recessive; we may label it R.

In the second generation produced by the union of the hybrids, *inter se*, there is a result as certain as the rising of the sun. Out of every four individuals, three present the dominant character, while one shows the recessive character.

This recessive in all future generations remains recessive and never produces any dominants ; therefore as it continues pure it does not concern us further. The three dominants behave in a different, though simple manner. One of the three dominants, like the recessive, breeds true, only producing dominants in succeeding generations, so we may exclude it from further consideration ; but the other two apparent dominants are mixtures, covering up recessive qualities.

When they generate, they produce in the third generation exactly the same results ; that is, the ratio of one pure recessive, one pure dominant and two mixed dominants. This process is supposed to continue for all time.

This may be more easily grasped if expressed by draughts figuratively (see Fig. 15).

Taking D to represent dominant and R as recessive we may represent an ordinary Mendelian cross as follows :—

$$\frac{D}{D} \times \frac{R}{R}$$

Each individual in the first generation, which Bateson has called F1, may be represented as—

$$\frac{D}{R} \quad (F1)$$

the dominant quality being alone visible.

In the second generation—F2—we have apparently a ratio of 3D to 1R ; but as already indicated these 3D's are not of the same constitution.

The actual constitution of F2 is as follows :—

25 per cent. $\frac{D}{D}$ or pure dominants, which remain pure ;

50 per cent. $\frac{D}{R}$ or mixed characters, dominants only appearing ;

and 25 per cent. $\frac{R}{R}$ or pure recessives, which remain pure.

The mixed $\frac{D}{R}$ repeat in the third generation (F3) what has just occurred in the second generation (F2).

If we apply this scheme to the inheritance of tallness and dwarfness, the hybrid (F1), resulting from a cross between a tall and a dwarf, is to all appearance like its tall parent ;

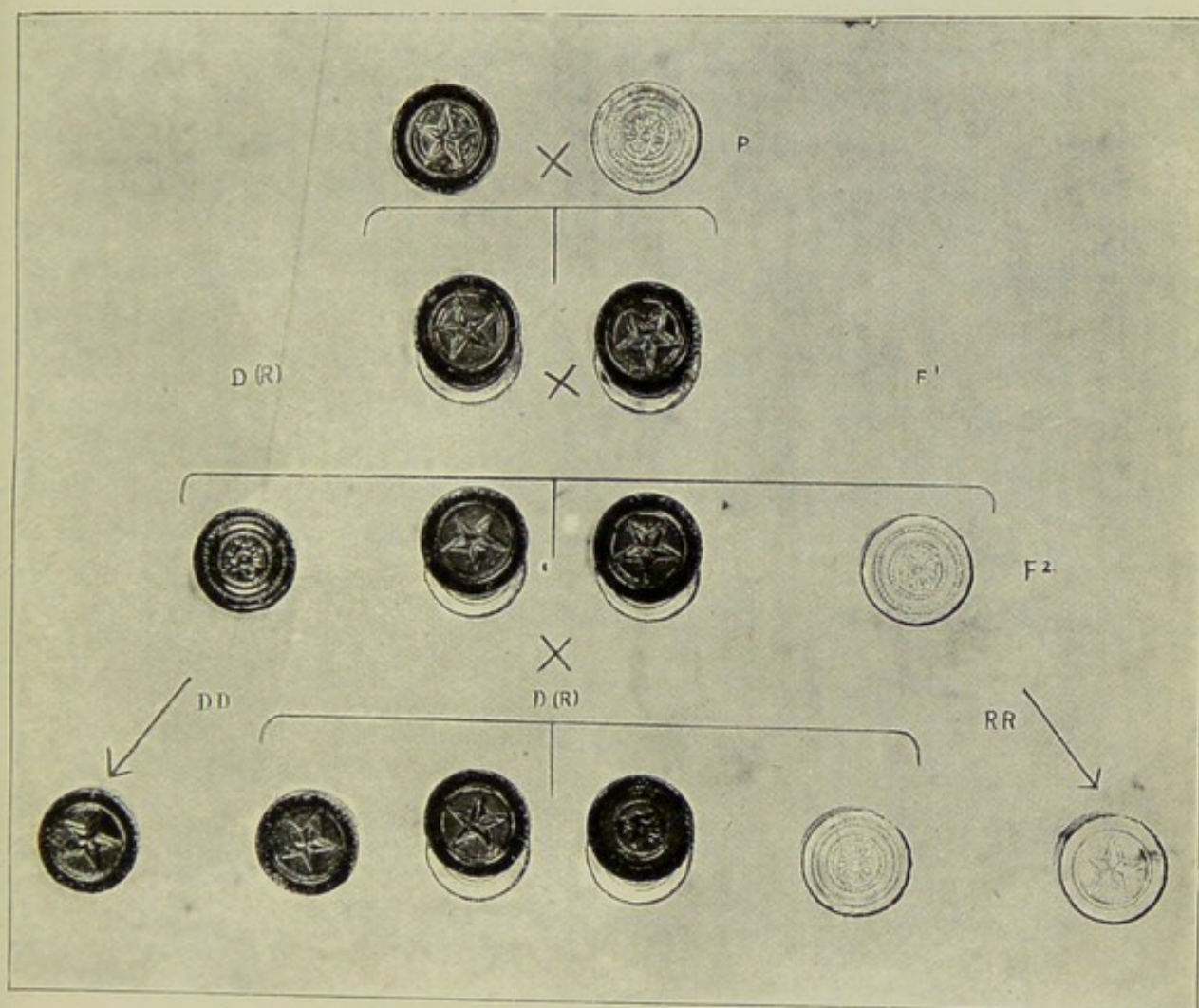


FIG. 15.

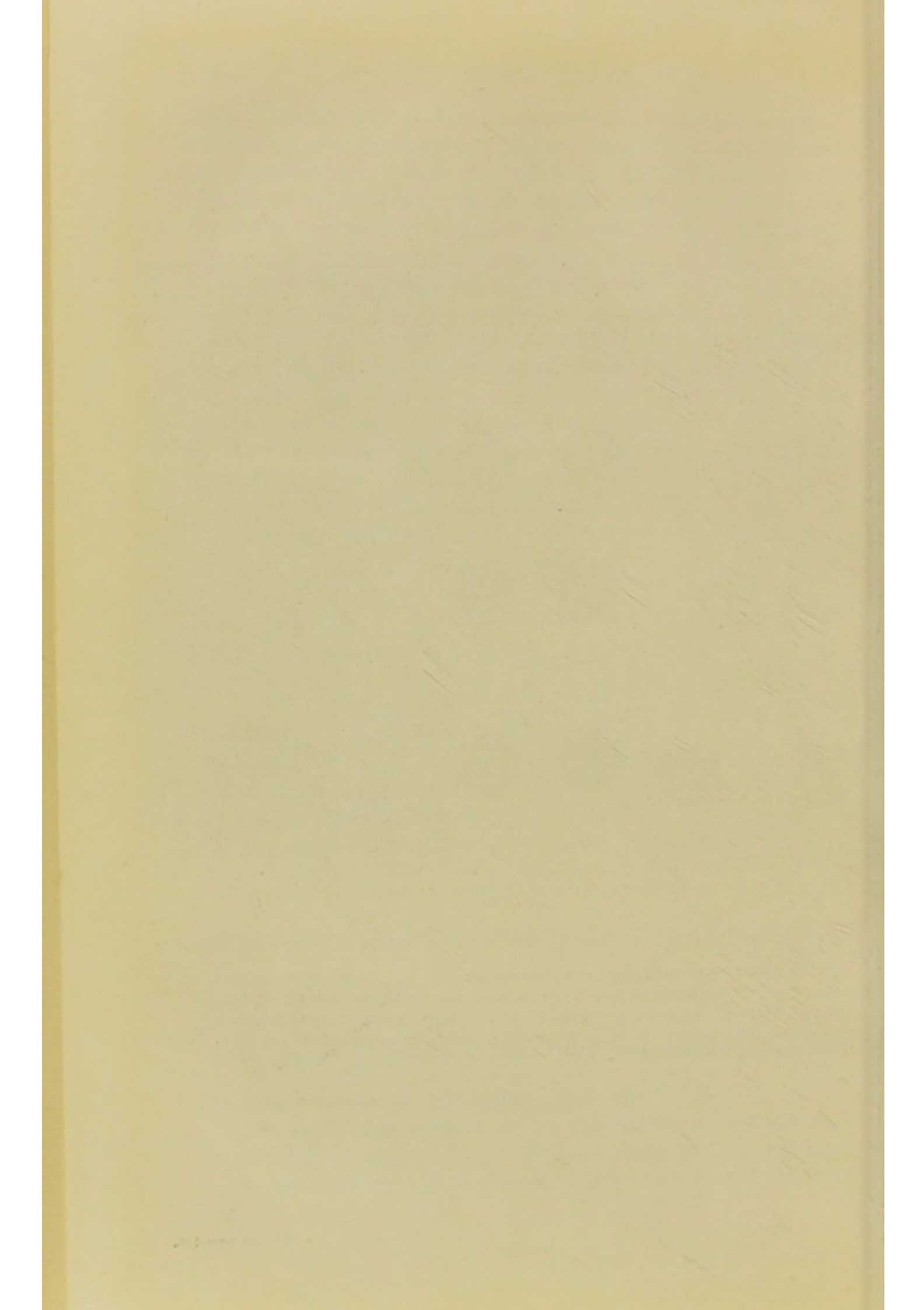
By the courtesy of Professor J. Arthur Thomson I show a diagram of draughtsmen illustrating the Mendel Law.

First line (P).—A black dominant and a white recessive.

Second line (F¹).—The hybrid offspring D(R); the black patent, while the white below is latent.

Third line (F²).—One pure black, two impure blacks, and one pure white. 1 DD+2 D(R)+1 RR.

Fourth line.—Pure extracted dominant to the left; pure extracted recessive to the right; in the middle as usual 1 DD+2 D(R)+1 RR.



but in reality it is a mixture and when it forms its germ cells, half of them bear the tall and half the dwarf character. We will call it a hybrid tall.

F2 consists of 25 per cent pure tall (dominant)

50 „ „ hybrid tall.

25 „ „ pure dwarfs (recessives).

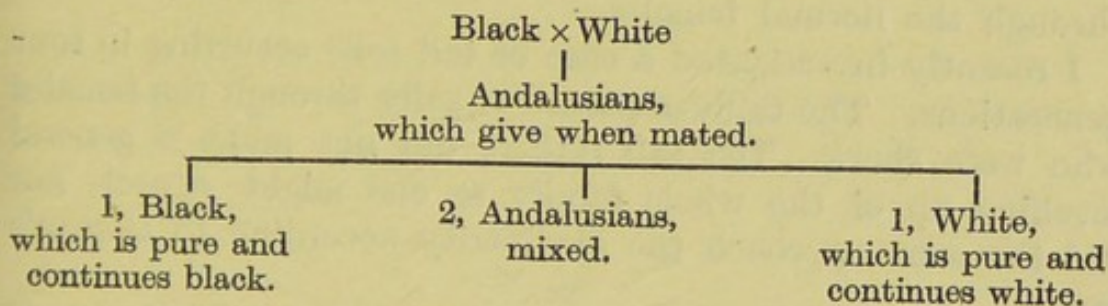
The result of the union of these F2 hybrid tall is the same as that of the F1 hybrid tall; because, according to the Mendelian theory, their constitutions are identical.

The principle of Mendelism is reduced to the simple statement that, in the process of crossing, any quality which is in either of the parents may reappear in a subsequent generation.

The fundamental principle of Mendelism. What is in "the blood" may reappear.

One of the most interesting illustrations of Mendelian principles, one that will appeal to the lay mind, has been given by Bateson and Punnett in the blue Andalusian fowls. Birds of this strain never breed true, but always throw off black and white birds. The blue Andalusians are really mixtures

DR or $\frac{D}{R}$. The blues are a cross between the black and white forms. Thus—



We do not pretend that Mendelian principles can be applied to the inheritance of such characters as criminality and degeneracy. There are, however, certain laws of breeding and it is as well to pay attention to them; and at any rate remember the possibility, that they may become applicable to these characters when more is known about both.

Mendelism and hereditary disease.

An attempt has been made to apply Mendelian principles to the inheritance of disease. Diseases are specially difficult as there are modified forms, and sometimes predispositions without the full development, and various other factors to consider.

The
germinal
mystery
of
bleeders.

Thus in the disease known as hæmophilia, or what are called by lay folk "bleeders," the transmission is through the females, but it usually attacks the males.¹ If there were three girls and three boys in a family, the girls would show no signs, whereas the boys might die of it. The apparently healthy girls carry the taint in a latent condition, i.e. in the germinal matter. If they have sons, these sons may die of it. The disease is dominant in the males, but hidden in the females (Fig. 16).

I have only been interested in two families of bleeders. In one case I attended a child till the age of 12, during which period he had several attacks of hæmorrhage; once a laceration of the tongue which oozed for many days. I heard that he died of uncontrollable hæmorrhage when 16. His elder brother and some of his mother's brothers died of it.

In another case the father was a bleeder and there were two sons. Neither of these are bleeders. One boy had to have an operation, but I foretold the absence of risk, on this known factor, that the weakness is only inherited through the mother and she was not a bleeder. Colour blindness and congenital cataract are transmitted in a similar fashion through the normal females.

Tallness
as a
domi-
nant.

I recently investigated a case of tall sons occurring in four generations. The tallness passed equally through the females who were short. The tall fathers did not make a general levelling up of the whole family as one might expect, nor did the sons approach the mediocrity according to Galton's law.

The great-grandfather A was tall (6 ft.). In the next generation B there were one tall son and two short daughters. They all married. The total result, in generation C, was—

4 short daughters;

1 tall daughter;

10 tall sons (3 were about 5 ft. 10 in.; 7 were over 6 feet).

In the fourth generation D, there were—

7 tall sons (over 5 ft. 11 in.);

8 short daughters (round about 5 ft. 6 in. or less);

2 tall daughters (5 ft. 10 in.).

¹ Grandidier (*Die Hæmophilie*, 1876) examined 200 families of bleeders, and found 609 male and 48 female bleeders.

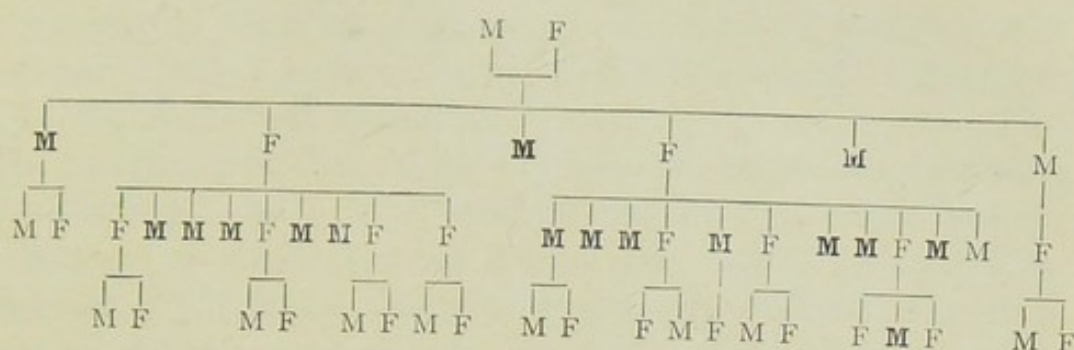


FIG. 16.

A family of bleeders recorded by Prof. Klebs. The dark letters indicate the bleeders. Observe that two sons, though bleeders, did not transmit the disease, whereas it passed through three of the females.

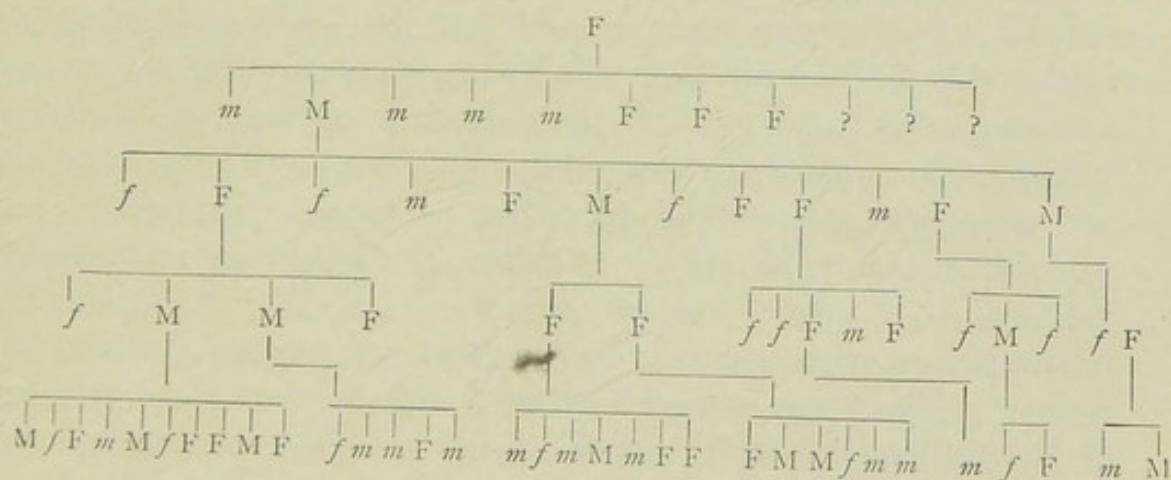
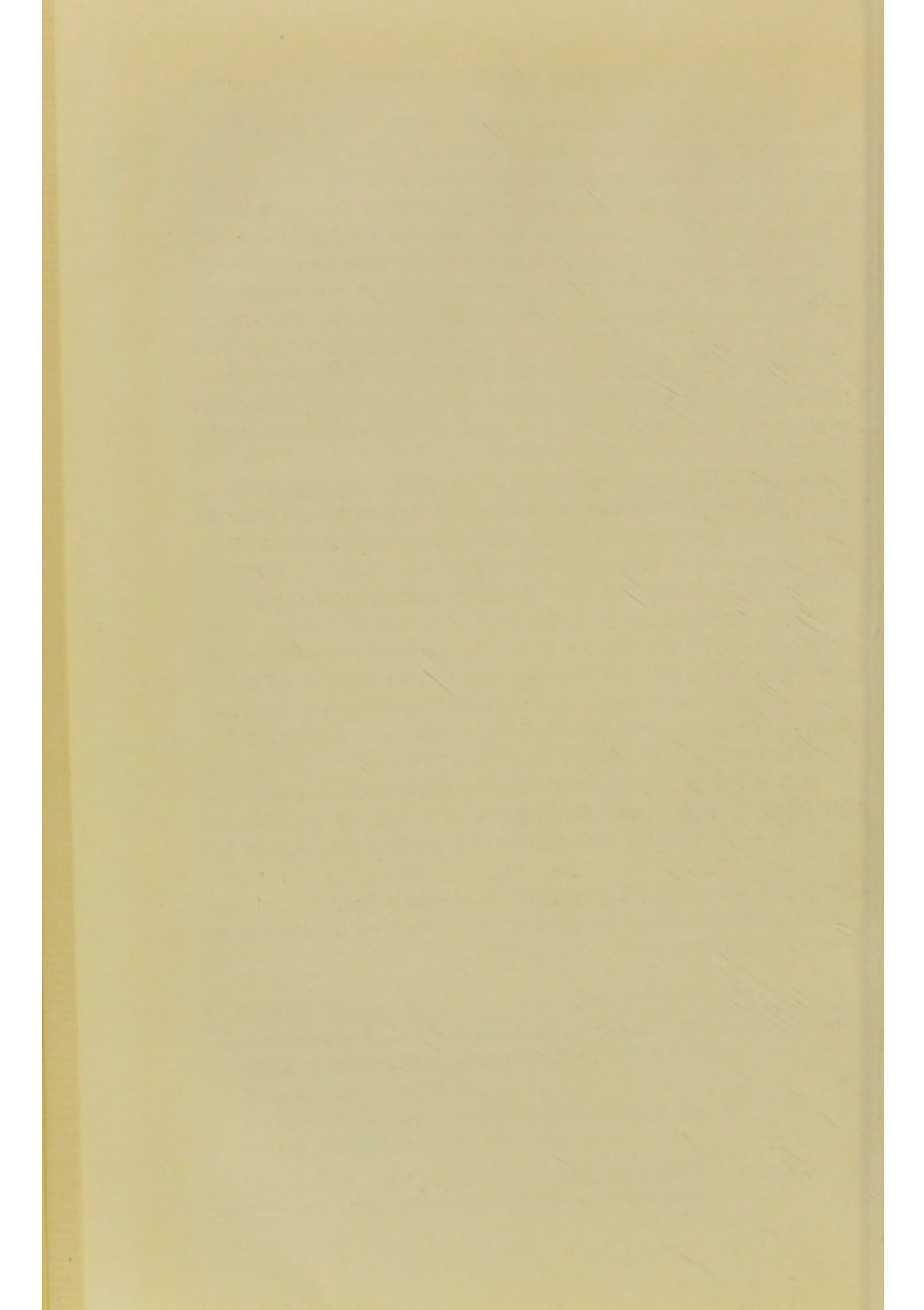


FIG. 17.

A table by Farabee representing a family affected by Brachydactyly, in which all the toes and fingers are double-jointed like the thumb. The abnormal members are indicated by the capitals. Normal members had normal children, and are not included in the above fourteen families.

I am indebted to Prof. J. A. Thomson for these two plates (*Heredity*, pub. by J. Murray).



To sum up—

Out of 19 males all were tall.

Out of 17 females 14 were short.

The short females transmitted tallness to the sons, while the daughters were mostly short. As tallness was a male dominant character what about the physiological aspect of sex in the three tall daughters?

The transmission of disease or taints therefore becomes very complex. Here is a case of heredity of heart disease and dropsy, in which it passed from the mother to the three daughters. The father was of a healthy stock free from heart disease and the sons escaped. In such a very ordinary complaint as this, we should have thought the sons were just as liable to heart disease as the girls. If it were a congenital affection, like tuberculosis, the sons would suffer equally. It must have been germinal—that is, inherited in the ovum.

A large number of pedigrees relating to the inheritance of disease are being collected, in order to test the applicability of Mendelian principles to them.

Diseases such as congenital cataract, and “inheritable” neuroses have been chosen. Results show that where a disease enters by one parent, some of the children exhibit the taint; others escape and produce pure stock. As generations proceed healthy marriage gradually casts out the taint. Conversely any unhealthy marriage, with the same taint, increases the proportion of unhealthy children. Can we explain this by Mendelism? Whilst there can be no doubt that healthy individuals, arising from a cross between a healthy and diseased person, seem to be as free from the disease as a healthy person of healthy ancestry (a result which is perfectly compatible with Mendelian principles), I am strongly of opinion that certain favourable environmental conditions are necessary for the production of healthy individuals with diseased ancestry; of course, a dependence of this kind on external conditions is not reckoned for in the Mendelian philosophy.

In the human race the facilities for determining the Mendelian ratio are less than they are in the cases of animals and plants, partly because the material cannot be dealt with experimentally, and partly because the characters, being chiefly (with the exception of eye colour) pathological, are so much

Mendelism as applied to the human family.

more elusive than in the case of animals. A pea is either yellow or green, but in disease you may have every transitional stage between a tendency and a development.

But even if we may not get the Mendelian ratio, the principle is not difficult to accept, that what is in a parent, or even in a remote ancestor, is either visible or latent and may reappear at any time.

At a recent important discussion of the Royal Society of Medicine, the consensus of medical opinion was against the application of Mendelian principles to disease. But with due deference to the leaders of the profession, I do not think that, in our profession, we have a very clear knowledge on this subject.

Let us now examine the tables of congenital cataract presented by Mr. Nettleship. Here are three family trees so affected, and there were in the offspring—

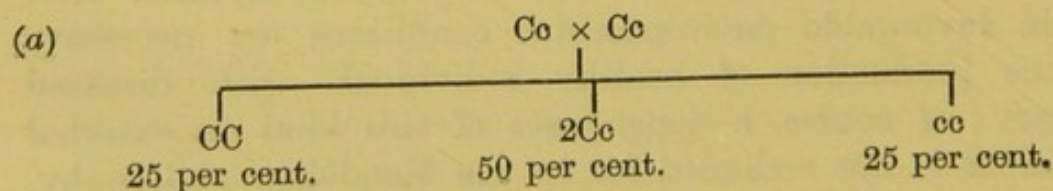
26 children affected with cataract, and

29 children not so affected.

The Mendelian ratio of 3 to 1 does not appear in this, but of course we are not breeding from hybrids, but from mixed marriages—some with cataract, which I will call C,¹ and some without cataract, c. There are according to Mendelian principles three possibilities which I shall endeavour to make clear.

If cataract, or the character of producing cataract, be dominant, C, and healthy normals be described as c, then there are three kinds of mating.

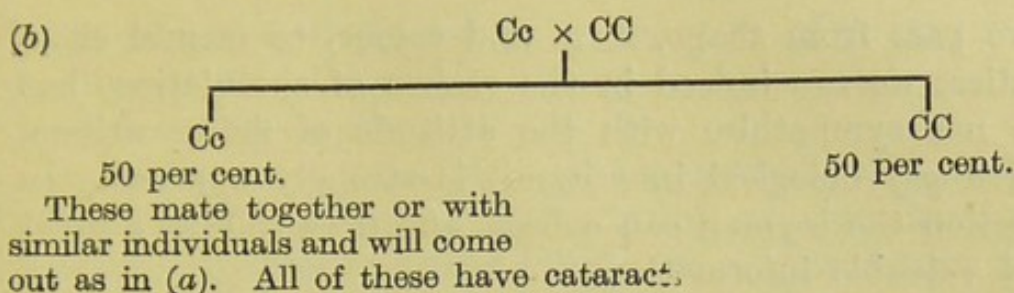
It is of course essential to bear in mind, that the individuals may be mixed or pure, and so two letters are necessary to state this condition.



That is, three with cataract and one healthy.

¹ Bateson considers that cataract is usually transmitted as dominant (*Mendel's Principles of Heredity*, p. 217).

(b)



(c)

$CC \times CC$
yield 100 per cent. CC.

In other words all the offspring have cataract. Normality can never appear.

(d) If we take a fourth kind of mating; cataracts with normals—

$CC \times cc$
it works out exactly like (a); there is merely a transposition of the characters. It would work out—

25 per cent. CC;
50 per cent. Cc; and
25 per cent. cc, as in (a).

Farabee quotes the case of a family in which some of the members had short toes and fingers; 2 instead of 3 phalanges (Fig. 17). There were in all 14 parents.

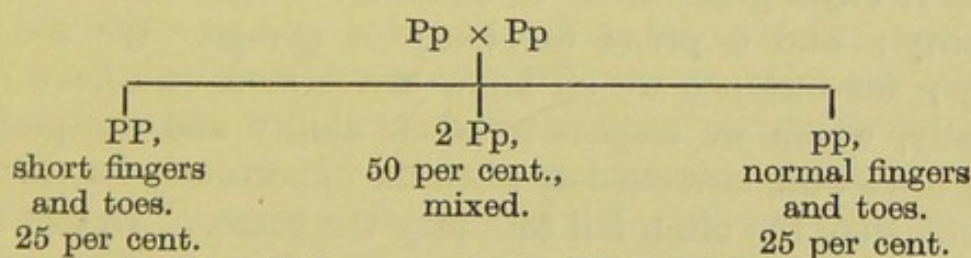
In the offspring there were—36 abnormal and 33 normals.

Here again we can apply the Mendelian principles.

If the character of 2 phalanges, P, or short toes and fingers, be dominant, we have 4 possibilities.

The normals may be expressed by p.

(a)



It appears really as if three are shorts (PP and 2 Pp) and one normal (pp).

(b)

$Pp \times PP$
50 per cent. of each, but they all are shorts; normality (p) being hidden.

(c)

$PP \times PP$
Result is 100 per cent. of short toes and fingers.

(d)

$PP \times pp$
This works out like (a).

Heredity
of mental
qualities.

If we pass from shape, form and colour, to mental characteristics, we are indeed in the realms of speculation, but we do not sympathise with the attitude of many writers, in which psychological inheritance is strongly opposed. In this section the layman can collect, and does collect, a great deal of valuable information.

There are many instances where children have been separated when young from one or both parents, where influence and imitation could be excluded, and yet they have grown up in every way the facsimile of the parent, or parents, in their mode of thought and conduct. It is absurd to take up a positive attitude against the heredity of mental characteristics.

Some writers attach great importance to environment, and maintain that, if a savage were educated in an ordinary civilised home, he would grow up civilised. This may occur to a limited extent. The child would be able to wear clothes and manipulate a spoon and fork, but that is not a sufficient test. Under the influence of fear, or provocation, which mental character would appear? Would not the savage instincts come to the fore? These matters can only be determined by observation and really come within the realms of opinion. I would therefore suggest that one and all be invited to contribute cases for or against these views. The case I quoted of an illegitimate girl,¹ father a peer, mother a servant, goes against such an opinion. I hold an opposite view. I think it takes generations to make a fine character and personality; and *à priori* to change a savage. We see this daily; for instance we all know clever men who have risen socially, whom we respect for their ability and the position they have won, nevertheless when the opportunity for chivalry occurs, they too often fail to "play the game." In fact they disclose their origin. For instance, men of this class are not generous to competitors, or opponents, a fact of frequent observation in political and even professional circles. For this reason I always advise the poorer people not to trust their own class as leaders. Mrs. Grundy knew a lot of biology and many of her old-fashioned ideas contain truth. She holds to the views which I have ventured to express.

Manners are not entirely a matter of imitation, but partly

¹ Chap. ix, p. 182.

of breed. Conversely among the poor we often observe good manners which indicate some superior ancestral strain. We call them "Nature's gentlemen."

I can, however, meet such opinions half-way, if I am allowed to choose a hooligan in Whitechapel, or a criminal, and to compare an infant of that kind with a Zulu infant. If the criminal's infant is brought up in a Zulu community, such is a very short step from Whitechapel, and he probably will be a savage.

If we work on low grade humanity, no doubt environment moulds the individual either way, up or down. It requires, however, a mass of evidence, and careful examination, to apply that rule to the upper strata of *Homo domesticus*. It would almost appear as if mental characteristics are transmitted, on the principle that mind is the function of the brain. If structure varies, function must vary. It is now an established fact that all living types, vegetable or animal, are plastic, liable to subtle variations. Brain, the most delicate of all structures, must be liable to minute changes and this would be revealed in mental characters, or modified function.

SECTION C.—DEGENERACY

Though it appears a hopeless inquiry to try and settle whether the degenerate transmit their defects or deficiencies; yet we take up a new position if we speak of degeneracy as a defect, negation, or want, rather than regard it as an active bad quality as if it were something new or added, or in Mendelian language dominant. We are too apt to look at the active, or positive side only and end in misnomers. If a man be a degenerate, it is because he lacks something actively good, which would control and prevent what we consider to be bad in him.

A more accurate view of degeneracy required.

It is like the case of a ship which deviates continually from its course, because it requires an extra blade to its propeller, so as to adjust the balance of directive forces; or a stronger and larger rudder to meet the momentum acquired when travelling at full speed. This simile is not inapt, for many of us have very weak rudders, which will answer for slow speeds, but are useless against high pressure. To return to

It resembles an imperfect rudder.

the original proposition, if the ship be amended to its normal architectural design all badness at once disappears. The badness or misconduct in the ship was passive, or negative. The resultant was active. Is it not the same in the human degenerate? The defective ship, powerless to conduct itself, incapable of being conducted, would work havoc and destruction amidst a crowd of vessels. Restore the ship to its normal and it is no longer a danger to others.

Many
criminals
are not
degenerate.
rates.

We cannot, however, shut our eyes to the fact that many persons appear to have sufficient intelligence to be able to exercise proper control, and yet are actively bad. An interesting man, a burglar, who as I write is in prison, represents such a type. He has both intelligence, ability and high ideals on that morality which does not bear on his particular industry. In this last phase he does not differ from the best of us; for we are all apt to close our eyes to morality, where it touches on our particular occupations or habits.

This burglar began his life of crime when 13, and such an early start was entirely due to the very unfavourable surroundings at home. In his case there developed a determination to be actively criminal. Had fortune favoured him he would have been one of the greatest and noblest, instead of one of the more dangerous, of the late Queen's subjects. The same motive which guides us all actuated him in his pursuits, namely, personal gain. To him it was easier and pleasanter to speculate as a burglar than to endure the monotonous toil of a skilled artisan. Though an amiable man in the evening of life, his instability continues; but he is not a degenerate in any sense of the term. If wickedness occur in a normal person, surely it is active; whereas in a degenerate I hope to show that evil is passive, being misdirected energy.

If a solicitor embezzles his client's property there is admittedly no mental defect; nor indeed can there be in cases where fraudulent men excel in intellect; or in the case of other clever evil-doers, some of whom defeat our most able judges on points of law.

Here is a photograph of a fine old man in his ninetieth year (Fig. 18). He is very bright and intelligent, and a most lovable character. Yet through a sideslip, when a young man of

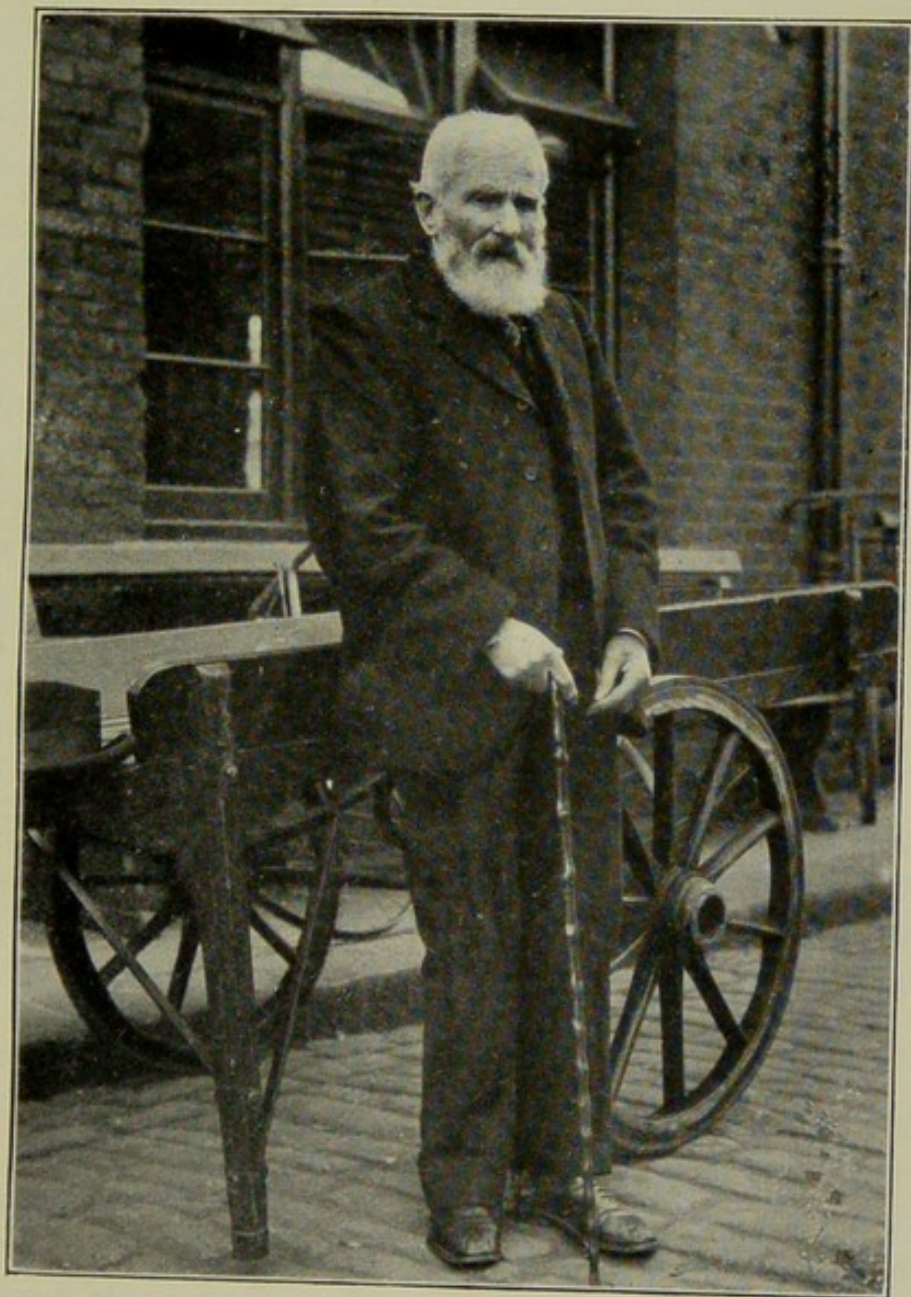
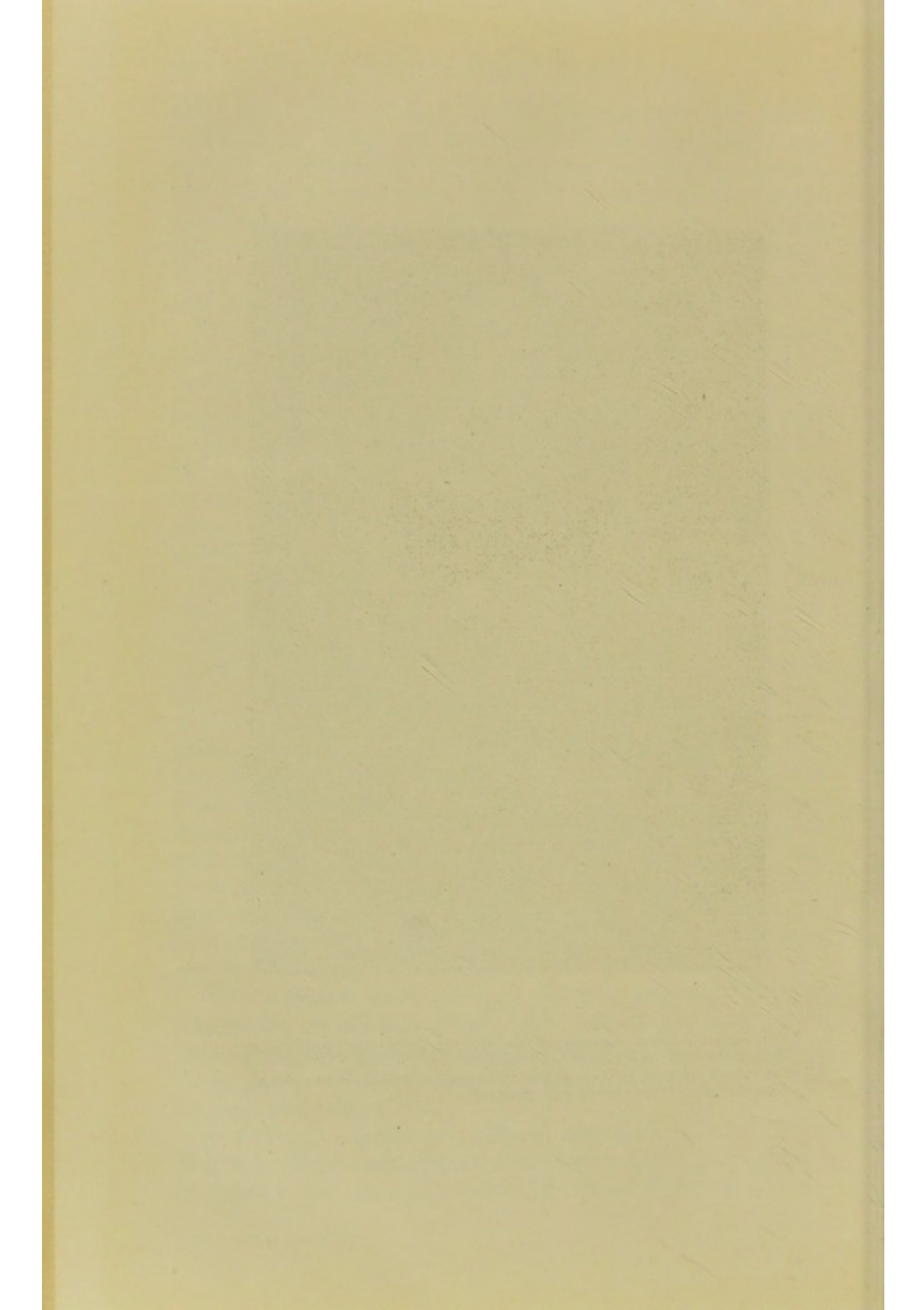


FIG. 18.

Portrait of a normal man, a fine personality, aged 90, who by stress of circumstances (the Irish famine in the Forties) was driven into crime. He has spent about forty years in prison—chiefly for coining. Is not our system absurd? Until the age of 94 he is under police supervision.



promise, he was led astray by a gang of coiners. He was not so much the skilled artificer as the disposer of the false coin. This melancholy deviation in his career resulted in sentences amounting to over 38 years. I introduced him in 1908 to the Medico-psychological Association as an example of a normal man gone wrong. He had then just completed a full sentence of 5 years, and he has 5 more years of police supervision to fulfil. At the age of about 95 the State will have finished with him. There must be something radically wrong with the State rather than the man, that it cannot devise some better method of dealing with these cases.¹ The photograph clearly shows that we are dealing with a charming personality.

We are bound to admit that there appear to be two classes of sinners, derelicts and degenerates, or normals and abnormals. Yet when we closely observe the so-called normal wicked man, we find that he is usually the breeder of bad stock ; or that some of his ancestry have been tainted in one way or another. This suggests that the apparently normal wrongdoer, even if an educated clever man, may be a concealed degenerate. We must therefore be cautious in describing any wicked man as normal.

Are
wicked
men
really
normal ?

To give an example :—an outwardly respectable and religious man may be convicted of forgery or fraud, and receive a long term in prison. Such an event would be distressing and equally unaccountable to his circle of friends and relations. But there is nothing surprising, if we discover that for years he has led a double life, namely, a religious life and a dishonest commercial life. Such a man passes through cycles, as in some forms of insanity ; a religious cycle and a dishonest cycle. Where this is regarded as hypocrisy I treat it as dual personality. In these cases the stock is unstable, and we generally find he was not the first convicted criminal in the family tree, while frequently others had lived under a cloud.

In many cases I have observed these cycles—sometimes of dishonesty, at other times of immorality—alternating with periods of integrity and piety. Alienists see the same alternation in cases of insanity ; at one time depression, at another

¹ See what they do in Belgium, chap. xv.

excitement, and so on. It is very unfortunate if they fall into the hands of the law during these lapses.

Another very remarkable case was that of a much admired lady, now deceased, prominent for good works and noble deeds. Towards evening she changed, and became a low, immoral woman. Words could not express the surprise and difficulty of the situation, and the distressed family regarded her not only as abnormal but insane. It was probably a case of dual personality.

The
cause of
wicked-
ness
negative
rather
than
positive.

It may still remain an open question whether man is wicked because of some active, positive, dominant, inherent quality ; or whether it is the want or deficiency of the goodness, restraint and inhibition, which are necessary to complete every normal person. Is it not more correct to speak of a bad man as "not good," or as one deficient in normal goodness ?

Is moral degeneracy a reversion towards the savage ? Or is the degenerate what I am endeavouring to demonstrate, an unfinished man ?

If *Homo sapiens* may have degenerate offspring, as does actually happen, and the intelligence be likewise diminished, surely we may infer that the brain has not sufficiently developed. In fact, the brain remains somewhat in the infantile state, and if so, degenerate man is not a reversion, but an arrest of development.

Unfortunately we are not assisted in comparing wild plants with their cultivated varieties. The small wild geranium is just as perfect and as beautiful as the finest geranium in any exhibition. The tiny mauve chrysanthemum, 4 inches high, growing on the wet banks of the river is just as perfect as the giant form in the garden. The savage beast is as clever as its tamed cousins, perhaps more so. But when we come to the human race, the savages or wild varieties are in every way inferior to *Homo domesticus*. If we examine civilised man we find different levels of culture and intelligence. It remains for us to see if stability and culture always go together, and if what we find in well-bred humanity tallies with what we infer when we speak of normal man. In these terms and ideas, we must entirely eliminate questions of money or social position. Virility, stability, culture, endurance, refinement, integrity, moral sense and all the best physical

and psychological qualities are surely the test of normality. The purse, whether full or empty, has no place in breed, or in Nature.

It is to be admitted that those born in lower social levels have not the same advantage of culture as those on higher levels. But we must not forget that the ancestors of the slum dwellers of to-day may have been in much more exalted positions, and quite worthy of higher rank. It does not follow that a slummer is of permanently bad stock because of the position we find him in to-day, for there are oscillations down and up, in the human family. It is not every bud that has the strength to flower; environment alone may be responsible for a man's downfall. Nevertheless where wise education and good influences are employed many in humble social strata are bound to rise.

On the other hand, from various causes mentioned in this book, some of those born on high levels are constantly falling into the class which bears the label "degenerates." The question is exceedingly complex and many sided; and we have by no means exhausted inquiry or investigation. We are obliged to fall back on biological research, for when all has been said about breed, marriage and artificial selection, or its neglect, it constantly happens that a surprise comes in a family. One of its members becomes a criminal, seems perverse, and exhibits inborn evil tendencies. Whence does this arise?

The researches of Darwin, Weismann, Bateson, De Vries and others serve to clear the mystery. It is known that if you put 100 seeds in the ground from one parent plant, none of the individual plants would be exactly alike. These are called individual or continuous variations. We see exactly the same in families; no two children are exactly alike. There must be some slight difference in the germinal substance in each individual seed or ovum. Variations.

It was Darwin's opinion that new species were built up by the accumulation of small perhaps infinitesimal variations. On the other hand, De Vries has shown that new species occur by sudden variations which breed true straight away. These have been called discontinuous variations, or mutations, or in popular language sports. Nature then, in addition to the Mutations.

small family differences or continuous variations, forms new species by decided jumps. This is called the Saltation or Mutation theory. It is well to mention this part of the subject of variations, as many criminals resemble sports. It may be sufficient here to say that Weismann is strongly against De Vries' mutation theory, and in favour of the accumulation in successive generations of variations which have proved favourable to the race.

Sports.

When we get a very pronounced variation in a plant or animal, we describe it as a Sport. We have in Nature a very familiar sport, in the Nectarine.

Darwin¹ first pointed out that a peach seed may grow into a nectarine tree, and a nectarine seed into a peach tree. In addition, a bud or branch of either will produce the other. Or we may get a fruit that is peach on one side and nectarine on the other. The peach is the normal; the nectarine is the sport, the criminal in fact, deviating from the normal both in shape, colour, appearance and taste. Nature is full of sports, both among animals and plants, and why should humanity be exempt?

Here is an interesting photograph of sporting in kittens. The mother has done her duty by having three families a year, in all twenty-four. There have been two to five kittens in each litter, usually four. She is a very handsome semi-angora. In about the twelfth family there appeared two sports (see Fig. 19). The variation was in the nature of the ears being turned back, somewhat like a lynx. In the next family there were two sports out of four kittens, in each of the two subsequent litters, one kitten had one ear turned back. Then the sports entirely disappeared for three years. now a sport has appeared again as a crumpled ear (1910). We were never able to find any male cat with ears turned back. The offspring, which had the ears turned back, had normal kittens; but they may have had abnormals also. When we see such physical sports, it opens the way to realise a germinal origin to criminal sports. We must view the kittens in the photograph as criminals.

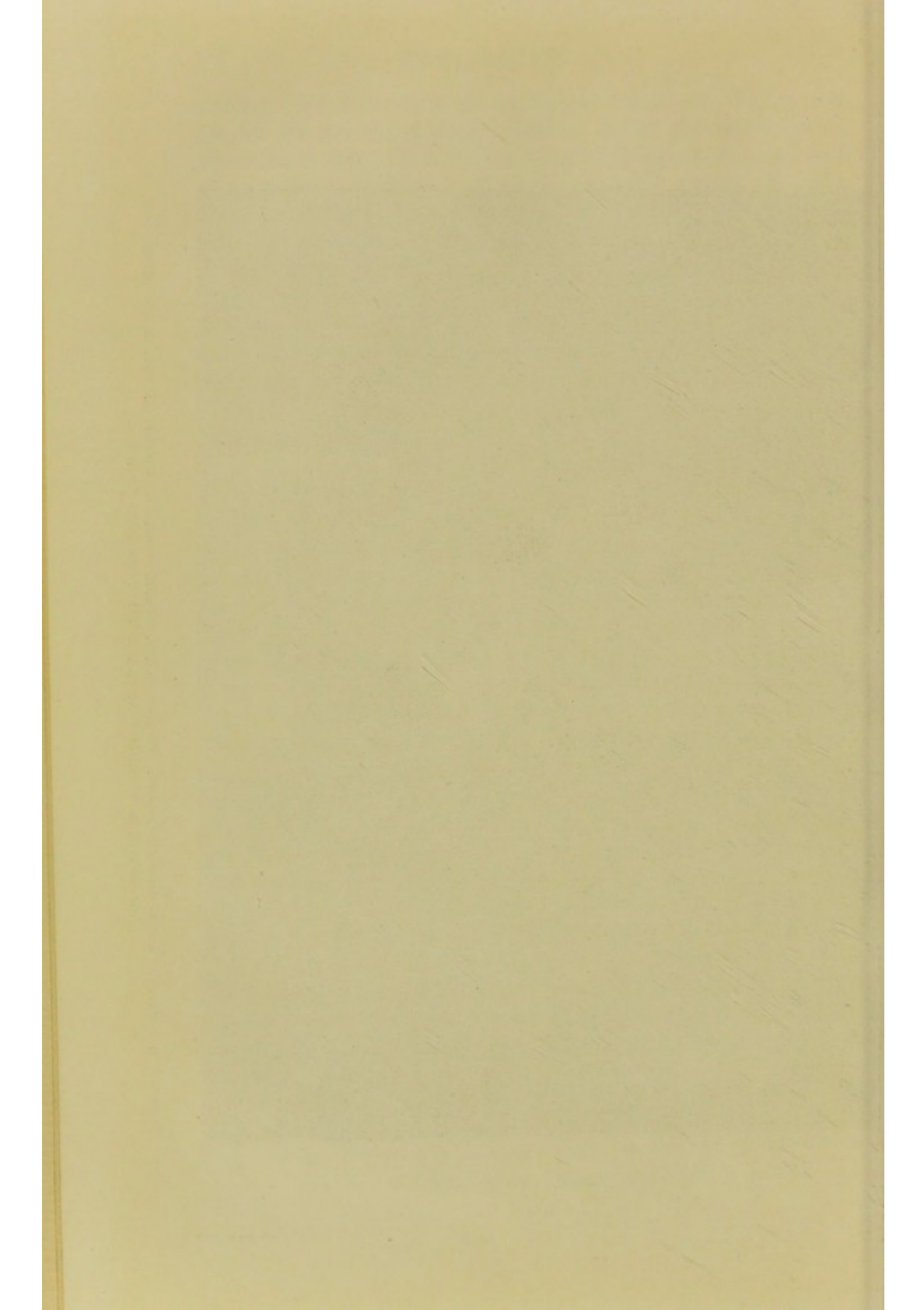
The term "sport" is not good as it wears the aspect of contempt. In reality a sport may be just as much above

¹ *Animals and Plants under Domestication*, vol. i, p. 362.



FIG. 19.

These are, on account of their ear deformities, sports. They are, in fact, criminals, being reversions and uncertain in their moods; yet their offspring have contained normals, as well as sports like themselves.



the general level as below it. Horticulturists are only too glad to obtain sports, making new and expensive varieties of them. Perhaps Beethoven and Turner and other geniuses were sports in the way of rising far above the average. A criminal appearing in a well-bred family must surely be a sport, for eccentricity of every kind is sporting. Many criminals and abnormal people can only be explained on this theory.

But a degenerate who is not necessarily criminal may be a reversion. Again we fall back on botany, for we often see highly cultured bushes or plants throwing out a branch, or leaf, of the primitive type. These are reversions to the early ancestors. Thus a variegated *Euonymus* throws out dull green twigs. The same occurs in privets. These primitive twigs are like some of our degenerates. The analogy between criminals and sports, or reversions in plants and animals, is very near to the truth. Reversions.

Weismann has shown that what he calls the germ plasm is responsible for all these changes. He divides the plasm into imaginary infinitesimal parts, *ids*, determinants, and biophors. He suggests that any little change in plant, or animal, has its representation in the germ plasm. If it be on the side of depreciation, or degeneration, it is probable that some "*determinants*"¹ are starved. May not this ingenious theory apply in the case of criminals? On the other hand, Nature often improves a stock and Weismann argues that the responding "*ids*,"¹ or "*biophors*," had obtained an extra supply of nutriment. All germinal matter is variable; in perpetual oscillation and plastic. It is for this reason we can mould the child for prosperity before it sees daylight; or we can damn it.

It shows that when dealing with degenerates there is no more sense in punishing them, than in losing one's temper with a plant, or shrub, because it disappoints our expectations.

SECTION D.—NATURE AND NURTURE

All attempts to solve this problem lead us in the direction of the mysterious germinal matter. It becomes a question

¹ Hypothetical terms, useful for explanatory purposes, but with no foundation, in fact, so far as we know.

of breeding and stock. Care prevents accidents ; negligence produces many. That is the entire pith of the whole problem from the practical side. The situation is somewhat involved with environment ; so that we cannot at present delimit the terms and conditions of heredity and environment, or as they are called Nature and Nurture. Nor can we say how far heredity is influenced by environment, nor whether heredity may finally be the result of environment.

Environ-
ment
reacts on
heredity.
Bad
heredity
de novo.

Degene-
racy due
to social
environ-
ment.

A normal person may be undermined physically by alcohol, syphilis or tubercle, and the succeeding generation as a rule is weak congenitally. Here then the unfavourable environment of a normal life may commence a degenerate stock. This is regarded as a bad stock produced *de novo*.

We have thousands of cases of normal individuals, who, through stress and excess, have sunk far into the submerged tenth. It is a question whether these normal, but sunken and depraved people can start an unhealthy stock, full of degeneracy.

It is quite conceivable that normals may not only be manufactured into criminals by unfavourable social conditions, but originate a long family of evil-doers and degenerates. Environment surely must control and modify heredity in the human family, even though it may not do so to anything like the same extent as in plants and the lower animals. These have no psychological and neurophysical plane on which to be attacked, as in the case of mankind.

The
Jukes
family.

The famous Jukes family¹ is often quoted in support of this theory. Old Jukes emigrated to America about 1760, and took up his abode in the backwoods. His was a rough and ready hunter's life. He had to depend on his own exertions for every mouthful. He reverted to the life of a savage and as a result of polygamy is supposed to have furnished the western hemisphere with 830 descendants, of whom the majority were traced to be degraded evil-doers. Many of the women were prostitutes and thieves, while the men took to thieving and every variety of crime. If old Jukes lived now in England he would have been regarded as a decent man, perhaps a town councillor or guardian, but his family would not have been so large, and much more respectable.

¹ *The Jukes*, by R. L. Dugdale, New York, 1894.

Here then the environment of the lawless, aboriginal state seemed to start off a long string of degeneracy, which was the more conspicuous as it met the advancing tide of civilisation.

It is quite possible that the reader will here intervene, and say that the fact of any one falling into the submerged tenth is in itself a symptom of degeneracy, which may have been hidden by other circumstances, and that the appearance of normality was fictitious. If this be so, it destroys the theory that normals can produce degenerates *de novo* from unfavourable social conditions.

Some biologists say that the foetus owes nothing to the parent except shelter and nourishment, but if the social conditions are very adverse, the nourishment and even the shelter may not accomplish sufficient to produce a normal child. Thus we have evidence leading in both directions.

It remains a fact that once normal man has been thoroughly poisoned, perhaps saturated, with one of the various toxins alluded to, his progeny is damaged in many ways and probably even structurally or somatically affected.

How disease becomes a starting-point for degeneracy.

The neurones, being of such delicate constitution, naturally suffer most in all attacks from without, and when this occurs the progeny is changed for the worse. Here is a starting-point for degeneracy. Any disease, or even shock, attacking the pregnant mother may starve the foetus, arresting its development—an effect which may remain permanent throughout the life of the offspring.

If philanthropic people could turn their energies to the fit, we should have a more virile race and stamp out degeneracy. As it is, the unfit are the hobby of the well-to-do. The unfit multiply at an alarming rate, and no one raises a voice against such recklessness. We might purge some of our degeneracy by healthier marriages; but is it not better to discourage marriage among the unfit, for the sake of future generations?

At the risk of being wearisome, I shall narrate some cases, that I have collected from various sources, to illustrate both of the questions under consideration.

Cases to illustrate both the questions asked. Four generations, A, B, C and D.

The following family comprises a record of four generations: A, B, C and D. A was a successful business man, who had no known taint in his family. His wife was normal. He was temperate and of good character. At middle life he developed

melancholia and finally hanged himself. He had a considerable family, one son and several daughters. They were all weak in *morale*—in fact, degenerate, vain, thriftless, idle and profligate. They form series B. Curious to relate they all died in middle life.

Those who married normals had an improved offspring, according to Galton's law of levelling up; the defects were more in the direction of feeble-mindedness. Some of the children married and those whose partners were of poor material, had larger families and the offspring were of very inferior quality; in fact, well marked degeneracy or weak-mindedness made its appearance. This is series C.

Series D, the great-grandchildren, as it happened, levelled up by the improved marriages of the parents. Financial comfort saved the situation. Had stress and poverty come into play, the degeneracy would have shown itself as crime.

Case 2.

Here is another case, of a burglar, who might be regarded as a "sport." The parents were of gentle birth and possessed of wealth. The wife suffered from melancholia and was insane. There were seven children; the two eldest were girls and insane after the type of the mother. The burglar, as the youngest, probably represented the dregs of an overstrained, unhealthy stock. When he was a child, the father died and left nothing, which showed a "spot" somewhere on his brain or personality—considering the easy opportunities he had of leaving his family comfortably off. The boy consequently was homeless from an early age and had to find situations as best he could. At 14 he robbed his employers of about £10, but was forgiven. After this however he seldom took any regular work and drifted permanently into crime. As a burglar he was not skilled, being too indolent. His robberies were clumsy and if he were disturbed he trusted to his heels. These occasionally landed him in the arms of a policeman, so that now at 32 he has had 15 years in sentences. He is a refined young man, not violent or cruel in his disposition. I wish I could have roused him to something better, but found him unquestionably a hopeless, weak-minded degenerate. Is it possible that there was a direct germinal instability from the father? ¹

¹ The poor fellow died recently of pneumonia, probably for want of warm underclothing when pursuing his vocation at night.

SECTION E.—THE ROYAL COMMISSION ON THE
FEEBLE-MINDED

I have collected a few cases from the Report of the Royal Commission on the Feeble-minded bearing on the heredity of degeneracy, or its starting *de novo*.

In their report¹ there is the following group of 40 defective children, which illustrates how alcoholism and insanity provoke degeneracy. The cases are not carefully worked out, for we cannot tell if the drunken parents were degenerates, or might be regarded as average. It is however safe to infer, considering the class they represent, that they transmitted degeneracy. In some of the cases consumption plays a part.

Each group is of interest, carrying a reproof and a moral in favour of healthier breeding, especially among the poor. Such concrete examples are worth infinitely more than groups of statistics. Of the 40 cases examined, one-third of the fathers, and one-quarter of the mothers, were drinkers; and one-fifth of the fathers and one-tenth of the mothers were insane.

Here is a group which cannot be regarded as a national asset.²

1. A boy aged 10 was subject to fits, and a congenital Cases. imbecile. He was kept in an Institution. His father was 79; that is to say, he was 68 when this boy was conceived. The mother was consumptive. Out of 16 (!) children, 10 died; of the 6 living, one other was insane and in an asylum. We may well be anxious about the other four and their offspring.

2. In another County Council Institution,³ there had been three brothers who were deaf and bad tempered. The home was of low class. The father was a drunkard; the mother was consumptive and of poor intellect. Of these boys, the eldest had been in an asylum, and at the age of 25 was liberated; he was at the time of writing earning 3s. a week and his board at a greengrocer's. The third boy, aged 21, had so far recovered as to be at home, and was earning 14s. a week and going straight. In the family there were two girls who were in service. This group shows a slight improvement through the care in

¹ P. 59, para. 201, vol. viii.

² P. 67, para. 319, vol. viii.

³ Para. 321.

the Institution, but nothing could lift them above their true condition of degeneracy. They had been raised to the mental standard of boys of 10 or 12 years of age. In 30 years they will be no higher and worth no more, because the brain texture has not been laid down that would make them capable of advance.

Here ¹ is another case. A boy, who improved under care, was admitted in 1892 as deficient and dangerous. The father was a drunkard and the home low class. He left the Institution when 14 and got a situation. He is now 21 and earns a guinea a week. Will he be worth a penny more when he is 30 or 40? He has not got the brain machinery laid down for ascending in the mental scale.

The Royal Commission ² find no evidence that mentally deficient parents are more liable than normals to produce mentally deficient children! They say that ³ "mental defect is spontaneous and has a great tendency to recur in its descendants, and thus is truly inborn and transmissible by inheritance."

These assumptions, so startling and contradictory, only represent the difficulty of collecting evidence; and the unreliability of statistical inquiry for want of accurate data. One doctor examined 29,000, another 20,000, and so on. Such examinations must necessarily be very superficial and therefore of little value. Take for example the case where I report four generations affected with degeneracy,⁴ if any one hurriedly examined two of the mentally deficient grandchildren (C1 and C3) they might in such a superficial examination pass them as normal without any reference to the father, B, and the grandfather, A, who were abnormal. Or still worse, they might recognise the mental feebleness and report it as originating *de novo*. Though statistics are telling and valuable if properly handled, yet they lend themselves to faulty manipulation. I must confess I have a great weakness for thoroughness in detail in all things.

Is feeble mindedness spontaneous as the Royal Commission suggest?

The Royal Commission have come to the conclusion that mental deficiency may be spontaneous; but this term is out of date. Spontaneous generation has long since been explained away; while spontaneous combustion is known

¹ Para. 322. ² P. 180, para. 540. ³ Para. 545. ⁴ P. 211.

to be due to very active fermentation. There is nothing spontaneous.

I have given a few cases of degeneracy appearing suddenly in a family, but the cause is traceable to the parentage in almost every instance. I could give more cases to support this view.

Where we cannot trace alcohol, the stress of poverty, or tubercle, we have always that secret enemy which lurks in the shadows, syphilis. The laity are very ignorant on this subject, but we know that it is extremely common among nearly every section of society. Secret taints.

Youth, in the age of folly, is often a victim of ignorance, and who can gauge the end of his trouble? But, it may be asked, if we grant the father had syphilis as a young man, should not all the children show signs in the shape of stigmata, bad teeth or bridgeless nose? That this is not so, is proved by the hundreds of cases where the children are perfect, even where there is a taint of syphilis.

Much depends on the treatment and cure of the disease. If a good cure be effected, probably the children will be healthy, as I can testify from cases I have watched for over 20 years. By contrast the syphilitic taint may appear as a surprise, "visiting the sins of the father" on the children. Few have any idea of the importance of parentage, or what might be termed the hygiene of married life. In the case of a girl of 18, who died with symptoms of brain tumour, the presumption was that it was syphilitic. This was admitted by the father. In another case a child was affected by a constitutional disease of great obstinacy and severity. Presumably it was a syphilitic taint, and the cause was traced to the grandfather. Out of about 30 of his descendants, only 2 were tainted, but to one of these the taint was fatal. Again, in the case of an epileptic idiot from apparently healthy parents in good circumstances, I traced syphilis in the father. The 8 other children in the family were healthy.

If the laity fully appreciated the extent to which they themselves are tainted with syphilis, they would not hesitate to make a study of the hygiene of marriage and take vigorous steps to lessen the trouble. If a man be not thoroughly cured, he infects the ovum and the foetus is syphilitic. This

in turn infects the mother, by the blood passing through the placenta. The innocent mother is then syphilitic, liable to reinfect all future progeny, to ruined health and to various neuroses in later years. Among the better class these troubles are not so common as among the poor, but it all spells race degeneration.

It is time for the purists to recognise the evils in our streets and take measures, not for "the regulation of vice," but for the prevention of infecting the youth of to-day, who in the next generation will be the backbone of the nation. It would have a visible effect for good upon the middle classes.

The
purity of
the
Quakers.

If we examine a healthy group, namely, the Society of Friends, we get a very fine object lesson. I was greatly struck some time ago by a story of a Quaker, 80 years of age and seriously ill, about whom there was a consultation of three or four doctors, who practically gave up hope. Not so the Quaker, for he said they were guided by statistics or averages, and he had seven generations, or more than two centuries of healthy, temperate, long-lived stock behind him. He lived to ninety-two. So it is that by plain living, healthy recreation, the avoidance of alcohol and dissipation, they have become a very healthy stock. They take but little medicine and being of economical habits never come within the poverty zone.

Unfortunately, there has been a great deal of intermarriage, and consequently, a certain amount of neurosis and insanity. They may have been credited with an undue ratio of insanity, because they were the pioneers of reform, when shocking treatment was meted out to the insane. In the Society of Friends, dissolute conduct and syphilis are absolutely negligible quantities. In their own asylum, the Retreat at York, they have only had one or two cases of general paralysis of the insane, and those recently. This disease is now considered to be syphilitic in at least 80 per cent. of the cases.

I can trace very few degenerates in the Society, which in round numbers reaches 15,000 members. It is their very stability which has enabled them to think and act clearly and wisely. Their special labours are now accomplished; their work is done, and they are rapidly decreasing. In fact, the original type is almost extinct. The present recruiting from the masses is very disappointing, and destructive to the old

traditions. They are not the same people. In many cases, where young Friends have left the Society and married "out," or as they used to call it "into the world," if they follow the gaieties of life they suffer more heavily than average people. Thus generations of total abstinence make them very intolerant to alcohol, and their children are likewise intolerant.

As a matter of common observation, mental defect follows in the wake of civilisation and stress. I remember seeing at St. Anne's Asylum, in Paris, several women suffering from general paralysis of the insane. This was attributed to the French women taking part in the stress of life, in contrast to our English women. I believe at that time there was only one woman so affected in Morningside Asylum. Now that English women enter into the competition of life with men, they likewise fall victims to general paralysis. English women are becoming masculine in all their tastes and habits, and it affects maternity. The men are less manly, as may be frequently observed where the wife has to work to keep the home together. Such lazy husbands should be tied to posts in the market-place and publicly whipped. It is time that women had a say in these things.

Degeneracy follows in the wake of civilisation

Women working to keep men.

How different is family life among the Jews, even among the poorest! How careful they are of their pregnant women! The Hindus take more care of the prospective mothers and the children than do some of our Christian employers of labour, who treat them as slaves.

The Royal Commission should have collected evidence on a far wider and less superficial basis. Every member of the medical profession should have been invited to contribute one case, thoroughly treated as regards heredity, congenity¹ and environment. We should thus have had the predominating causes distinctly traced.

The Royal Commission aimed at quantity rather than quality of evidence.

We must enlarge the inquiry in regard to the two following problems:—

1. Must a degenerate be the child of a degenerate; or may he arise *de novo*, as a sport or variation?
2. Does a degenerate pass on his degeneracy to the next generation?

The two important questions in degeneracy.

As regards the general problem of degeneracy, it is evident

¹ A new term, but essential; in French, *congénite*.

that the deficient, or as I prefer to call him degenerate, may arise *de novo* only in the same way that tubercle arises *de novo*, or any other congenital affection. If the taint is congenital, occurring after conception in the womb, then it should like tubercle be preventible.

It follows that the other part of the first question is answered, namely, that it is not essential for the parent of a degenerate to be a degenerate.

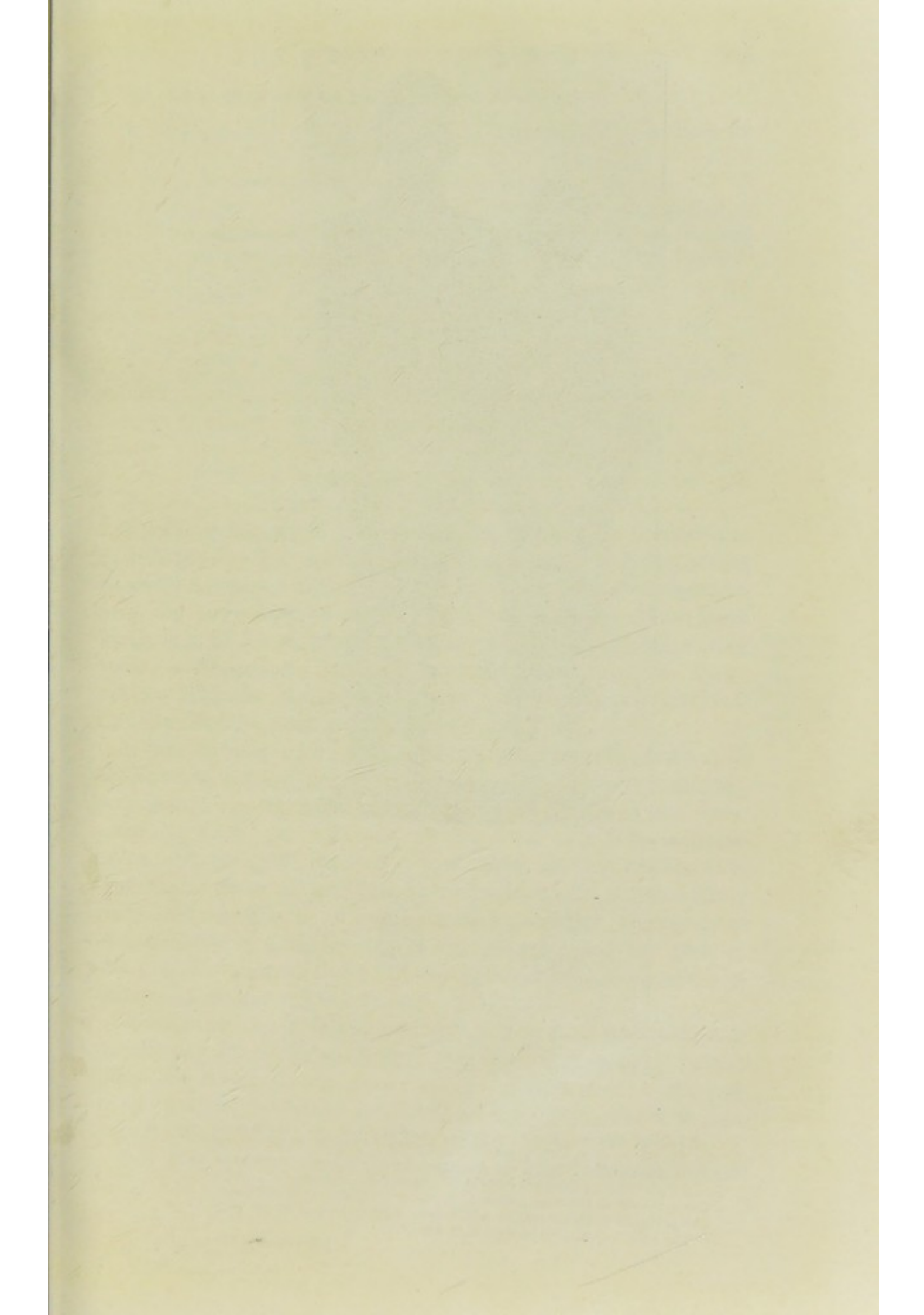
The second question is of the highest importance. Does a degenerate pass on his degeneracy to the next generation?

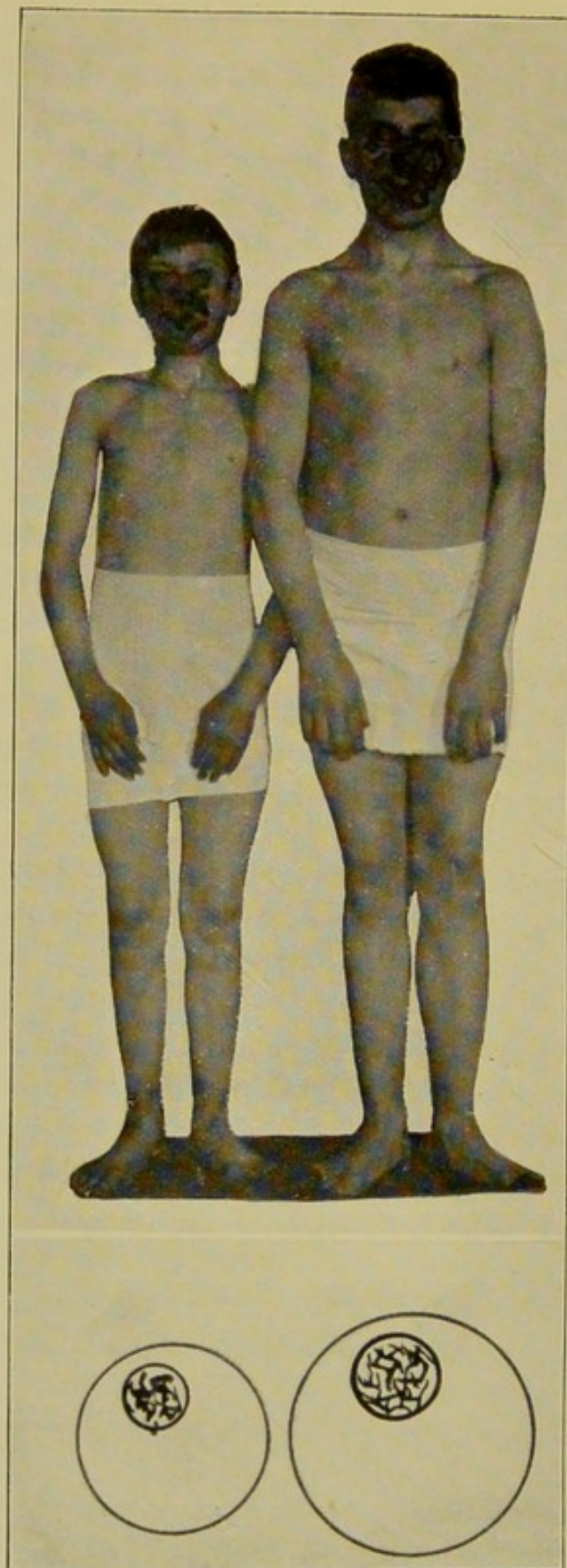
There is abundant evidence that frequently, if not usually, the children of degenerates are much below the average. They are dullards, spendthrifts, weary-born, ne'er-do-weels, and half-timers at labour. If the environment is favourable they do better; they are held up or carried along; but if the environment is adverse, anything may happen, down to their becoming criminal. I think we must admit the probability, as well as the possibility, of degeneracy passing down the stock.

It is abundantly evident that when we get among the class called degenerates, the human type is distinctly altered and lowered—intellectually and morally. This gives an appearance of heredity to degeneracy. It is a false appearance, being more concerned with the continued unfavourable environment. To make a proper scientific investigation, we should take the parents out of the slums and see what their offspring are like if reared in the country, in Canada, or Australia. From all one hears the offspring are improvements on the parents, rising to the level of mediocrity.

We are not, however, going to turn sows' ears into silk purses, and if the parents are degenerates, it is evident that their qualities, lowered in all directions, will take a good deal of levelling up—doubtful in one generation but probable in two or three.

Do we get a warranty for saying that degenerate parents transmit their degeneracy by what we observe in insanity? Here is an illustration comprising five generations as regards insanity which is very lucid. The taint has passed down through the females. Environment is largely excluded as the family is wealthy.





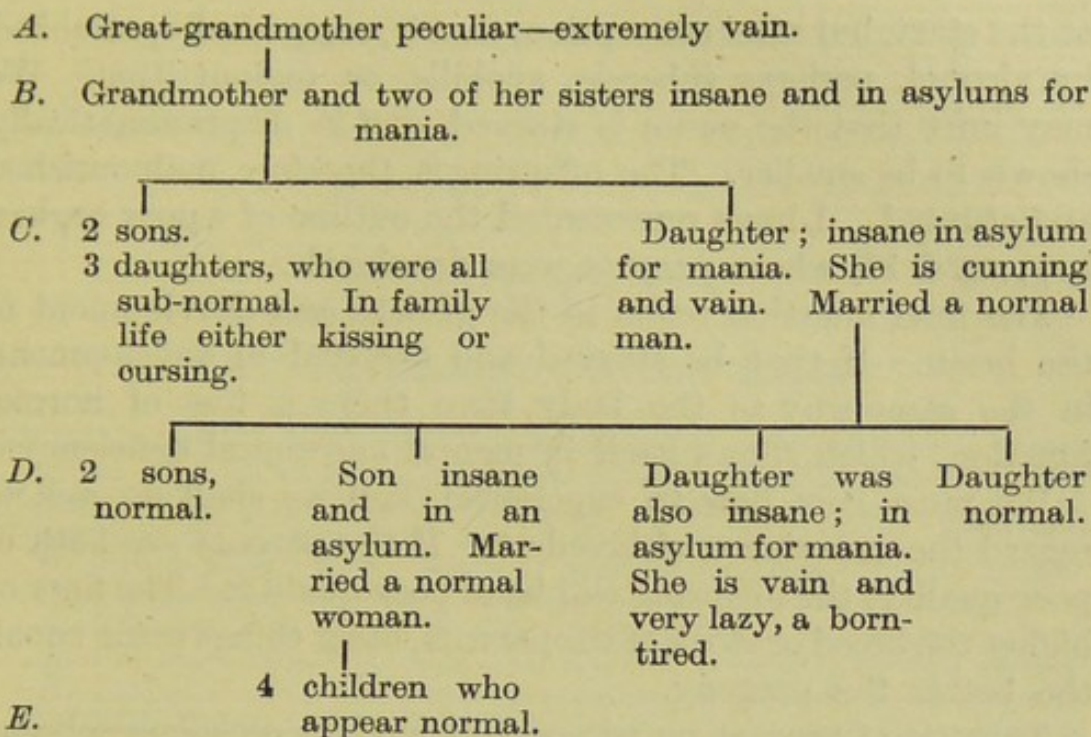
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FIG. 20.

This is a diagram to explain physical, and indeed mental, degeneracy on the theory of the starved and damaged ovum. The normal boy is 16, while the stunted boy is one year older. Below them are represented two ova. The ovum on the left side, beneath the degenerate, is two-thirds the size of the normal ovum. It is, of course, entirely hypothetical, but probably contains truth; and carries a suggestion as to the care of the poor, especially the expecting mothers.

[To face page 219.]



To the question, is it essential for degeneracy to continue in a family, I think we can hardly give a negative reply, unless there be a healthy alliance in marriage. But so often degenerates are only attracted to people on their own low level. Even then in theory we could rescue the children by improving their environment. This is proved abundantly in Institutions like Dr. Barnardo's Home; the Wesleyan National Orphan Homes, and similar places.

How can we arrest the descent of degeneracy?

If the opinion is correct that the mother only subscribes shelter and nourishment to her progeny, then any prostitute, any imbecile, any woman, however repulsive to us and however degraded, provided she is free from any constitutional taint, will make as perfect a mother as the finest woman in the land. Such a position is untenable. It is absolutely ridiculous; moreover it is quite contrary to the experience of our workhouse authorities. It would seem as if the pith of the problem rests in the germ plasm, in the hypothetical determinants and ids of Weismann.

The pith of the problem.

If we represent it diagrammatically (Fig. 20) it becomes more apparent:—Take 2 ova, A and a—the former starting fair in life; the latter damaged by alcohol. Let A be normal, properly nourished after conception, and a normal being develops. I show the photograph of a normal boy of 16.

Let a be the ovum of an alcoholic mother, or even normal

at the start, but after conception, that is, congenitally, attacked by alcohol, perhaps tubercle, syphilis, or malnutrition. We may infer that the ovum is starved, and is diagrammatically shown to be smaller. The offspring is, therefore, malnourished and stunted. I have represented the outline of a poor orphan boy, aged 17, whose parents were drunkards.

The final question refers to the growth and development of the brain. If that be starved and arrested in development, in the same way as the body, then there is loss of normal function, which shows itself in mental and moral deficiency.

We must here bow to experience, and we shall do well to regard the experience of breeders. If the parents are both of poor quality, the offspring will be of poor quality. The finer or higher the breed or stock of the parents, other things being equal, the better the progeny.

There is at present no prospect of modern socialism solving, or even assisting in this problem ; nor will the germ plasm lend itself to the theories or platitudes of the politician. Some of them are actually endeavouring to make silk purses out of sows' ears.

CHAPTER XI

THE PHYSIOLOGY OF THE BRAIN

SECTION A. BRAIN STRUCTURE : Simple nerve action explained—Reflex action—The brains of the lower animals—The basal ganglia—The cerebrum—Sulci—Convolutions—The grey cortex—Size and weight—An operation on an imbecile for loss of speech—Brain pattern.—SECTION B. BRAIN FUNCTIONS : Areas of different functions—Psychic areas—Association areas in the lower mammals—Instinct *versus* Intellect.—SECTION C. THE MICROSCOPIC STRUCTURE : Microscopic appearance of the cortex—The pyramidal layer—The nerve cell—The layer of intellect, divided into two layers ; prenatal and post-natal.—SECTION D. THE PHYSICAL BASIS OF DEGENERACY : The key of the problem of degeneracy ?—The brain of a degenerate, a murderer—It was an infantile brain—The brain of a supra-normal child—The brain of an alcoholic—The care of the child—Is the degenerate unfinished ?—Suggestions afforded by a diagrammatic representation of the great problem.—SECTION E. THE STIGMATA OF PHYSICAL DEGENERATION.

SECTION A.—BRAIN STRUCTURE

BEFORE I ask the question, "Where is Mind ?" ¹ I must give a short sketch of the structure and function of the brain. A concise but accurate description of this organ is essential for the study of Criminology.

It is important to realise that nerve structures occur in the lower forms of life, as in a worm or sea-anemone : and they gradually develop from these to more complex forms, as in the brains of Vertebrates. Let us first study simple neural action. Whenever a worm is touched, it recoils ; likewise the beautiful tentacles of a sea-anemone instantly close up. This is because delicate receiving organs in their skins send impulses inwards to nerve cells, which in turn cause motor impulses to be sent outwards, from other cells, to various muscle fibres of the body, thus producing these contractions.

Simple
nerve
action
explained.

Among higher animals a sensation travels along a sensory fibre to a sensory nerve cell or cells, producing a response from motor cells, which passing outwards results in motion or activity. The whole affair is comparable to touching a push and

¹ Chap. xii.

Reflex
Action.

ringing an electric bell. The same occurs if a sleeper's foot be tickled, when he will withdraw it. In the latter instance the process is carried out in the spinal cord, and may act without consciousness. This nerve motion, representing the simplest type, is spoken of as Reflex Action.

The brain proper or Cerebrum appears first in the fishes, although the nerve masses or ganglia in the Invertebrates are usually described as brains.

The
brains
of the
lower
animals.

The fish brain is a complex reflex machine, and is constructed in three lobes (Fig. 21, *A*). The front lobe, *C*, is connected with the olfactory nerves, *Sm*—as if fish were richly endowed with smell to aid them in the acquisition of food. The middle lobe, *Op*, is a very rudimentary organ of sight; while the posterior lobe, *Cb*, is the cerebellum and as a steering apparatus is very highly developed. This is necessary on account of the very rapid movements which form a feature in fish life. *M* is the medulla or vital centre. The frog has a very small rudimentary cerebellum, as its movements are so slow (Fig. 21, *B*).

Birds (Fig. 21, *C*) are developed in the cerebellar region, *Cb*, according to their powers of flight. Thus the eagle has a very large cerebellum, while it is rudimentary in the Apteryx. Birds are, however, specially developed in the organs of vision. Their optic lobes, *Op*, are very large and elaborate. It is generally considered that the cerebrum has its first rudimentary representation in these lower animals. If this be so, then the cells in the so-called cerebrum of birds are, as far as I have observed, not pyramidal but polymorphic; the latter layer being related to instinct, the former to intellect.

The basal
ganglia.

The Cerebrum proper, or Neopallium of Elliot Smith, is at all events more conspicuous in mammals. This (*C*) is shown diagrammatically, in the brain of a rabbit (Fig. 21 *D*). There is, however, a steady evolution in the nervous system, from the simple reflex cells and fibres of the sea-anemone, to the complex association centres of the human brain. In mammals the cerebrum or neopallium covers the large basal ganglia, which correspond to the lower brains and which have to do with the immediate necessities and functions of life.

The Cere-
brum.

This Cerebrum, with its delicate convex surface, lying protected under the roof of the skull, has surface markings, due

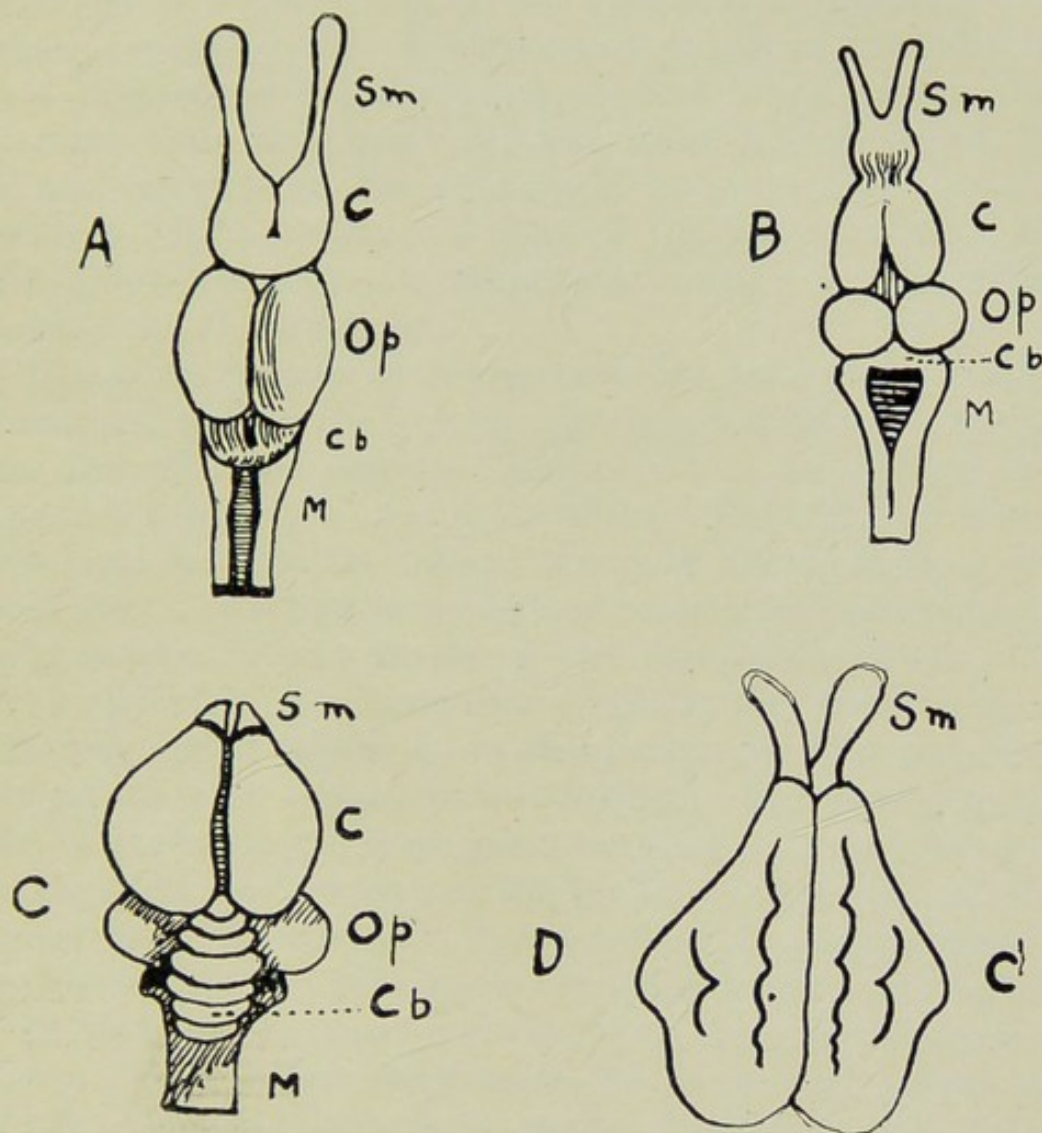


FIG. 21.

A is a diagram of the fish brain ;
 B, that of the frog ;
 C, of the pigeon ; and
 D, of the rabbit. There is a steady advance from simple lobes or ganglia to a neopallium or grey cortex in the mammal, c.

Sm is the olfactory nerve ;
 C, the cerebrum (?)—so-called ;
 Op, the optic lobes ; and
 Cb, the cerebellum ;
 M is the medulla oblongata.



to indentations and grooves, called sulci. The measurement of intelligence is partly related to the development of these markings or sulci. If we investigate the lower mammals, we find that in a rabbit they are few and simple, whereas in a dog there are more. The Herbivora, whose placid existence does not demand much intelligence, have a much plainer brain pattern than the Carnivora, who must live by their wits.¹ When we come to the anthropoid apes we find a complex pattern, which approaches that of the human brain. Here the grooves or sulci are numerous, running in a curvilinear manner in all directions.

Sulci.

The parts formed by the grooves are termed the convolutions, and in describing the appearance of a brain we speak of the convolutional pattern. The object of the grooves is to increase the surface area of the brain. The outer covering of the brain is called the Cortex,² which in man is about $\frac{3}{8}$ of an inch deep. It is buff in colour and commonly spoken of as the grey mantle, or grey matter of the brain. The depth of the sulci varies from $\frac{1}{2}$ to more than 1 inch, in the case of man, and the grey cortex follows down the grooves, so that as a result we get the outer convex surface doubled. This is very important as an economy of space inside the skull. As the brain grows or expands, what in infancy lies in the grooves may partially come on to the surface. For this reason a small amount of hydrocephalus does not appear to be a misfortune. The skull is expanded and gives more room inside for the convolutions of the brain. By common observation we know that people with slightly hydrocephalic, large skulls, display a great deal of intellectual power. Conversely some become idiots in infancy, by the bones of the skull welding together at too early an age.

Convolutions.

The grey cortex.

Size and weight teach us very little, if anything, as regards intellect. Some microcephalic idiots have been improved by chipping away part of the skull and relieving pressure. Recently I had a case, in which a girl of 11 had been an imbecile since the age of 4. At that time she was intelligent and could speak. She has a large head and an intelligent face, but is

Size and weight.

An operation on an imbecile for loss of speech.

¹ Diagrams and photographs of these are shown in my earlier work, *Education, Personality and Crime*, pp. 74-76 and 77 for brain of orang.

² Cortex, bark.

clearly without mind, very restless, not in touch with her surroundings, but seems to live in a world of her own. As she could speak 7 years ago, I advised an operation in the faint hope that some internal pressure would be relieved. Mr. Donald Armour removed a large plate of skull from the left frontal, or speech area, but no benefit has ensued. Speech has not returned, except one or two words of affection to her mother. The brain was healthy and beautifully convoluted. The cause of the imbecility is quite obscure.

Brain
pattern.

Pattern, or the arrangement of the convolutions and sulci, is at present the chief factor in estimating the intelligence or normality of the individual; yet in the case of this imbecile girl we should be completely misled.¹ (Fig. 22.)

Neurology or perhaps Cerebrology is still in its infancy, and much will have to be re-written. It will not remedy itself until a science of Cerebrology is established, as a superior adjunct to Neurology.

It would sometimes appear that in medicine an opinion becomes a fact, if the weight of a great name is attached thereto. For this reason error is too often fostered, and we have to stand the harsh criticism of the scientist.

I cannot help feeling that the science of Cerebrology should now be ardently pursued. Let us fathom the mystery of the grey cortex. Flechsig, Brodman, Vogt and Bolton have enlightened us as to foetal development. We must not stop here. There is a rich harvest waiting reapers. We have to determine to what part of the cortex intelligence is attached, and for that purpose compare the foetal brain at birth with that of the child at 1, 2, 3, 5, 7, 10 and 15 years of age. We have to examine the mentally deficient; those not insane but on the borderland; and we have to examine the brain of the confirmed wrong-doer.

I have been appalled that in some of our very best laboratories, the brains of the insane when examined under the microscope are often described as normal. Why, then, are normal brains confined in asylums? The thing is a contradiction.

Another matter is the casual way the cortex is examined. A small portion is removed from motor, sensory and perhaps

¹ There are several photographs and diagrams of the cortex, in my former work, demonstrating great variety of pattern.

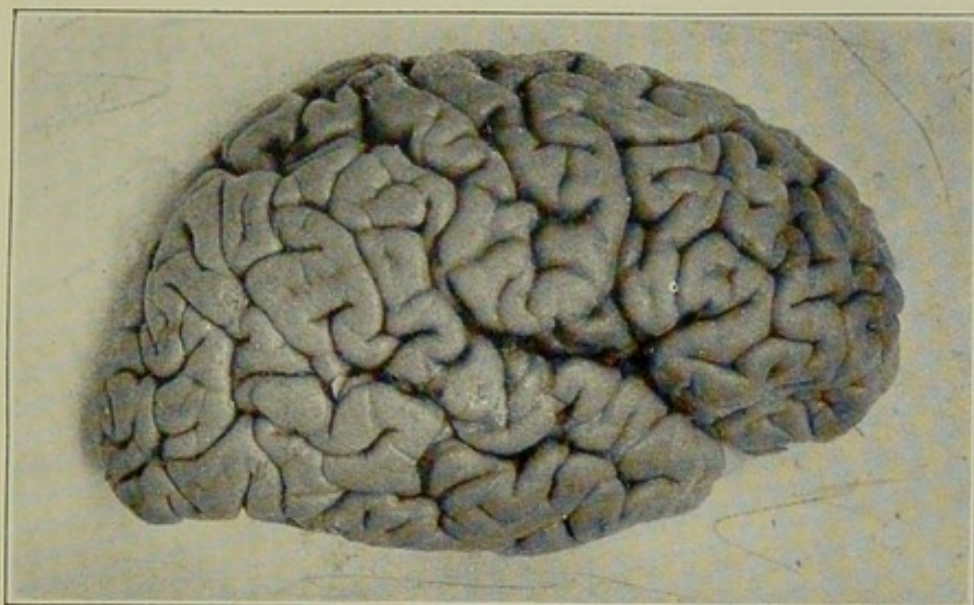


FIG. 22A.

To show the brain pattern. It is a lunatic's brain, and shows some wasting of the convolutions. I am indebted to Dr. Bolton for these three photographs.

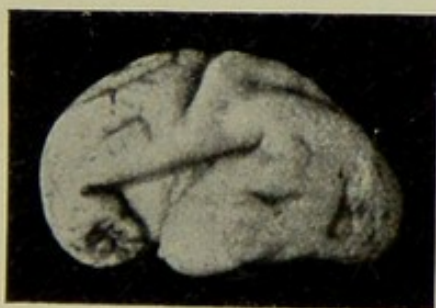


FIG. 22B.

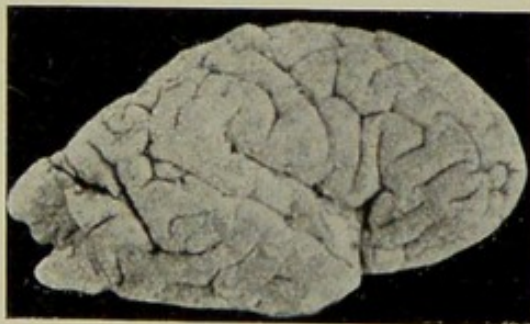


FIG. 22C.

Fig. 22B shows the outer surface of the left hemisphere of a human foetus about the sixth month. It weighs 55 grms., about 2 oz. The main fissures are appearing.

Fig. 22C shows the outer surface of the right hemisphere of a human foetus at the seventh month. The fissures are complete except the more delicate (higher functional) fissures. It is a good convolutional pattern. [See Dr. Bolton's Goulstonian Lectures, "Brain," 1910, vol. xxxiii.

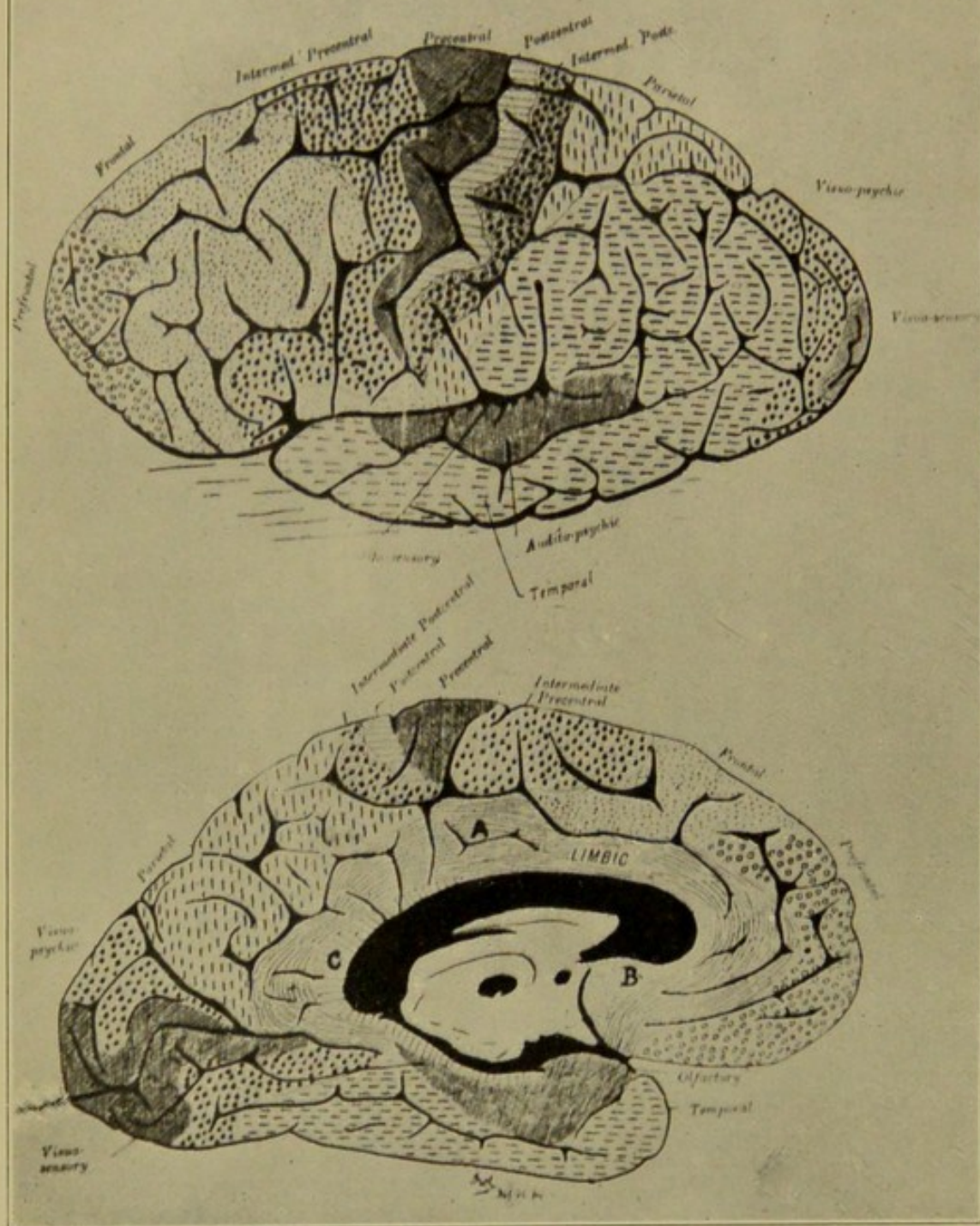


FIG. 23.

I am indebted to Dr. A. W. Campbell for these beautiful maps of the cortex. The areas are clearly marked and defined.

calcarine areas. Some six or eight blocks at most are relied upon to determine the causal relation of the mental disease. These practices not only keep us in the dark, but lead us into error. The rising generation of pathologists will improve on this.

If patients have persistent delusions, or be deaf-mutes, or anything which points to a particular organ, why not examine carefully the cortex of that part, to see if there be an arrest in development either before birth or after, or some more recent pathological change. I trust my earnest appeal to neurologists will not be misunderstood.

SECTION B.—BRAIN FUNCTIONS

Having briefly described the naked eye appearance of the brain, I shall now refer to the areas of function into which it is mapped out, and the general microscopic structure of the cortex. Areas of different functions.

There are all sorts of nerve actions going on in the brain below the cortex; processes concerned in unconscious movements, or connected with various bodily functions and secretions. Everything, however, which rises to consciousness, according to present ideas, may be transferred to the mechanism of the grey cortex. It is of course possible and probable that subconscious mentation is carried on also in the cortex; but about that we are quite ignorant.

The cortex is made up of layers of cells and fibres,¹ grouped up in areas, according to functions (see Fig. 23).

One area, the post-central, receives every touch or sensation from the skin; another area, the temporal, every sound; a third area, the calcarine, receives visual impression; while others receive impressions of taste, smell, and so on.

Another large important area (the precentral and the frontal) sends out motor impulses from its cells, which travel by means of fibres down the spinal cord, and thence to the muscles.

These areas are sensory and motor, and through their agencies we move about in touch with our environment. But Psychic areas.

¹ In this treatise I am not dealing with fibres. A normal cell must have its complement of fibres, as a body has legs and arms. Deficiency in cells implies deficiency in fibres and *vice versa*. (See Fig. 35, p. 255.)

there are other areas in the brain, which have higher, psychic, or intellectual functions. They are the thinking parts of the brain. They analyse the perceptions and, in fact, evolve conceptions. They record impressions and formulate directions. Perhaps memory has its chief stronghold here. We call these the Association Areas, and they doubtless raise us to a higher platform than the rest of the animal world. They are the Parieto-occipital, Insular, Temporal and Frontal areas.¹

The higher apes are said to have rudimentary association areas; perhaps the Carnivora have, for dogs under domestication exhibit almost human intelligence. This subject of comparative physiology is still being investigated.

Associa-
tion
areas in
the lower
mam-
mals.

Take, for example, the subject of punishment. A dog is punished for doing wrong, say, for stealing cake. When the dog sees cake afterwards, it resists the temptation. A message in the brain travels from the visual centre, and the areas of smell and taste, which would in the ordinary way direct the motor cells to put in motion the necessary machinery to seize and eat the cake. It is difficult to conceive how the dog resists the temptation, unless in an area which is neither sensory nor motor, it can recall the past punishment with its already recorded pain, and connect or associate them. There is no bridge or path in a dog's brain, any more than in a human brain, to connect up the sensation of the flogging with the neurones of the muscles of the jaw. There must be an intervening area, a psychic area, where memory is stored for purposes of analysis. Such are known to exist in man and ape, the Association Areas, and they are the measure of intelligence. We know that some dogs are more easily trained than others, like human beings, and this probably depends on the development of their association areas.

But if we carry this argument further, we find ourselves faced with the dilemma that we are bound to admit that all the mammals must have association areas. Why not? Each after its kind may have some portion of the cortex, which is neither sensory nor motor, but associates in memory past sensations with certain conditions, dangers, and opportunities.

This appears to be the difference between the fish, as a complex reflex machine, incapable of education or much, if any,

¹ See *Education, Personality and Crime*, p. 103.



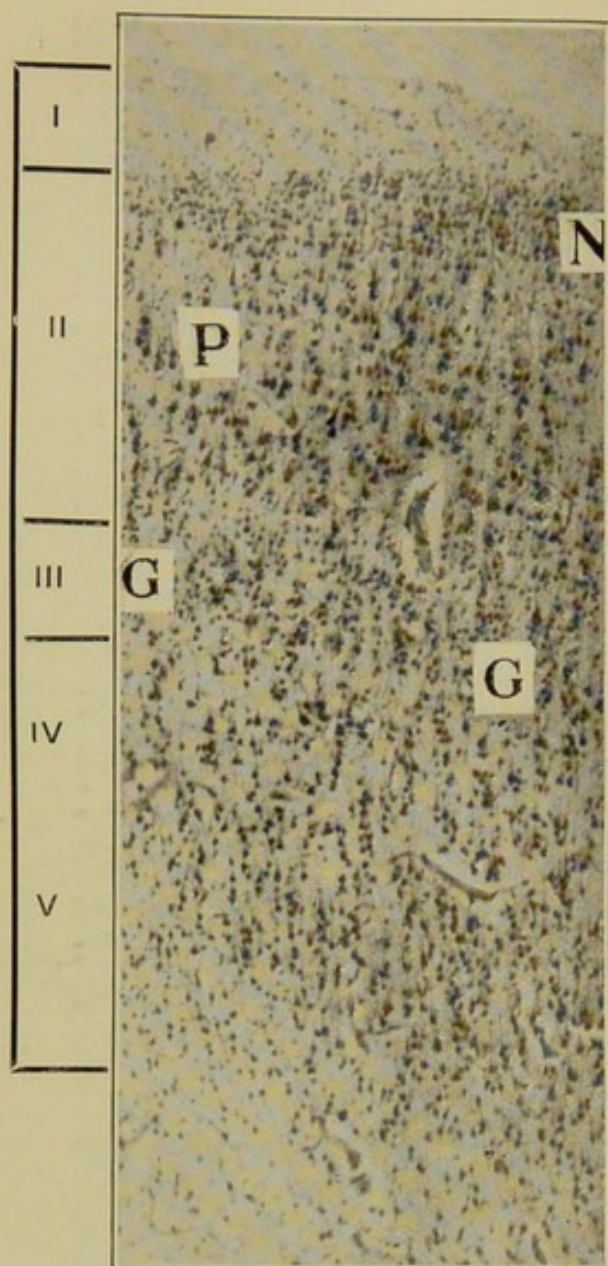


FIG. 24A.

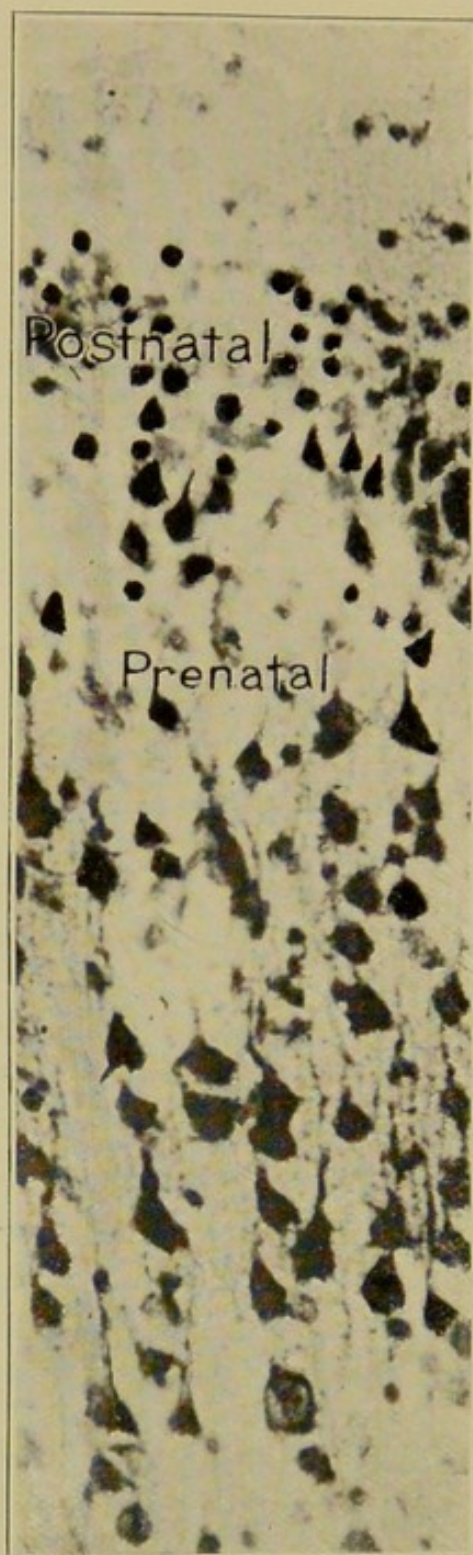


FIG. 24B.

This section is from the ascending parietal or post-central convolution of the foetus, about the time of birth.

I is the zonal or tangential layer, and is made up of delicate fibres of association.

II shows the pyramidal layer *P*, which is divided into well shaped cells below—the prenatal (Fig. B), and a band of nuclei or neuroblasts above, *N*—which are better seen in Fig. B, and are postnatal in development and function.

III is the granular layer—sensory.

The infragranular portion is marked IV and V. (See page 228 for description.)

[To face page 227.]

adaptation, and the mammals which reveal a higher order of memory—capable of acquiring experience and adaptation. There is a vast difference of intelligence in the mammals, but that the lower mammals have a certain amount is evident by what any one can observe in the Zoological Gardens. I do not see that the selection of man and a few anthropoid apes, as being the sole possessors of association areas, is at all tenable. It must be a question of degree as with vision. How could the wild rat exhibit such remarkable intelligence if it was a mere sensori-motor machine, and had not association centres by which to correlate past experiences with certain results and environments? Let us then, *à priori*, accord association areas to every Neopallium, as a necessary part of its architecture and function.

The Invertebrata with their varied instincts are surely but machines, living machines adapted to certain environments, and depending on those environments for their existence. The bee is built for extracting nectar and making honey. Take away the nectar and the bee must die. It cannot turn into a carrion fly, nor yet serve an apprenticeship to a colony of ants. Instinct is not intellect, however intelligent it may appear.

Instinct
versus
Intellect.

Nature has endowed a perfect neuro-muscular apparatus to all the lower animals, each after its kind, adapted to and dependent on certain environments. That is the sum total of instinct. Adaptability is very limited, and when environment goes beyond such, the species dies out.

Probably in mammals the instincts are represented in the basal ganglia; intellect being a function of the cortex. This is confirmed by observation, for the outer pyramidal part of the grey cortex, which in man is the final structure related to intellect, becomes shallower, though not poorer, in structure as we pass downwards to the lower mammals. (G. A. Watson.)

These digressions are not entirely apart from the study of criminology, because it would seem wiser to attempt to grasp the whole subject, to obtain primary knowledge, and learn the first principles, rather than accept a selection of final results. It helps us to understand how mental defects, or mental reversions, in character and intelligence may occur. There may be structurally a throw back from the human type to an ape-like type, or even to a much lower animal type of

brain. It is an extremely difficult subject, and we are apt to be enticed into a lot of unproven theories and suggestions.

In my former work¹ I showed the brain of an imbecile woman, and it is not altogether unlike that of a human foetus at the sixth month of intra-uterine life. By this last comparison it is evident that the poor imbecile woman was arrested in her brain development, months before she reached daylight. She may be regarded from the evolutionary aspect as a throw back or reversion; but is she not more probably a case of arrested development? Nature "missed fire" as indeed she does with many of our criminals.

SECTION C.—THE MICROSCOPIC STRUCTURE

Micro-
scopic
appear-
ance
of the
cortex,

The minute structure of the cortex can only be examined by the microscope, after chemical fixing and staining processes have been employed; and will be more clearly understood from an examination of the following photographs and diagrams.

Fig. 24, *A*, shows a section² through the cortex of a child at birth, from the ascending parietal area. (It is magnified 50 times.)

It can be easily recognised that in the middle there is a distinct band or layer (*G*). This consists of small round cells, and is called the granular layer. It is sensory in function and is supposed to receive impressions from the outer world or from other parts of the brain. It does not concern us in this inquiry except as a landmark.

Below the narrow granular layer, there is a much deeper layer of cells, more or less devoted to natural instincts. It may be called the infragranular layer.

The
Pyra-
midal
Layer.

Above the granular layer is another deeper layer (*P*), which is the goal of this treatise. It is called the Pyramidal Layer, on account of the shapes of the cells, which are seen better in the higher magnification (Fig. 24, *B*). The cells are triangular and have many processes, or fibres, but there is only one fibre, at the base, the axon, which carries impulses from the cell. These impulses may be to muscle, or perhaps

¹ *Loc. cit.*, *E.P.C.*, pp. 75 and 76.

² These various brains were hardened in formalin; and stained with Polychrome or after Heidenhain's method.

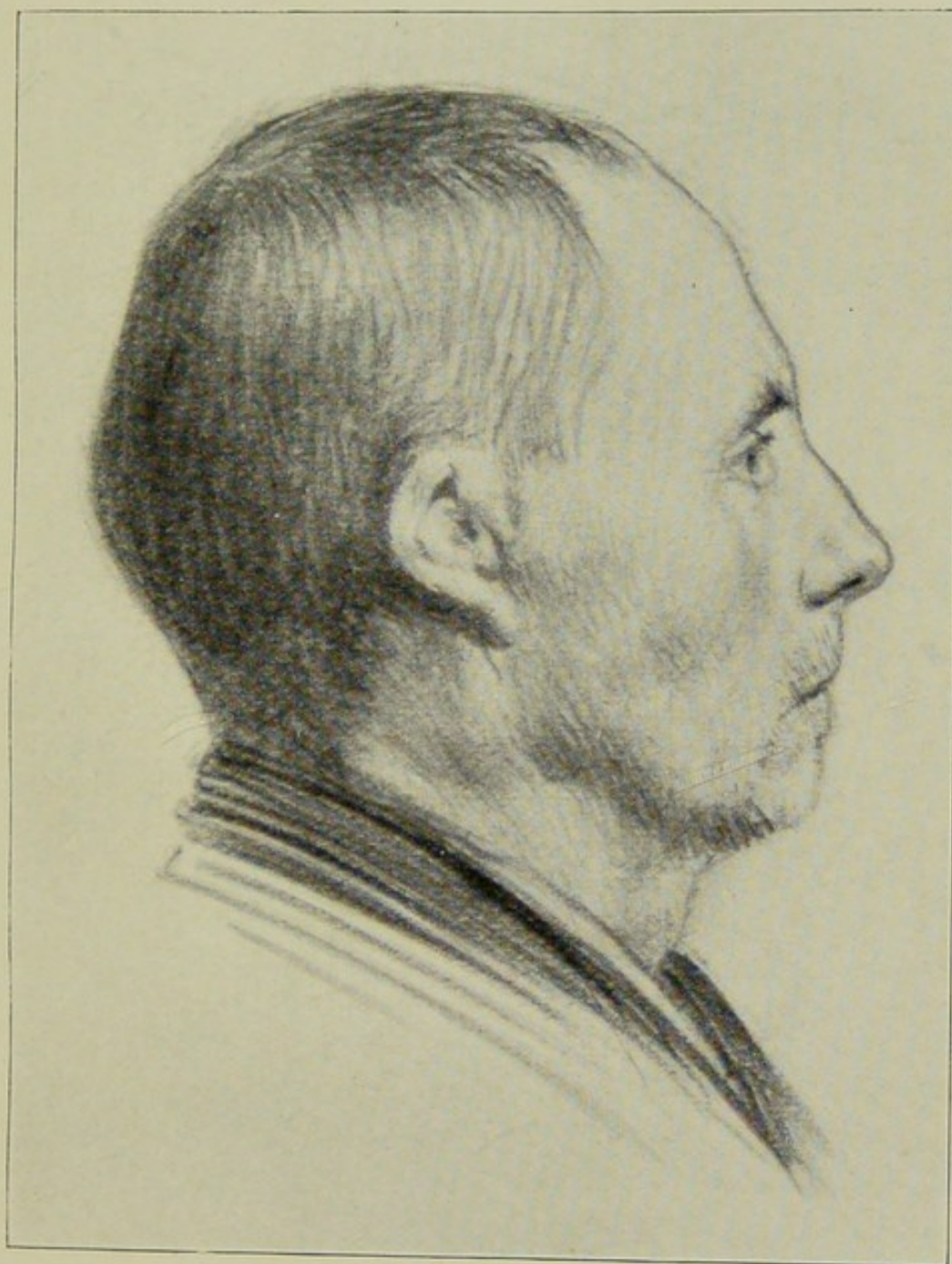


FIG. 25.

This is the murderer whose brain I have described. He was a degraded, typically degenerate man. Observe the badly shaped features and head. The ears were very small and crumpled, devoid of helix. (See page 231 for description.)

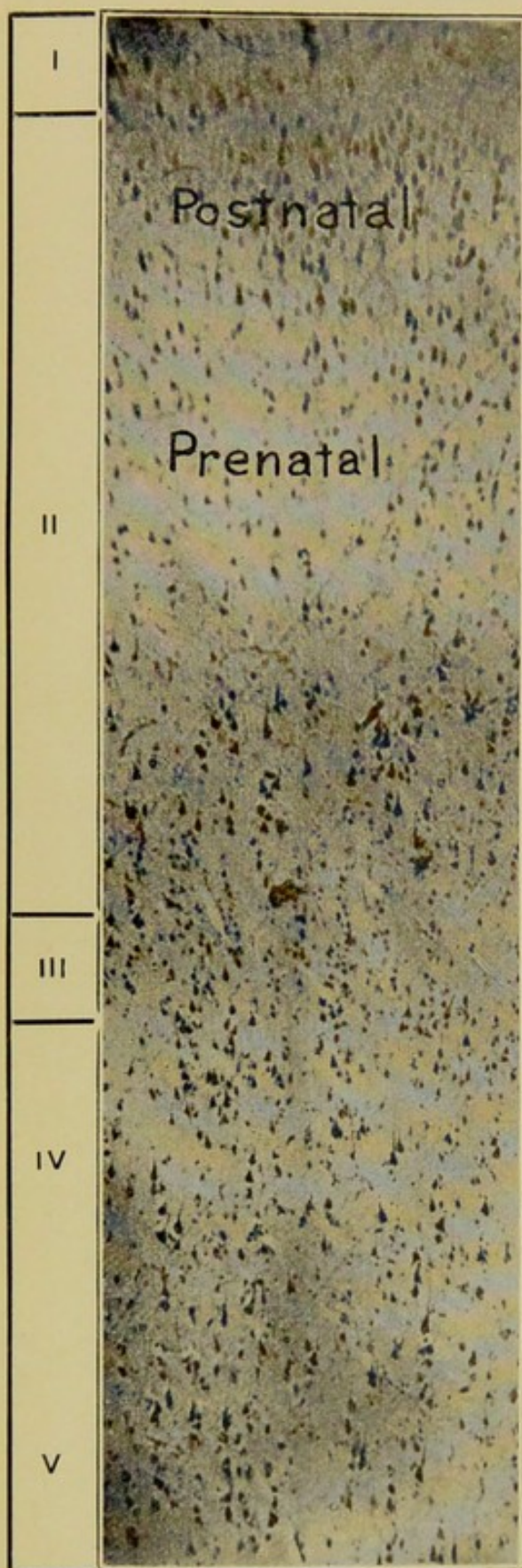


FIG. 26A.

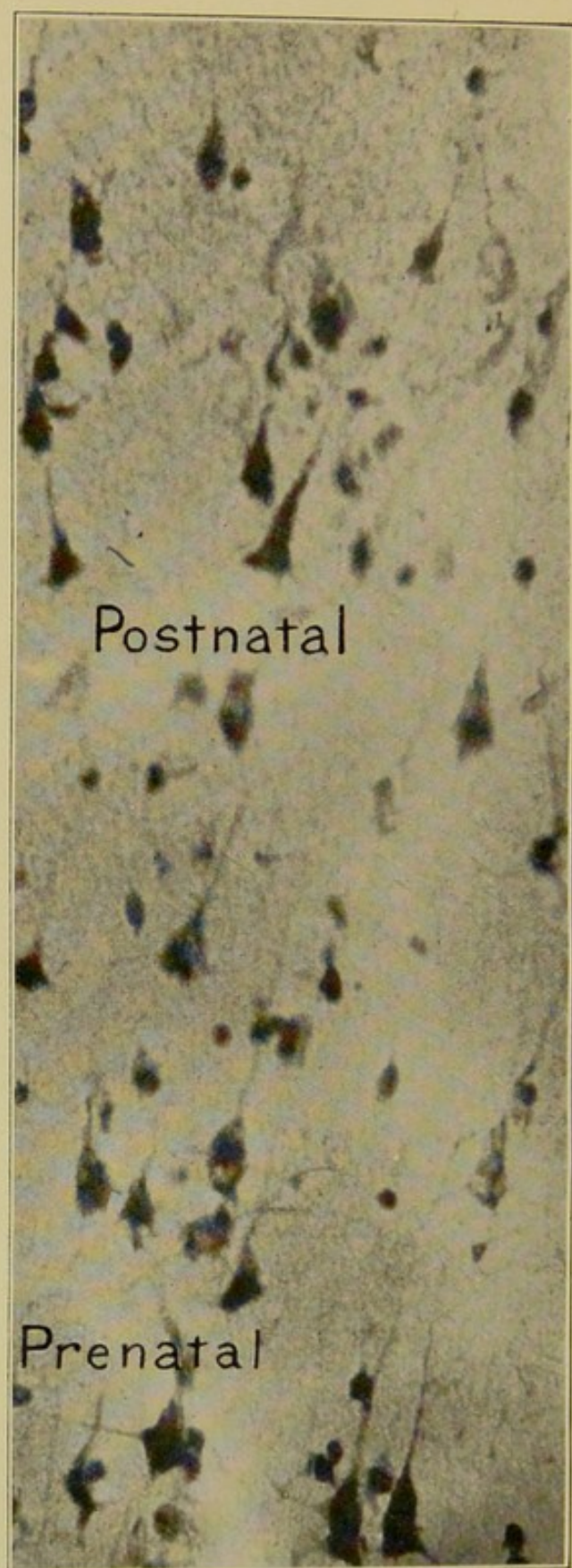


FIG. 26B.

This is an important picture as a type of what the cortex should be. It is from the first temporal convolution of a supra intelligent man of good pedigree. Observe the great depth of the pyramidal layer (II), and also that in Fig. B the postnatal cells are perfectly developed right up to layer I. There are no neuroblasts visible.

Only half of the infragranular layers (IV and V) are shown.

All the micro-photographs are to the same scale, unless specially mentioned. Low power, 50 diameters. High power, 400 diameters. They are all stained to show cells and not for fibres. (see page 232 for description.)

to other cells. At the apex and sides there are several branching processes and fibres, which collect or receive messages. These are called dendrons, from the Greek word meaning branches or rootlets.

The nerve cell appears to generate nerve force, and we might use the ordinary electric cell as a simile. A stimulus enters by the dendrons or receptors, evokes the nerve force already stored, which then passes out as an impulse along the axon. The electric cell must have a rest, though it may be infinitesimal in time. The nerve cell likewise must be recharged by the chemical interchanges with the blood. If the cells are overworked continuously, or deprived of fresh air, exhaustion results, which we style brain fag.

Every nerve cell contains a nucleus, which is the vital part and which precedes the cell in the embryonic brain.¹ This nucleus, or neuroblast, builds up the cell body around itself. In certain diseases, as alcoholism and general paralysis, the cells swell and the nucleus gets pushed out and dies. When the nucleus dies, the cell is done for ; being put out of action it gradually disappears by absorption.

The
nerve
cell.

The pyramidal layer is the layer of intellect. In idiots and imbeciles it is very shallow, and it wastes in dementia and chronic alcoholism.² General paralysis destroys the cortex, commencing at the highest intellectual centres, and ending with the motor and sensory centres.

The
layer of
intellect.

I observed in the foetus at the time of birth, or just before, that this pyramidal layer was divisible into two parts (Fig. 24). There is a deeper part, *P*, representing $\frac{4}{5}$ to $\frac{5}{6}$ of the whole thickness of the pyramidal layer, perfectly developed. These cells appear ready to be switched on. Above them, say $\frac{1}{5}$ or even less of the layer, there is a band of round nuclei, marked *N*, which has not yet developed into pyramidal cells. These can be easily recognised when magnified 50 times, but still better at the 400 magnification.

Divided
into two
layers ;
prenatal
and post-
natal.

I³ therefore ventured to divide the pyramidal layer into two : the deeper, well developed, portion which I name the Prenatal Pyramidal Layer ; while I call the superficial band

¹ See *Education, Personality and Crime*, p. 95.

² *Loc. cit.*, pp. 190, 191.

³ See *Trans. Roy. Soc. of Medicine*, July, 1909.

of nuclei, the Post-natal Pyramidal Layer, because it develops after birth into proper normal cells (Fig. 24, B).

It is quite evident that in normal cases these external superficial neuroblasts go to make up the outer or upper layers of small pyramidal cells. All neurologists agree that the pyramidal layer is clearly divisible into two or three layers, of large cells below, medium and small cells above. The foetus or newborn child has the large, as I would call them ancestral cells, but no small cells. These latter are to come later, bearing relation to the educatability and personality of the individual. If there are but few small cells, we should expect on these grounds that there is a want of personality, an inability to learn, and all the negative qualities which make up a degenerate. In fact, in some imbeciles this layer of small cells is said to be absent, or even entirely undeveloped.

SECTION D.—THE PHYSICAL BASIS OF DEGENERACY

The key
of the
problem
of de-
generacy?

Here seemed to be the key of the problem of crime and "feeble-mindedness"; namely, the arrested development of this band of post-natal cells or nuclei. There seems to be a distinct relationship between this particular, post-natal cell layer and the intellectual development of the individual. The marvel is that it was not recognised before. It stands to reason that as the cortex develops from within outwards, this superficial layer must be the last to develop; nor is it beyond the imagination to assume that as the newborn babe is born without mind, so the brain structure necessary for thought or mentation is in an undeveloped condition. Is it not reasonable to admit from all our knowledge, *a priori*, that the developing intellect or intelligence of childhood and developing brain structure run concurrently?

I received great encouragement in this work by reading Dr. Campbell's monograph,¹ in which he alludes to the cortex of a deafmute, which showed the very condition that I am now describing and find so conspicuous in the brain of the degenerate. He says:—

¹ *Histological Studies on the Localisation of Cerebral Function*, p. 168. (Cambridge University Press.)

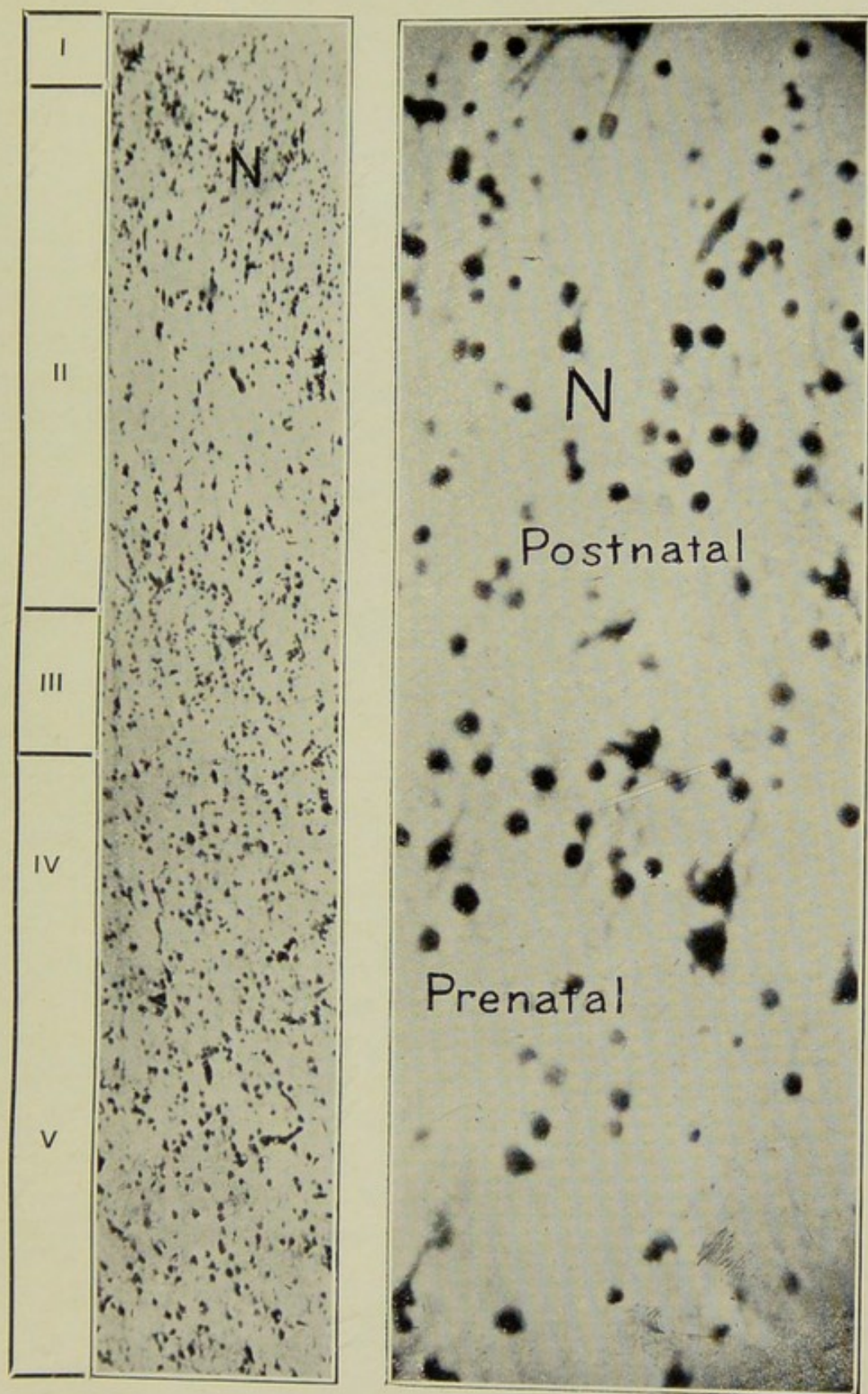


FIG. 27A.

FIG. 27B.

This is the same cortex as Fig. 26, but from the fetus at the time of birth. *N* shows the neuroblastic band, while in B the nuclei are plainly seen. (A is rather more highly magnified than the others, 80 times.) (For description, see page 232.)



FIG. 28A.

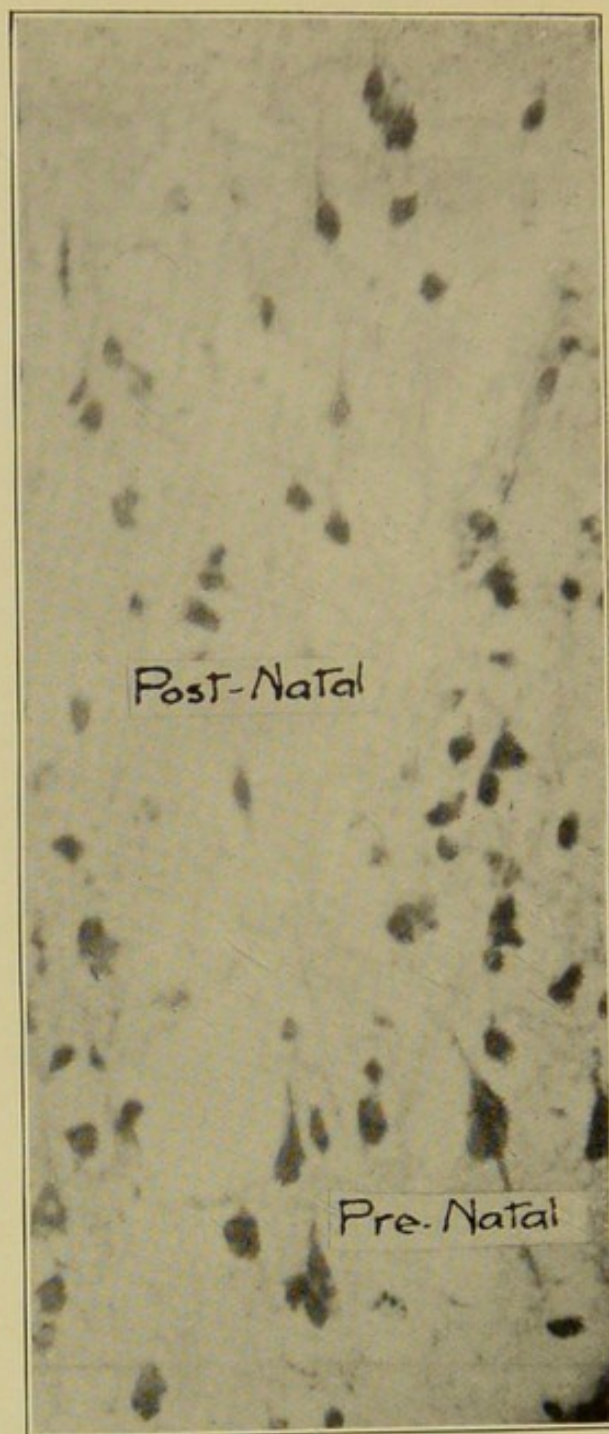


FIG. 28B.

This represents the same area as in the last two pictures, from a supra-intelligent child. Observe the depth of layers I and II, and the advanced postnatal development in B. Only two-thirds of the infra-granular layers (IV and V) are shown. III is the granular layer.

[To face page 231.

"The brain of a man aged 40 who has been deaf from birth has come into my hands, and I have taken the opportunity of examining the temporal lobe in serial sections. The results are most gratifying, because the sections stained with thionin show exquisite changes clearly concentrated on the gyri of Heschl, although distributed to a certain extent over the psychic field of the cortex and the posterior insula. A general disturbance of lamination, an absence of large pyramidal cells, and the *predominance of numbers of round nucleated elements looking like nerve cells deprived of body substance and processes are the prevailing features*. To this I might add that what appear to be similar changes have been recently observed by Strohmeyer in a case of congenital deafness."¹

Now this condition is exactly what I found in the brain I examined, and this footnote in Campbell's book seemed to me as a bugle call to advance! I can only produce one case, making, as far as I can trace, three in all; but the importance of this branch of neurology cannot be over-estimated. Many questions bearing on individual intelligence are opened up, and it must revolutionise our penal system, as much as cases of well-recognised lunacy have already done.

While I was studying the foetal brain, I was also giving attention to degenerate criminals, and one of them, a very low-down murderer, died. He was a short but very ordinary-looking man, with a broad square head rising high in the parietal region. The chief stigma was the crumpled condition of his ears, devoid of helix (Fig. 25). The brain was full weight, 50 oz.; but the pattern was simple and plain. There was no wasting, it was not the brain of an insane person; the convolutions were large.²

The
brain of a
degener-
ate, a
murderer.

The occipital lobes were better convoluted than the frontal, but were shrivelled and so shrunken, that the hemispheres did not approach the middle line at the occipital pole. They were in fact more than $1\frac{1}{2}$ inches apart. The parietal area showed the best convolutional pattern.

The microscopic examination revealed a shallow cortex about $\frac{3}{4}$ to $\frac{2}{3}$ of the normal depth. In most areas the prenatal cells were well laid down, but not so the post-natal layer. The psychic areas were under-developed. Development was better in the sensori-motor area than in any other part. In the prefrontal and parietal areas, there were many neuroblasts;

¹ The italics are mine.

² See pp. 222-224, *loc. cit.*, *Education, Personality and Crime*.

while the occipital cortex, the shallowest, had but very little representation of the post-natal layer.

This matter can be clearly demonstrated by comparing four different brain sections; that of a normal, a foetus, a child of 5, and the degenerate.

Fig. 26 shows a normal cortex. The portion marked *A* shows a magnification of about 50 times, and the layers are marked at the side. The granular layer is marked *III*; above is a deep layer of pyramidal cells, *II*; while below there can only be shown about half of the infragranular (*IV*, *V*), or layer of instinct. In section *B* is shown the very top edge of the pyramidal layer, and observe what beautiful cells are present. These upper cells have developed after birth, from similar neuroblasts to those which we have previously seen in the foetal cortex. At the lower part of the photograph are pre-natal pyramidal cells, which were well formed on the day of birth. This man came of a very intellectual family.

I now present a foetal cortex¹ of the same area, namely, the first temporal (Fig. 27). The magnification is the same in all these cases, except in 27, *A*, which is $\times 80$. It is to be observed in the higher power (*B*), that the upper pyramidal layer, the post-natal portion, is quite undeveloped. It is marked *N* in the lower magnification, where it forms a band of round nuclei. These are cells awaiting development.

It is very striking now to examine the same cortex in the case of a supra-intelligent child of 5 (Fig. 28). Observe the extreme depth of the pyramidal layer, almost as much as in the adult. Only half of the infragranular layer can be shown. The post-natal development contains both well-shaped cells and a few nuclei (see *B*, Fig. 28).

The murderer's cortex (Fig. 29), is a very shallow cortex; *B* is very instructive, illustrating the non-development of the post-natal layer. There are many embryonic nuclei.

As the occipital lobes were very shrunken in the murderer's brain, I show a section of the third occipital convolution (Fig. 30). It is evident that the prenatal portion, though shallow, is good. When we examine *B*, it is quite apparent

¹ From a paper presented by myself on the Brain of a Degenerate. *Proc. Roy. Soc. of Medicine*, July, 1909. Neurol. Sect.

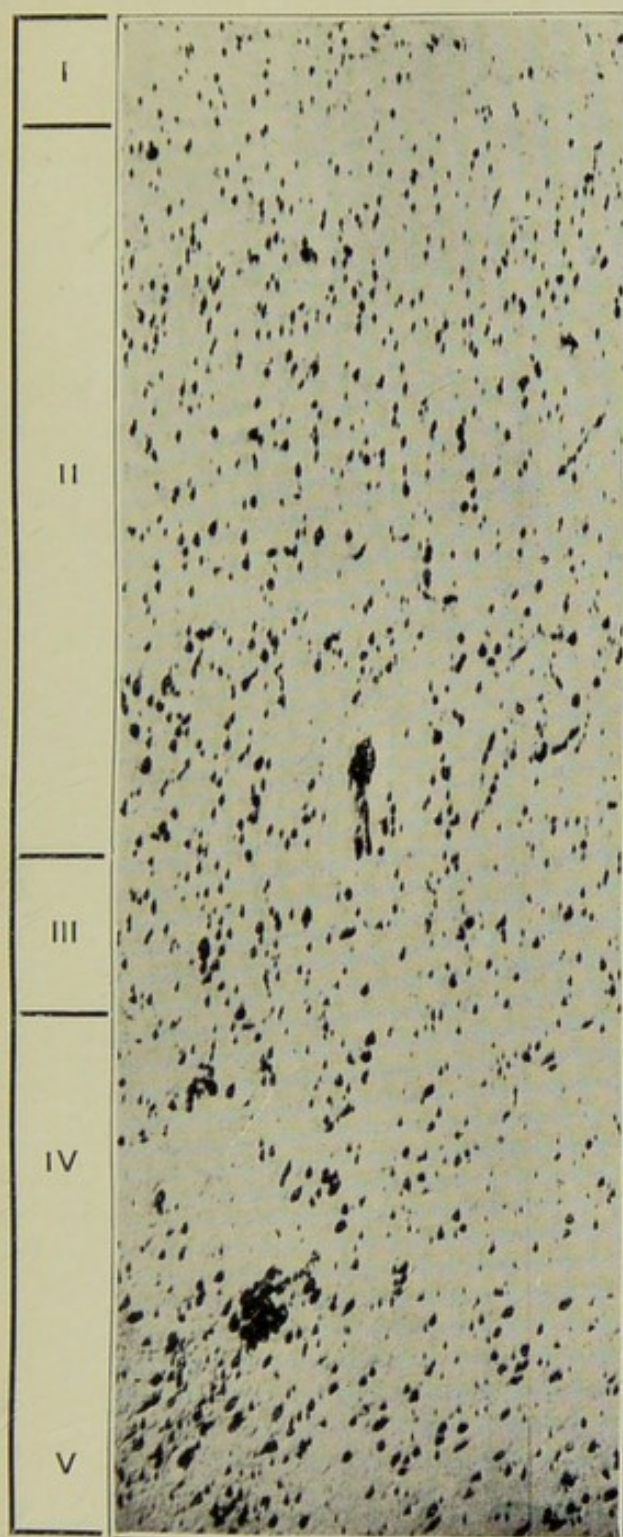


FIG. 29A.

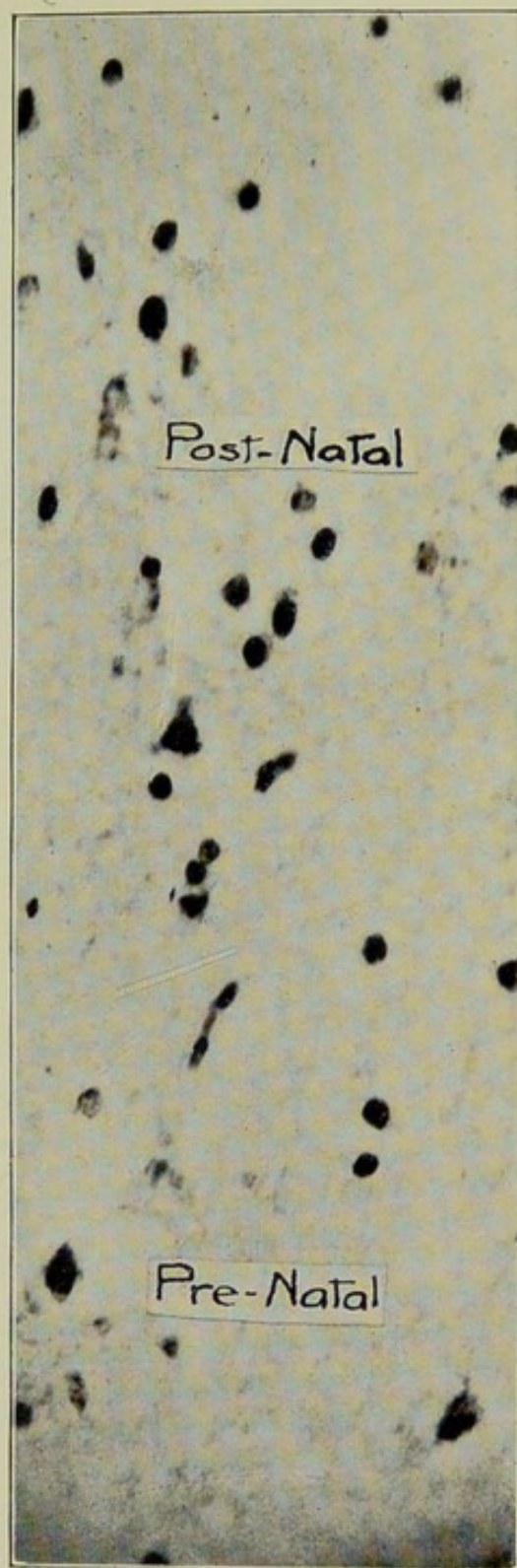
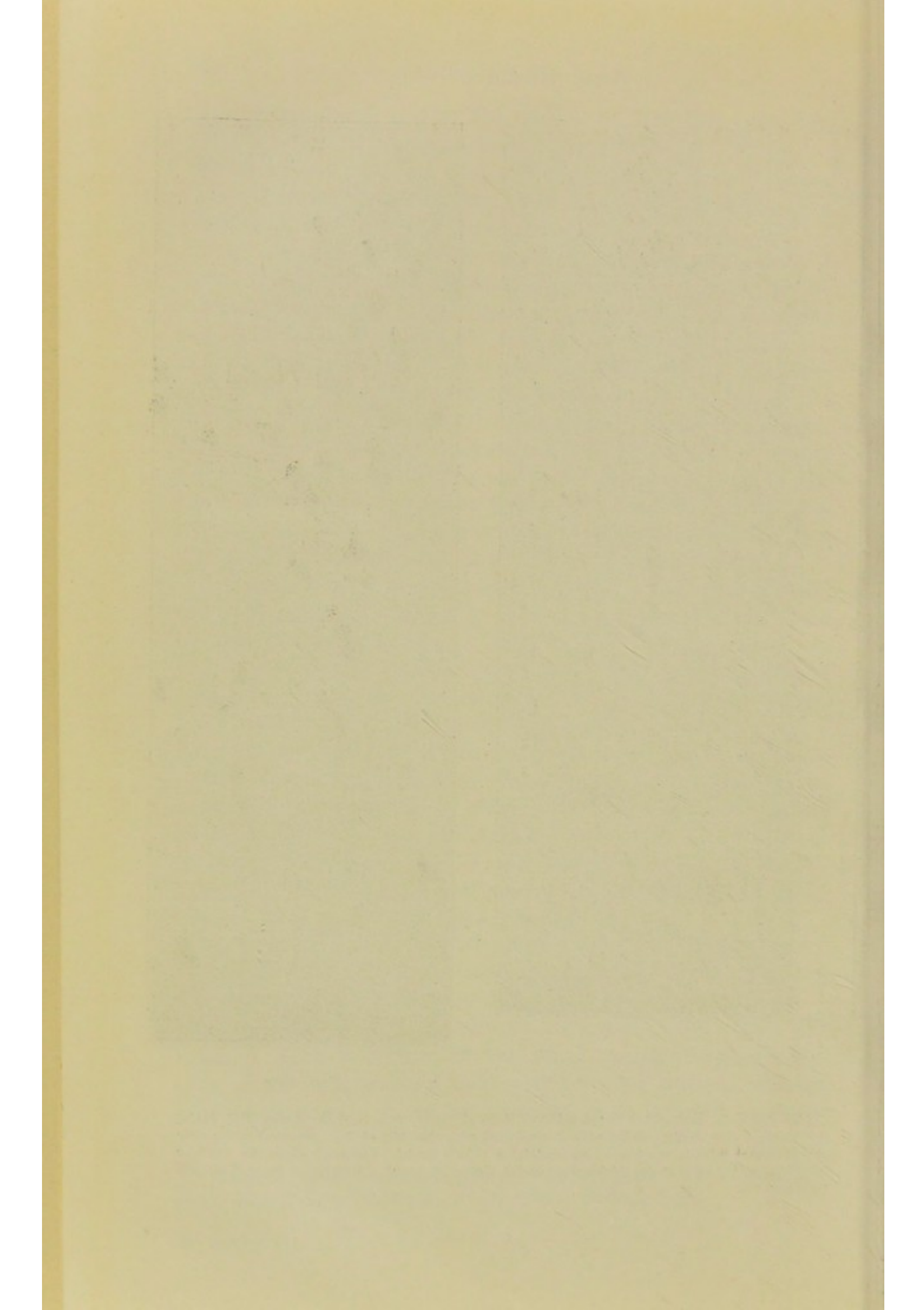


FIG. 29B.

This shows the same cortex as the previous three pictures. It is from the degenerate's brain, and shows a very shallow cortex even as compared with the child of five. Observe how poorly the postnatal layer is developed (B), containing chiefly nuclei. These are from the auditory centres, which represent the higher human intelligence. About a quarter of layer V is not included.





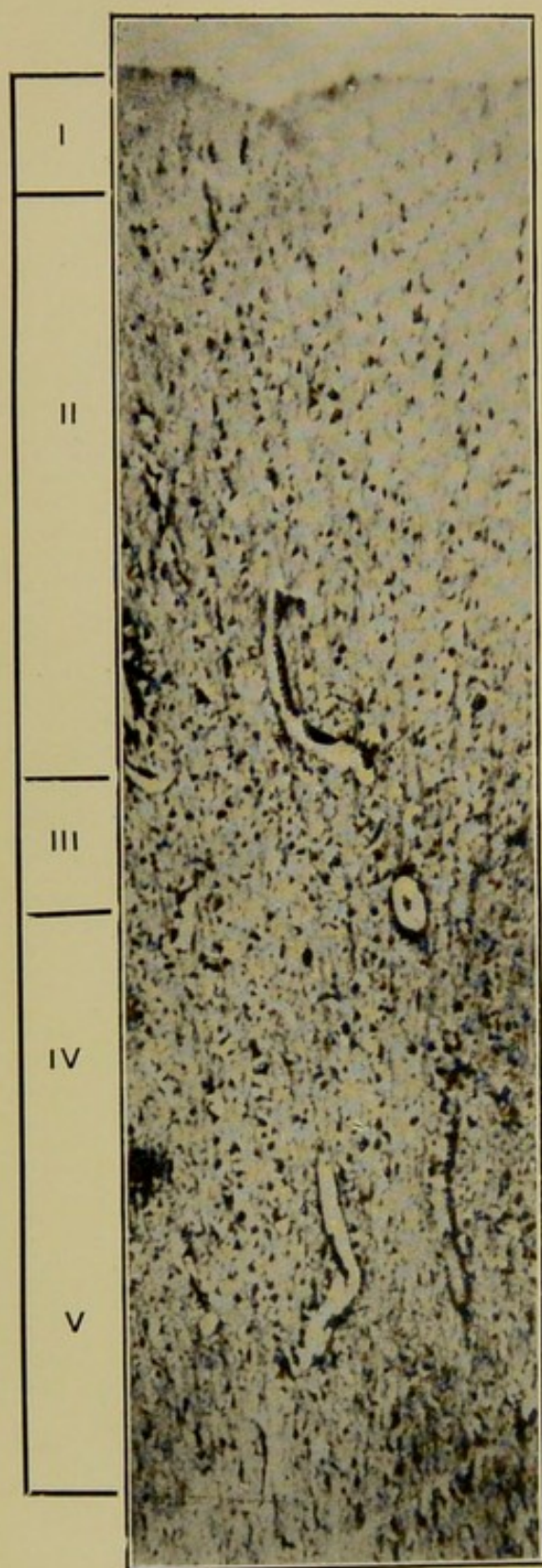


FIG. 30A.

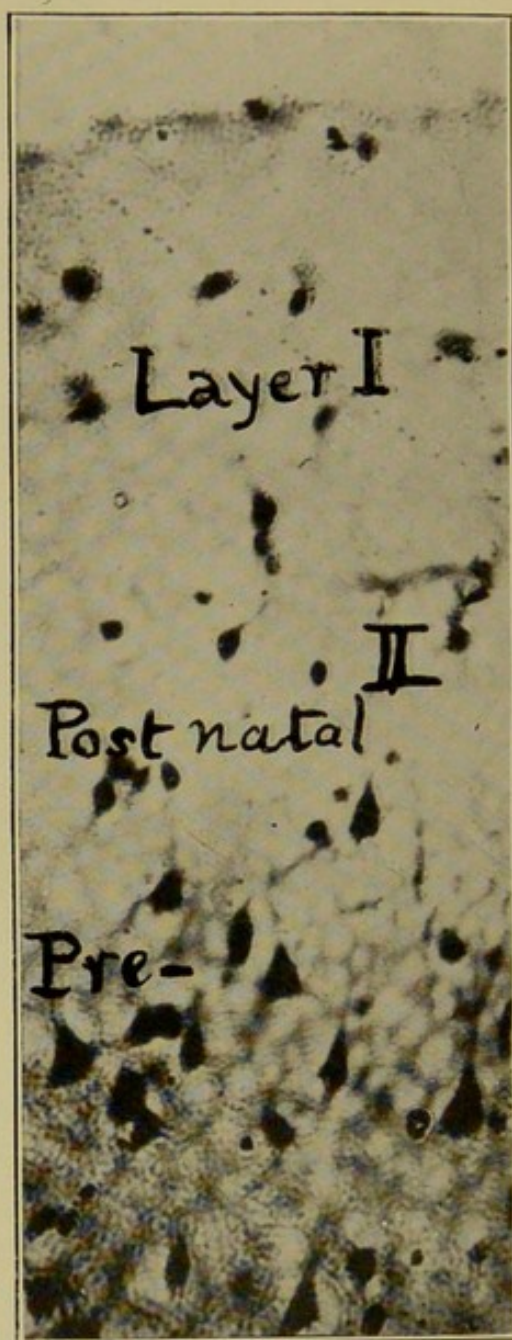


FIG. 30B.

This is to show the shallow cortex of the shrivelled-looking occipital lobe in the degenerate's brain. It appears as if his postnatal cells were not even laid down in the embryo (see B).

that the post-natal portion has been arrested, hence this extremely shrivelled appearance.

I have included two sets of drawings (Fig. 31, *A, B, C, D*) of different areas of the pyramidal layer, and from different types of cases. It will be noticed that in the foetus the post-natal layers, *N*, are made up of nuclei; and that in the degenerate although this part is expanded, yet the cells are poor and many nuclei remain. In the normal cortex the post-natal cells are beautifully developed.

Fig. 31 shows camera-lucida drawings of the pyramidal layer in different cases. They are all to the same scale.

Fig. 31, *A*, is a sensory area, the first temporal.

Fig. 31, *B*, is a highly organised motor area, Broca's, the area of speech.

The interesting feature is the great depth of the normal cortex, *Homo sapiens*, in Fig. 31, *A, d*, the great perfection of the cells and the absence of neuroblasts.

The nearest approach to him is that of the supra-intelligent child (*a*), but in this case there are still neuroblasts. It has not reached perfection at the age of 5, which is one of the points I wish to demonstrate. The shallowest cortex is that of the newborn child (*b*), or foetus (8th to 9th month). Its cortex shows many neuroblasts, especially in the upper post-natal layer. In between as regards architecture is the degenerate cortex (*c*). It is shallower than that of the child of 5, and shows many undeveloped neuroblasts.

Fig. 31, *B*, the motor is shallower than the sensory. This has never been alluded to, but one would *a priori* expect a receptive cortex to be deeper than an emitter.

In Fig. 31, *B*, the foetal cortex (*b*) shows the post-natal neuroblastic layer. The degenerate (*c*) shows imperfection as many neuroblasts remain. I have not a normal, but show that of a chronic alcoholic (*d*), much affected in the speech centre. His cortex is reduced by disease, especially in the post-natal area.

The child of 5 (*b*), shows an unfinished cortex. Indeed, at the age of 5 the gift of language is not complete.

Fig. 31, *C*, is from the highest psychic area, the prefrontal. The psychic cortex is again shallower than the motor or sensory.

The degenerate cortex (*c*) is very unfinished, full of neuroblasts. So is that of the child of 5 (*a*), but such is normal at that age. I show the cortex of a general paralytic (*d*); it has been good, but is now put out of action, and the cells are few because of the wasting.

The foetal cortex (*b*) shows abundance of neuroblasts.

Fig. 31, *D*, is also an association area, the superior parietal. In this we see the foetus (*b*) has a better cortex than the pre-frontal, more cells and fewer neuroblasts, but inferior in structure to either the motor or sensory areas. The higher the function the more delayed is the structure.

The child's cortex (*a*) is deep and good, much better in structure than that of the degenerate (*c*), which has many undeveloped nuclei, and equal to it in depth. The normal cortex (*d*) shown is that of a normal of inferior quality. It is better for cells than that of the degenerate, but not any deeper.

I do not attach much importance to any drawings of this character, as the personal equation must always come to the surface. They, however, have a relative value.

Obviously this man was at birth fairly well equipped, but after birth his post-natal layer had remained undeveloped. If it had developed it would have given the added depth to the grey cortex. The cortex would not be so shallow.

It was an
infantile
brain.

This poor man had then an infantile brain to steer his unmanageable body, and the failure had steered him right up to the gallows, but a merciful Home Secretary had spared him, for the prison doctor considered him weak-minded. The British sport of capital punishment demands a great deal of safeguarding not only by our profession, but from those in power. On the whole I think there is a very great desire at the Home Office to avoid the death penalty. Clearly, if we had hung this miserable brute, we should have committed a scientific error in hanging an irresponsible degenerate. On the other hand no reasonable, or rightly minded person would object to placing such criminals in a lethal chamber. If it were filled with water gas there would be nothing unpleasant, and they would fall into a tranquil sleep. We may resist this humanitarian method in favour of the grossly brutal gallows, as a matter of rusty sentiment, but it is bound to come in a few years.

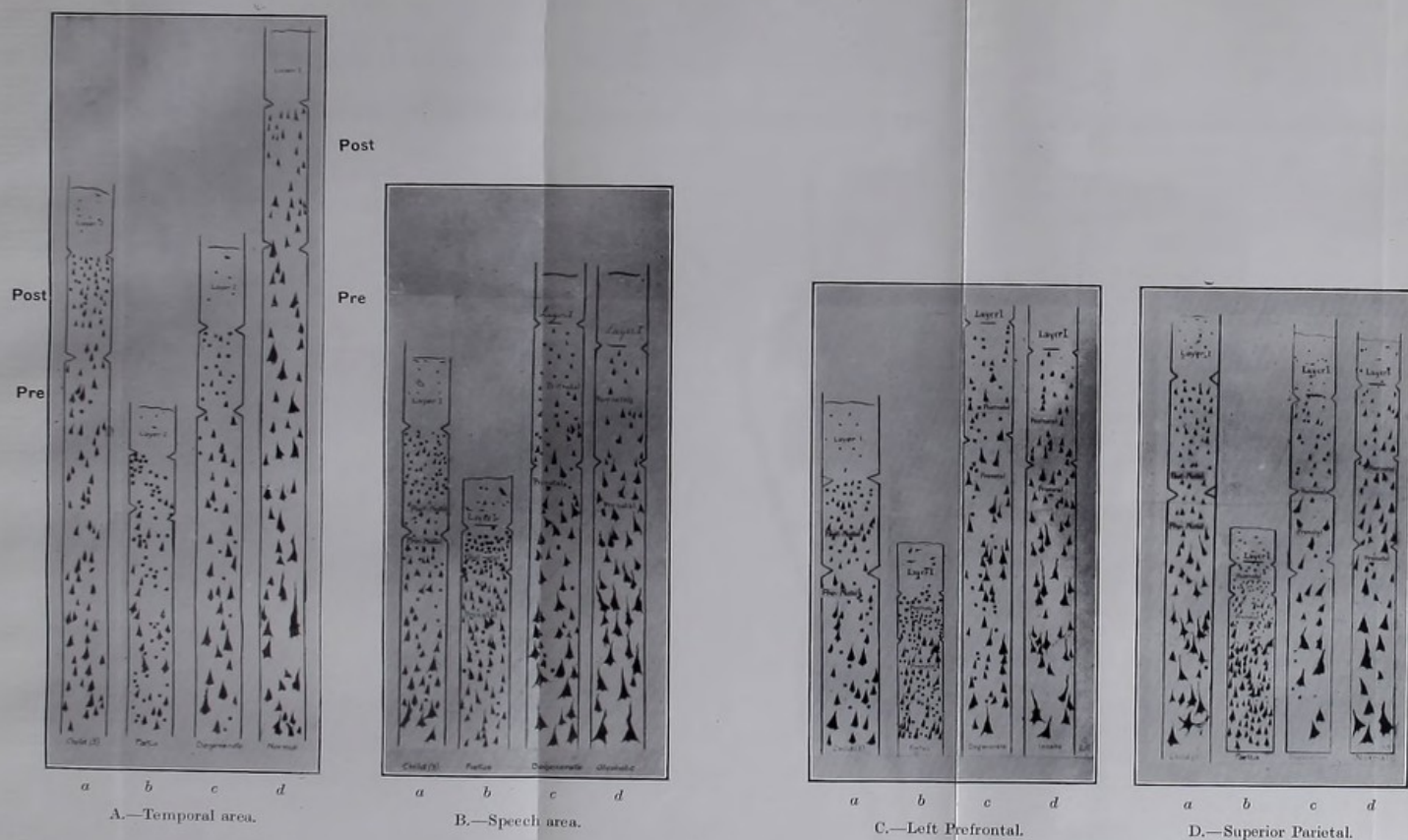
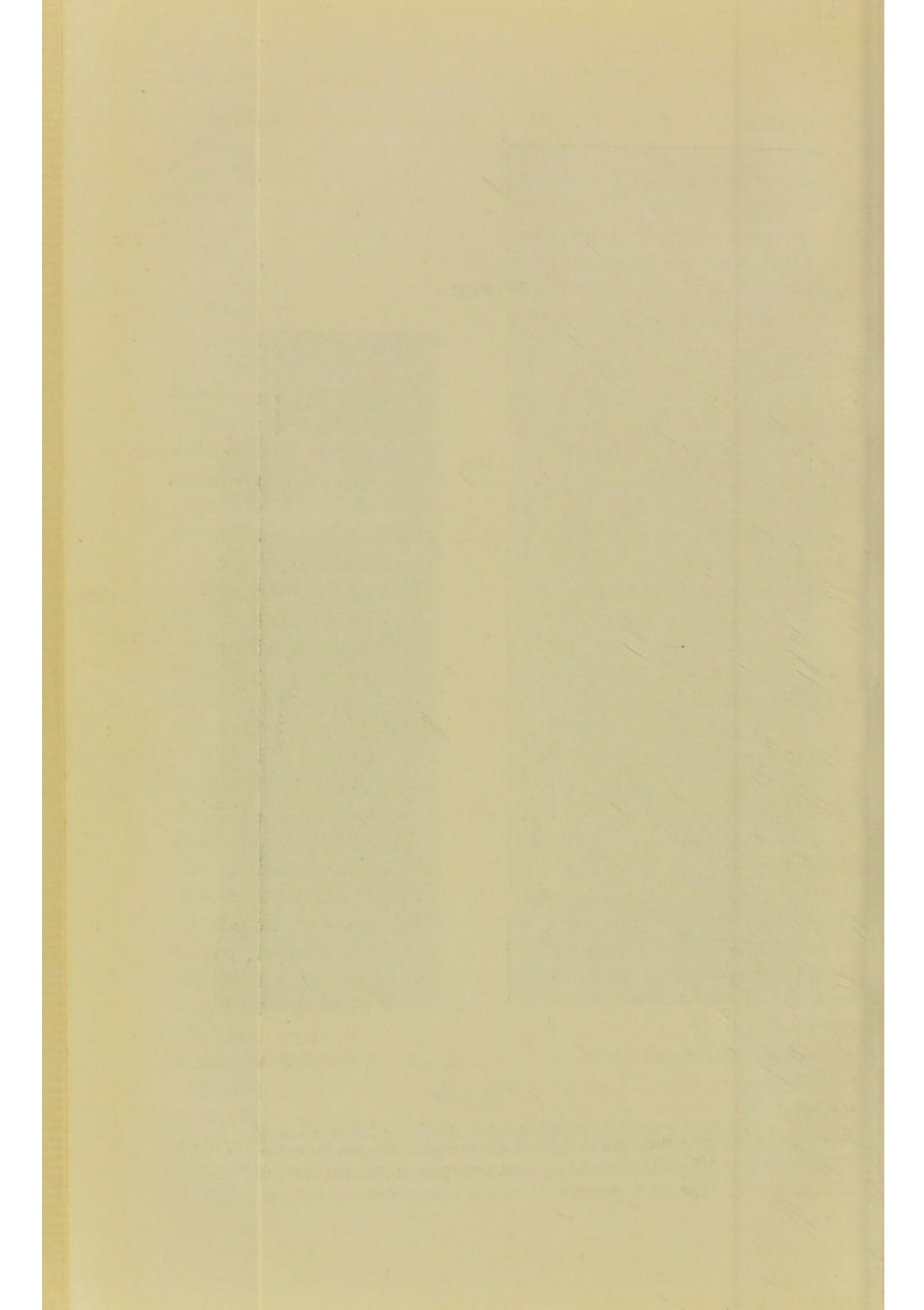


FIG. 31.

These represent the pyramidal and zonal layers, and are drawn with a camera lucida, using a $\frac{1}{2}$ lens ($\times 400$). The originals are, of course, much larger. Allowing for the personal equation, there is a certain relative value to be attached to drawings. Compare the well developed normal cortex in Ad, and that of the child, a, with the degenerate c. The child's cortex and the fetus appear in each plate on the left side. The point to observe is the undeveloped, upper, postnatal layers in the degenerate. By an unfortunate error the layers in A have not been marked, but may be compared with B.



At a later date I examined the brain of a very intelligent child. It died of tubercular meningitis when 5 years old. I found the post-natal layer much more perfectly developed than in the murderer. The mentation of this little boy was certainly much higher than that of the murderer, for I had the opportunity of examining both in life.

The brain of a supra-normal child.

As this is such a large subject, of vital importance, I am treating it more fully in Chapter XIII. This child, of very poor environment, showed a very fine brain architecture, both microscopic and macroscopic.

In another case I had an example of regression or destruction of the post-natal cells. This was in a woman who died of alcoholism. A large number of her brain cells were put out of action, and this particular post-natal layer was almost destroyed; in fact it was the first to give way.

The brain of an alcoholic.

It is only natural that the post-natal cells should be more unstable than the prenatal, because the prenatal have a racial ancestry of millions of years, including the history of evolution, which makes them stronger and more resistant. Those which develop after birth are less resistant and less stable; easily damaged by adverse conditions, as malnutrition, influenza, hereditary syphilis and alcohol.

This is where the care of the child comes in, and where its neglect means failure in the race of life. It was probably neglected childhood that contributed largely to make the degenerate; and neglect is making thousands of others all round us.

The care of the child.

This particular murderer had been fairly treated by Nature. I say fairly, because though his brain was large and normal weight, 50 oz., yet his convolitional pattern was very plain, and his cortex was always shallow. This shallowness was caused by the arrested development of his post-natal cells.

It is very important to get a grasp of these elementary principles and somewhat complex facts, before one can realise what some degenerates are. A degenerate of this kind is unfinished. Nature has been thwarted and not allowed to finish her task. The brain is thrown back or stopped in the child stage, but the body goes on developing. It is, indeed, the body of a man, guided and controlled by the mind of a child. He is UNFINISHED.

Is the degenerate unfinished?

If my observations are correct, as in the main they undoubtedly are, then the inference is clear.

Suggestions
afforded
by a dia-
gram-
matic re-
presenta-
tion of the
great
problem.

To put it diagrammatically—Fig. 32, A, *a*, represents the whole depth of the developed grey cortex as it appears at birth—prenatal; B represents the layer of undeveloped nuclei, which are post-natal.

In Fig. 32, *b*, A continues to represent the prenatal development, while B indicates the increased development characteristic of *Homo domesticus*.

In Fig. 32, *c*, we find A as before, but B of a greatly increased depth to illustrate *Homo sapiens*.

Finally, Fig. 32, *d*, shows the degenerate, the feeble-minded, the low-grade criminal, as represented by a very poor development of B. It is better than in the infant *a*, but nothing approaching *domesticus* or *sapiens*.

Let us go a little further. What does A represent? We may with confidence assert that A stands for the genus *Homo*. There is no brain architecture approaching this in any of the anthropoid apes, and certainly not in the Carnivora or lower mammals.

A then admittedly can only stand for *Homo*.

But does A represent anything more than genus? Can it stand for species, subgenera, varieties or what are popularly called families? It is quite reasonable to think that subtle modifications of A represent variations, perhaps species—Russian, Teuton, African Negro, Latin, Indian, Jew, Celt or even the hybrid Briton.

It is too much to ask if A stands for the family stock or breed—Wilson, Smith, Jones or Thomson, or for Lord this or Duke of that. It would be unscientific to imagine that when there are distinct family traits, they are not represented in the cortex; and if in the cortex is it to be in A, or in the vast potentialities of B?

If this reasoning be correct, clearly B represents at least the individual; and B may represent the family. Family Smith may be more intellectual than family Jones, and B may be deeper. This could hardly be demonstrable, as we would have to look through the whole of the Jones' and the Smiths, which is not possible.

We may be fairly agreed, however, that if B represents

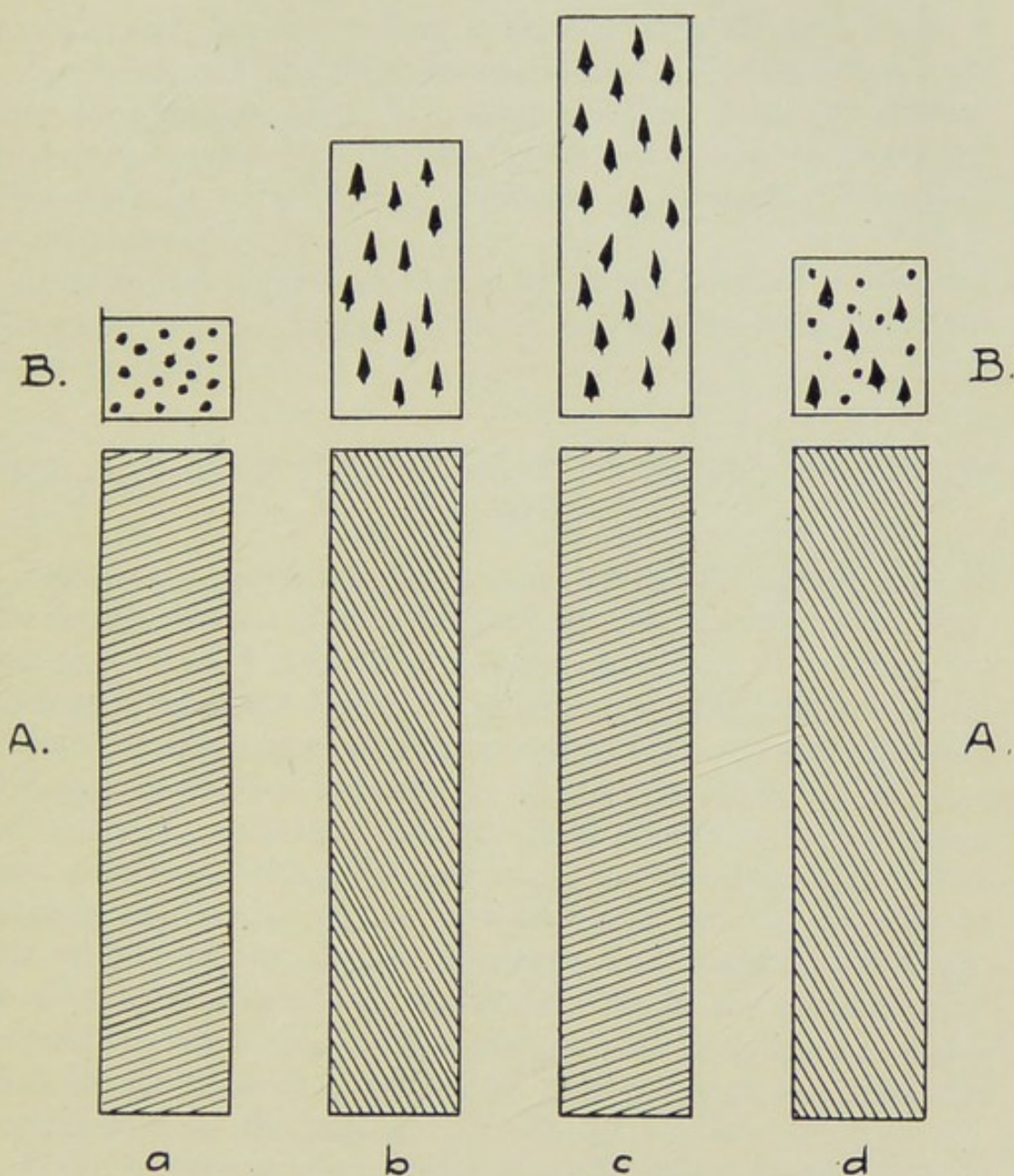
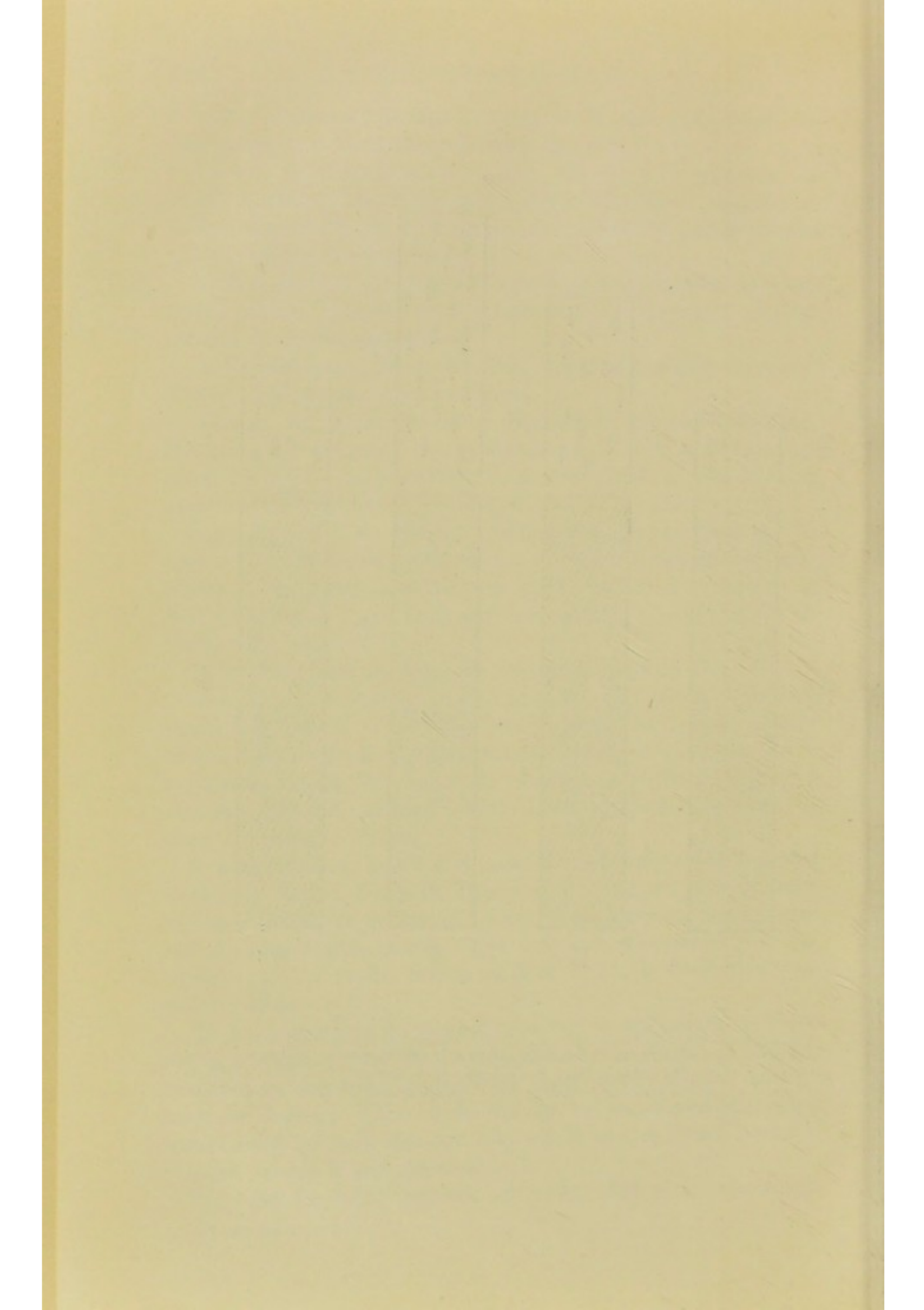


FIG. 32.

This diagram is fully explained in the text. It offers suggestions as to heredity or stock, represented by A, the prenatal brain structures; and the vast potentialities of the postnatal brain development, B. In the foetus, *a*, this is undeveloped. It is developed in *b*, *Homo domesticus*; and more so in *c*, *Homo sapiens*; whereas in the criminal or degenerate, *d*, the post-natal layers are only half developed.



the individual qualities and potentialities, it stands at the threshold of life demanding justice ; demanding protection, food, nutrition, education, opportunity of development and self-improvement. If not protected from alcohol, tubercle, syphilis and starvation, then it remains undeveloped, as in *d*.

We have in B immense potentialities. We have in B, not only race regeneration, but race salvation from our present deplorable condition. B stands for educatability, personality—strength or weakness, intellect or imbecility—morality or criminality.

It is in fact the centre round which we live and move, and have our being. Surely there is no vain hypothesis about these remarks.

SECTION E.—THE STIGMATA OF PHYSICAL DEGENERATION

Some have estimated that there are 4,000 million cells in the human brain. A few millions do not matter either way, but the number surpasses the imagination. But when we remember that every bundle of muscle fibres, perhaps individual fibres, and all gland cells, skin, bone, and other minute delicate tissues and whatever makes up form or features, are at least indirectly in connexion with the individual brain cells, then that numerical estimate does not appear to be too high. The vitality and vigour of the cortical nerve cells is essential to the vitality of the various members, and parts of the body. If a limb be amputated, the nerve cells in the cortex which control that limb die, and the part shrivels, causing an indentation on the cortex, which shows how parts of the body are represented on the cortex.

There is then a wide inference to be made in reference to what Lombroso styled the external stigmata of degeneration. It is this, that while the brain cells are concerned in the growth, development and management of the body, if subtle poisons like alcohol, tubercle, influenza, or syphilis damage the nerve cells in utero, there will be corresponding malformations of the body. This is to my mind a clear and reasonable explanation of the cause of the external stigmata of degeneration : malnutrition of governing parts, some subtle damage of the

brain cells, which are responsible for that particular growth, which ultimately evinces what we call a stigma. We must remember that parental alcoholism, alcohol drinking during nursing, starvation during infancy, parental tuberculosis or syphilis, are all concerned in damaging the foetal brain.

Where such damage is great we get idiocy or deformities, where it is less serious the higher, psychic areas are damaged and we have mental feebleness, or more correctly intellectual weakness which may only be slight and recoverable, or end in insanity, or irresponsibility; where less, then the body is damaged and we get these ugly external stigmata.

That Nature follows this order is apparent, from the fact that many have stigmata without being in any way weak in either mind or morals. On the other hand, Lombroso observed that those who had the greater damage to intellect or morals and were criminal or lunatic had stigmata. He therefore, incorrectly I consider, joined up the two as counterparts of the same condition; that is, external manifestations of internal conditions.

I think we can recognise three primary states of degeneracy:—

A. External stigmata, due to malnutrition of sensori-motor areas, without affecting the association areas. In such cases there are physical malformations without affecting mind or morals.

B. Malnutrition or defect of association areas or higher sensory centres, sight and hearing. Here there is mental or moral enfeeblement, with or without external stigmata.

C. The whole brain undeveloped, with idiocy or imbecility and many external stigmata and deformities.

The accompanying photograph (Fig. 33), is of great interest because it illustrates class *A*. There is a good deal of asymmetry, but there is no moral deterioration. He has a very fine personality. Nature has fortunately only hit him on the physical plane. He only attained the fourth standard, but his character is summed up in his own words—

“I am no scholar, sir, but I know what is right.”

In that class the last expression is an emphatic recognition of duty and upright living. He has had an uphill fight, but is doing well. He is one of Nature's noblemen.

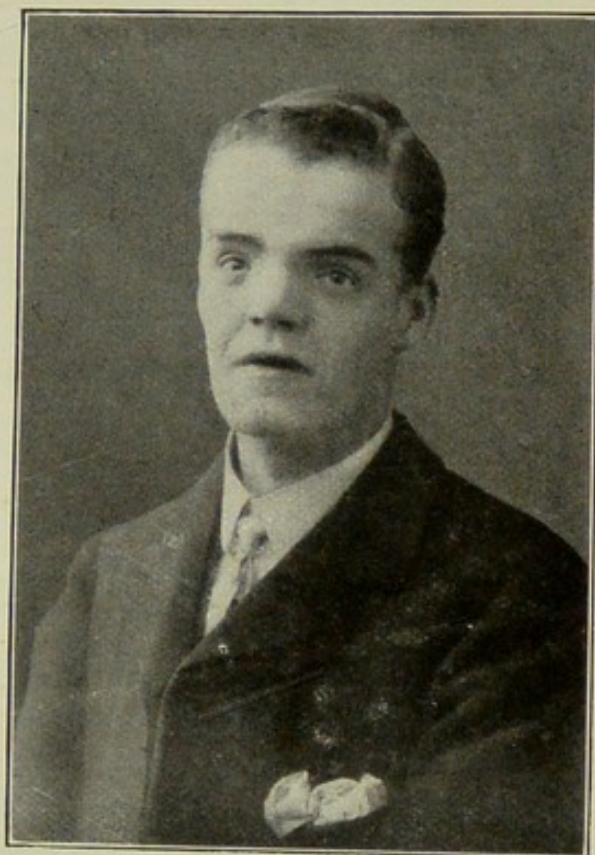
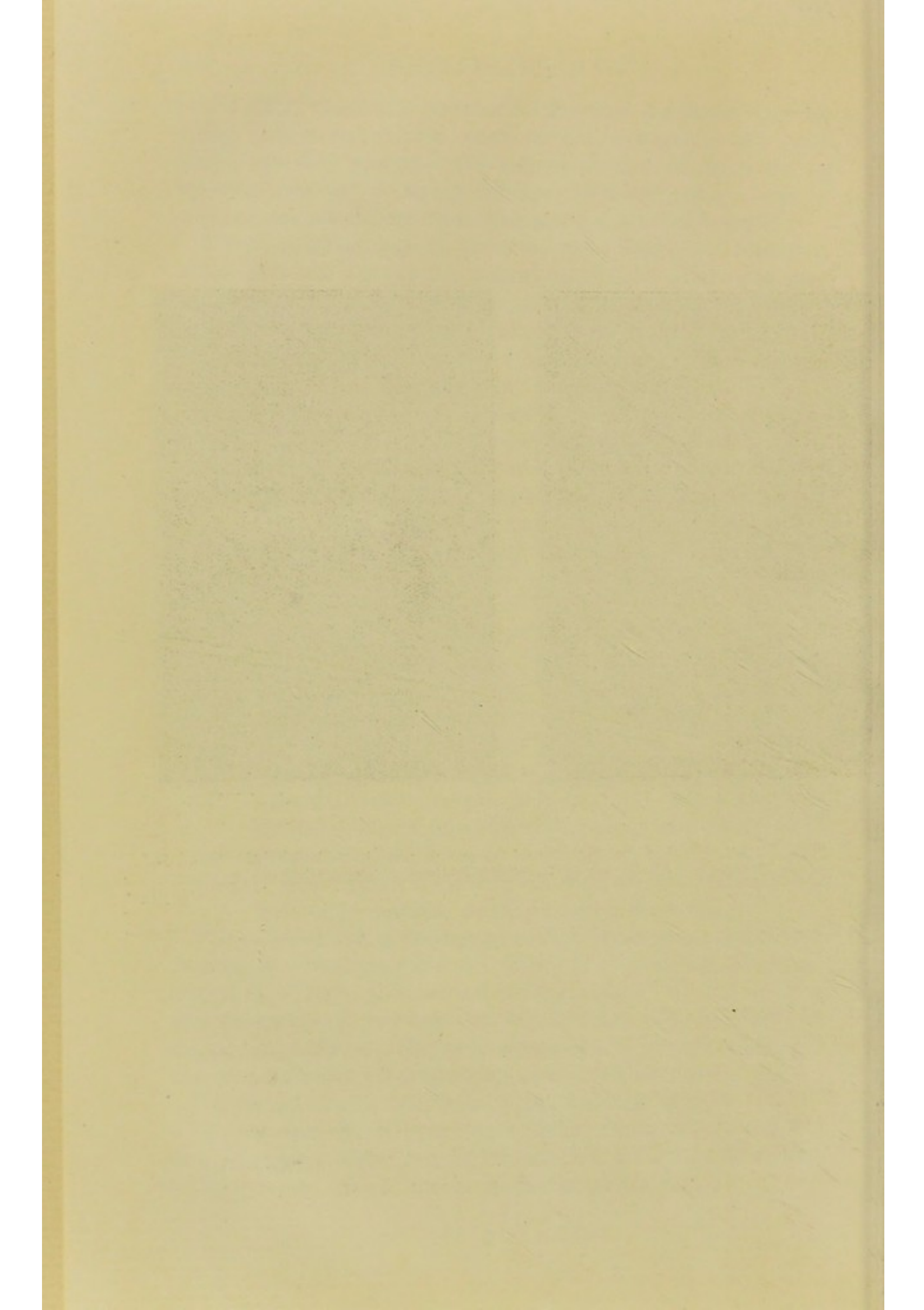


FIG. 33.

One of Nature's gentlemen, but badly hit on the physical plane before birth; hence the asymmetry of features and skull—misnamed, stigmata of degeneration.

[To face page 238.



CHAPTER XII

WHERE IS MIND ?

Visceral sensations—Their habitat in the basal ganglia of the brain ?—Experiments on decerebrated animals—The seat of the emotions and instincts—Hysteria—What is pleasure ? A Negative state ?—The condition in degraded men or women—The mind probably resides in the pyramidal layers—The action of certain drugs, especially of alcohol, on the brain—The mystic's view of mind—The physiological aspect of mind—The division of the pyramidal layer into the prenatal and post-natal—What the post-natal development means—An analysis of the relation of cortical to psychic processes—Ethics—Sympathy—Religion—Conversion ; its basis—Résumé—Dual consciousness.

THE question "What is mind ?" is too difficult, uncertain, and speculative to be dealt with in a treatise of this practical character, and it is, perhaps, a subject for the consideration of the philosopher rather than of the physician. But it is absolutely necessary to discover the habitat of mind and to settle definitely whether it lies in the head or the foot, in the heart or the stomach. Visceral sensations occur in the heart and in the stomach during emotional periods, such as joy, pleasure, fear, or anger. These emotions, belonging to a low psychic condition, if indeed they be psychic at all, represent the physical rather than the intellectual aspect of emotion. Sherrington has shown that the emotions of anger, fear and spite occur in an animal such as the cat after the cortex of the brain has been removed, and the large basal ganglia alone are left.¹

Visceral
sensa-
tions.

Their
habitat
in the
basal
ganglia
of the
brain ?

These basal ganglia, so important in function and so overlooked by specialists, are the representatives of the brains of the lower animals, especially of those below mammals. They are the seat of the emotions. The emotions are, according to Sherrington, not the result of visceral sensations, but rather the visceral sensations occur from the disturbance in these basal ganglia. If an animal be decerebrated and annoyed, or

Experi-
ments on
decere-
brated
animals.

¹ See *The Integrative Action of the Nervous System*, chap. vii, p. 265.

teased, it shows resentment by every sign of anger and spite, such as snarling, growling, or spitting. It is essential, for defence and attack, that these acts should be rapid and almost reflex; we might say, beneath the region of consciousness or thought, which would necessitate delay.

The seat
of the
emotions
and
instincts.

What are described as the lowest forms of mentation or animal instincts evidently reside in the large motor and sensory ganglia in the base of the brain. I am here using the term mentation in the very widest sense. The grinding of the teeth in anger, the clutching of the heart or stomach in fear, perhaps the clenching of the fists in passion, are probably reflexes of these large basal ganglia. It is indeed very difficult to say where mind begins, for these higher reflexes enter into consciousness, although they may occur when the consciousness of the cerebral cortex is dulled or even absent, as under the influence of alcohol or chloroform. It is, for example, frequently observed how a man of rough character will exhibit every sign of fear and anger in the early stages of anæsthesia, when his cortex has been put out of action.

Hysteria.

It is probably the case that in hysteria these ganglia, or the prenatal cortex, dominate the ego, for it is evident in this disease that the higher mentation is weak and out of control.

There can be no question that the higher the mentation, or, in other words, the more perfect the action of the grey cortex, the greater the control of the emotions and animal instincts. This fact is known to every one, though not perhaps in the terms in which I have stated it.

What is
pleasure?
A nega-
tive
state?

While decerebrated animals are easily aroused to show the emotions of fear or anger, nothing can induce them to exhibit feelings of pleasure, such as purring in the case of a cat, or wagging the tail in that of a dog. Pleasure does not appear to exist in these organs according to experiment, so we assume that when these ganglia are undisturbed there is a negative condition of contentment. Contentment is a quality of even-mindedness, exhibiting no exuberant joy, possibly without much sign of pleasure. If there be positive and negative ions in nerve force, they are evenly balanced in the condition of contentment. Disturbing the balance results in a positive discharge, either for defence or the seizing of food, or for the gratification of amorous instincts. These three qualities

include the essentials of life—self-protection from enemies, the acquiring of food, and the propagation of the species.

If the lawyer would realise these truths, he would more clearly comprehend the unfortunate position in which some of our criminals are situated. An uneducated man, unguided by lofty ideals, fogs his higher cerebral cortex with alcohol, and thus becomes a mere brute—a creature of impulse guided by emotion. Surely in such a poor piece of cerebral mechanism there is at best but little control or guiding power, and when that little is thrown out of action by alcohol, what indeed is left ? The following case illustrates this paralysis by alcohol of the higher cortex of the brain. A man was hanged some years ago for killing a woman in an ale-house. During a *fracas* the woman threw a beer pot at him, and in ten seconds she was killed. Such an impulse suggests a reflex of the basal ganglia, as demonstrated by Sherrington.

The condition in degraded men or women,

I do not plead for these unfortunates to be pardoned. I merely ask the lawyer to act in that heroic, fair-minded spirit, which he acquired in his public-school days. Annihilate the man as a social nuisance, but not with the vindictiveness of the gallows or the farce of judicial proceedings, as if he were a responsible being. In dealing with the difficult question of alcoholism, let judgment be founded and formed on scientific knowledge and data.

By the process of simple elimination we are forced to the conclusion that the mind resides in the brain ; and to this conclusion we can add the result of recent scientific research, to show that it resides in the pyramidal layers of the cortex. We find that in *amentia*,¹ so called, there is a deficiency in this layer. There are fewer pyramidal cells, and in some higher imbeciles there are nuclei remaining since birth, which in the natural course should have grown into pyramidal cells. There may be only one pyramidal cell in the idiot or imbecile, where in an average brain there would have been twenty, or even more.

The mind probably resides in the pyramidal layers,

At the far end of the scale of life, when decay sets in, or at periods when insanity and destroying processes occur, we have *dementia*.² In these cases the pyramidal cells

¹ *A*, without ; *mens*, the mind.

² *De*, from ; *mens*, the mind.

disintegrate and are dissolved chemically, even the nuclei disappearing.

The
action of
certain
drugs,
especially
of alcohol,
on the
brain.

A further proof of the connexion of mentation with cerebration is found in the degenerative action of certain drugs, such as alcohol and chloroform, on the brain cells. Mental changes occur as the cells become diseased or destroyed.

The first symptom in acute alcoholic poisoning is loss of higher psychic function, control, and will power. With this, or very shortly after, follows loss of memory for recent events, then confusion of ideas. These are the later-evolved mental characteristics, and one would infer that they are associated with the later developed neurones, which are the superficial or extreme outer pyramidal layers of the cortex. We can safely speculate that these psychic functions are specially carried on in the higher association areas. The next functions to suffer in alcoholic intoxication are the motor functions, resulting first in excessive garrulosity, which is evidently due to loss of control of the speech centre, then in staggering gait and inability to stand; and when muscular power and the muscle sense have gone, sensation disappears altogether. In dangerous alcoholism the medulla is affected, as shown by stertorous respiration and failure of cardiac action. Such cases of acute alcoholism ending in death are very rare; I have seen but one, a medical student.

Chloroform narcosis follows the same course, only more rapidly. Mental confusion at once becomes apparent, with in many cases incoherent talking or gibberish; then muscular paralysis, affecting the upper extremities before the lower; lastly, sensation disappears, while an overdose tends to paralysis of the vital centres in the medulla, first that of respiration and then the cardiac centre.

The route pursued is exactly the opposite to that of evolution. Why? Is it because the older structures can resist the poison better? Or to put the question in a slightly different aspect, are the higher structures more yielding because they are more recent and unstable?

The action of these drugs follows the same route as in general paralysis of the insane; first the frontal and other association centres, then the motor, and finally the sensory areas. In this disease it is the pyramidal layer which is chiefly attacked.

Those who have been observant after taking nitrous oxide gas may have noticed the numbness in the limbs, which wears off first in the legs, before they can be moved, and then in the hands which are locked, and cannot be moved until the tingling or sensory paralysis passes off. I have often tested this, and found myself quite powerless till the block on the sensory cells was "cleared."

A distinguished professor of physiology in a well-known university gives me permission to say that even a glass of light beer will affect his manipulation and mental vigour when doing very delicate research work. So confident a statement, coming from a famous scientist, must carry great weight and emphasises the absolute need for temperance amongst brain workers.

Mind is the delightful and exciting hunting ground of the philosopher, the preacher, the moralist, and the mystic. Of theories there is no end, and who is to decide which is the most probable ?

The
mystic's
view of
mind.

The mystic spiritualists say that the brain is a machine, like a harp or piano, and that the Ego is a spirit which takes up its abode therein. If the harp or piano be good, the operator or spirit can show excellent results ; but if the machine of whatever kind be faulty, how indeed can anything good come out of it ?

There is much comfort in this doctrine, which is of Asiatic origin ; for then depraved humanity, hopeless and helpless to all appearance, is still attended by the angel of Light. The flesh is nothing. It is a question of the Spirit ; and if the Spirit fail to show good results in one human wreck, after that wreck is dissolved, the same Spirit continues living and re-enters another human frame, possibly rising to a higher level.

Mysticism is fascinating. Who knows but that it contains the final truth ? Nevertheless to us as physiologists it is forbidden ground. The whole subject must be approached in a scientific manner when we find that mentation, thought, or mental acts are in reality very simple at the commencement, but complex beyond comprehension in the higher states.

The simplest mentation occurs in reflex complexes, in which many centres are engaged. Sensory impressions enter the

The phy-
siological
aspect of
mind.

brain through the eyes and ears, directing and controlling complex movements, such as in reading, speaking, writing, playing music, and so forth. These processes rise in complexity as the child develops. Memory, or the storage of past impressions, is necessary for purposes of repetition, analysis, and for the association of impressions past and present, before directing movements, which become more complex with experience. Thus the child first learns simple words appropriate to its early surroundings, terms of affection for its family, names of things around it, names of food and clothing. It is a gradual ascent of mentation for a child to learn its native language, not in parrot-like fashion, but by attaching the meanings to words and words to meanings, which can only be done by a sort of pictorial, auditory, or other word-meaning representation on the sensory cortex. The movements of the child are, as we all know, most simple in infancy; but later on there is much labour to educate the hand and fingers for writing, playing, or any other art. As youth advances, the hand may have to be taught highly skilled movements, demanding gradual but laborious education.¹

The
division
of the
pyramidal
layer into
prenatal
and post-
natal.

I have in the previous chapter described more minutely the structure of the grey cortex; and I emphasised the division of the so-called intellectual or pyramidal layer into two strata; the deeper, older prenatal layer and the outer or post-natal layer, which latter is laid down at birth in neuroblasts, and gradually develops into the small-celled layer. This last layer I suggest represents the personality or ego, because that feature is quiescent at birth and comes gradually as the child grows. This observation, which should have fallen to the lot of earlier investigators, is so important that I make no apology for repeatedly alluding to it. It is this stratum that we have to think about, protect, nourish, nurture and care for. Its perfect development makes the individual, his prosperity, and his personality. Opposite conditions spell ruin and disaster. If this be so, how much sympathy should we show to those who fail in life?

This fact in cerebral evolution or development must change

¹ The physiology of education is too large a subject to open up in such a short sketch as this treatise. I have briefly alluded to it in chap. i, concerning education.

the general opinion concerning the personality or ego, associating it with the wonderful machine that we call the Brain. As youth develops, those portions of the brain come into action, which are neither motor nor sensory. They used to be called the "silent" portions of the brain, because they would not react to galvanism. They are the psychic areas, concerned with the highest thought, will power, and control. It is the development of these areas which places man right above the highest mammals, namely, the anthropoid apes.

It seems to me that we are as yet only on the outskirts of neurology. We have a topographical outline of the main routes, and even these are not too accurate.

What the
post-
natal
develop-
ment
means.

Here, however, we have a vast field for research in that part of Neurology or Cerebrology which distinguishes man from the lower mammals. How could the learned investigators gaze time after time on the post-natal layer without some spirit of inquiry as to whence they came and whither they go ?

Even now some will declare that they are merely a shallow layer of nuclei awaiting their turn, at the same rate and under similar conditions. The absurdity of this assumption is at once apparent. If half the pyramidal layer has been laid down in the 5 months preceding birth, the other half should necessarily be complete in 6 or 8 months. But what could an 8 months' infant do with a fully equipped brain ? That the brain could not be so equipped is evident, because there is not sufficient increase in size or weight for the improved architecture.

If this pyramidal layer doubles itself in the first year as some think, why should not the same rapid growth take place in the child ? Why should it not attain adult dimensions in 2 or 3 years ?

We observe in the lower mammals that even if shorter lived, yet they mature at a much greater rate than does the human species. They are built on more mechanical lines. Their pyramidal layer is shallow. From what I have observed in the brains of the rat, squirrel, lion, camel, and many other mammals, the lower mammalian cortex appears to correspond to the human prenatal cortex. The post-natal human cortex appears to give that power of intelligence, that mark of

intellect, and the complex adaptability which places man above beast.

Many imbeciles in whom there has been post-natal arrest, but in whom the prenatal cortex appears to be normal, are just like animals. Some of these acquire much skill, but it is of a lower order.

From all that we know of the pyramidal layer, it is for us now to determine if the distinguishing super-intelligence of man is not associated mainly with this post-natal layer. That is to say, where two healthy children are born, we know that starvation, disease, and unfavourable environment may destroy the intelligence of the one, whereas care and nurture make a great intellectual success of the other. We have to decide if this is associated with the proper development of the post-natal layer. Everything now points in that direction.

There is another very important problem to investigate, as to how far heredity is connected with intelligence. The present school of thought are undecided, but I am inclined to think that stock has much to do with it. Suppose we take a child whose progenitors have been bricklayers for 5 generations and another child whose progenitors have been schoolmasters and professors for 5 generations, do these children start from the same level? Some would maintain that the stock, stem, or heredity might be equally good in either case, that the result depended on environment; which means that the bricklayer's child if carefully fostered might turn out as clever as the child of the schoolmaster. It is more suggestive that there is something lacking in the bricklayer's heredity or stock, which kept him down in such a low social area. If this be so, has the child sufficient inherited potential to rise?

We are apt to be led into error by seeing some of the children of the poor rise to important positions. But follow them to the end. I know a learned professor, who far overshadowed the other University professors, and who came of very humble Scotch stock. Though his people may have been poor for 2 or 3 generations, yet there are some wonderful "biophors"¹ in Scotch pedigree, a pedigree that is not only virile but intellectual. This case is easily explained. On the other hand,

¹ A fanciful term of Weismann's to indicate the physical elements in heredity.

the Celts of Wales and Ireland are made of different material, lacking that sturdy character and even the intellectual development. In a large city like London we see numerous instances of the children of the poor rising to positions of affluence. These people are frequently less stable, and their offspring are liable to fall down again to the former level. In such cases the stock, heredity, or breed has not been equal to the required potential; and this upholds my theory. This is where the future Cerebrologists must explore. They must be able to tell us whether the whole cortex which refers to stock is deeper in the schoolmaster than in the bricklayer. They must also find out whether the post-natal development is deeper and richer in cells in the schoolmaster than in the bricklayer.

In both these particulars I find the brain of the supra-normal child is superior to the low grade labourer, of labourer's stock, who finished up as a murderer. This child resembles in both particulars the learned man of a learned family. Far beneath them, in my investigation, came various "normal" lunatics and lower class normals.

We have another problem to place before the Cerebrologist. How are ordinary good middle-class people related to each other in these matters? Take two children of two families, Smith and Jones, who have everything in their favour; does each start alike with a similarly constructed prenatal cortex, and are the neuroblastic bands of like depth? Or is one child a little better equipped than the other? Or suppose they are equipped equally, has one child a higher, potential, a greater driving force? Will his post-natal neuroblasts divide up into a richer layer of nuclei? If Smith at birth has 10 layers of neuroblasts and Jones has 15, at the age of 10 will they have the same ratio of developed cells—Smith to have 30 and Jones 45—or will Smith have a greater growing power and overtake or even surpass Jones?

This vast area in Science can only be explored by the co-operation of many investigators, all working to one scale. At present there is confusion. We want this chaos cleared up and rules laid down which all can follow, for the Central Investigating Board would depend for supplies from far and wide. I fear I am looking too far ahead. This work will fall to the rising generation.

But when we have come to the extreme limit of our investigations in relation to mind and matter, we come up to a closed door, marked "no thoroughfare." There is always a force beyond, which we cannot understand. We know not whence it cometh nor whither it goeth. It is a mysterious force, psychic in character, and we have no language which expresses it, and no terms in which to analyse it.

An
analysis
of the
relation of
cortical
to psychic
processes.

Other important questions, however, at once arise.

1. Can a cortical process occur without a psychic process ?

2. Can a psychic process occur without a cortical reaction ?

These questions lend themselves to opinion and remain at present unanswered, for it is impossible to get at all the facts concerning them. It is generally assumed that no cortical process can occur without a psychic process, always excepting purely motor explosions, as in epilepsy. The action of the neurone is compared to that of an electric bell or a Leyden jar. But there are other matters of speculation; for example, how are the neurones behaving during states of subliminal consciousness, or what we call subconscious cerebration.

To the second question many scientists reply that psychic processes probably do occur without neural reaction. They instance the higher ideation, ethical and religious thought, or the attempts to imagine what space and time represent. These ideas are supposed to enter the brain machine from without. Thus man, though on the physical plane, is supposed to have some connexion with an unseen, unmeasurable, so-called psychic plane. There is much to be said in favour of such an opinion, considering that after all our research in physiology and psychology, we finally come up against a barrier which we cannot remove. It is only an opinion, but as it is approved, much has been put down to psychical phenomena, which really belongs to the physical plane. Thus our idea of infinity is probably a sense of continued progressive motion. It is a muscular percept or concept.

Ethics.
Sym-
pathy.

Our ideas of ethics, sympathy, morality, and religion are built up of mental images or pictures already impressed on the sensory side. In sympathy we picture suffering, not only the expressions of the sufferer, but we affect his pain.

Religion.

In religion we rest or build on the storehouse of facts, and

imaginary and other pictures, with which our infantile minds have been stored. Every Biblical scene is impressed on the sensory visual mechanism, and according to that impression so is our creed, whether a God of wrath, of mercy, or of splendour. I think it is because we physicians realise this fact that as a profession we are tolerant even of extremists and can harmonise with any sect. The same fact has become known to the layman, who expresses it thus, that each man is meritorious according as he acts up to his belief, that is, to his mental visualisation of the Bible or any other religious guide. Though this sounds materialistic, it in no way invalidates the belief in religion, or in God, or in spiritual life. At present we "see as through a glass darkly," and must therefore abstain from dogma, and wait expectantly until we meet our Pilot and "then face to face."

It would seem as if, in the higher life, sentiment is raised chiefly by education; that is to say, those above us, in age or position, have cultivated our ideas as it were by throwing moral pictures on the mental screen. If we try to reform a hooligan, we depict to him his present misery and conversely suggest to him pictures of pleasanter surroundings, always working first on the animal side, and later suggest methods of self-improvement. It is all a question of mental visualisation and entirely on the sensory side of the physical plane. No suggestion can take full effect unless a similar representation has been made before. On this account to preach of Heaven to the degenerate, or uneducated, can have little effect. The dream of Heaven lies on the sensory plane, and represents the most refined sensations that ever entered the mind. Darkness is repulsive to man, and so is ugliness. Though we may add to our beautiful ideas apparently without restraint, yet our sphere is very limited and finite. Nevertheless there is no argument in this against an infinity far beyond any present conception, for it seems difficult to conceive that we are the Alpha and Omega of the "creation."

Conversion ; its basis.

I think that with the evidence before us we may assume *Résumé*, as facts :—

1. That mind and psychical processes are closely related to and actually dependent on the brain.
2. That the part of the brain connected with mind and

higher thought is probably the post-natal development of the pyramidal layer of the grey cortex.

3. That as experiment has defined the cortical areas connected with sensation and motion, so observation in disease has shown the connexion of the association areas with higher thought, will, and control.

4. Finally after the most complete analysis by any known writer on psychical subjects, there is always a great deal which we cannot explain on the psychical side.

As to mind, it represents a something which we cannot analyse physically ; nor can we tell the nature of it as a force or energy ; nor even what it is finally resolved into. Other forms of energy perform work which can be measured in units or if dissipated end in heat ; but when we investigate mind, at a certain distance we invariably come up against a door which is closed.

Dual Con-
scious-
ness.

I could hardly be expected to write on the subject of mind or brain, without touching on the subject of Dual Consciousness, or multiple personality. It was my good fortune in the year 1895 to treat a case, and it is reported in my former book. Without going into too much detail, I shall call attention to some of the chief points of interest and their application.

Mary Barnes, a normal healthy child of good stock, after a severe attack of influenza was so shattered that her ego was completely disrupted. There appeared at different times during the two following years ten different personalities. At the suggestion of my friend Dr. Savill,¹ I labelled the normal Ego A, and the ten abnormal states B1 to B10. Each personality was a separate life or existence, unconnected with the other nine, or with the normal Ego. For instance, B1 knew nothing of A, or of B2 to B10. Similarly A knew nothing of any of the B states.

As an instance of the gaps in the memory of each personality, B6, who resembled normal in being a healthy-minded personality, knew nothing of A or B3. As B3, Mary went to the seaside and learned to swim. She said she had never seen the sea before, although as A she had often been to the seaside. The following year Mary Barnes went as B6 to

¹ Since this was written the profession has suffered an irreparable loss through his death, by a fall from a horse, in Algiers.

the seaside. B6 however said she had never seen the sea and was frightened. She had no knowledge of her previous swimming and had to learn again.

B6 had to be re-introduced to old friends whom she had known intimately as A. Mary has lived for many years in the B6 personality and apparently in good health.

This case, and several other similar ones, indicate that an individual may live two or more lives. Each extra life, or personality, produces a lapse in consciousness from the normal self or Ego. In this case, I found that each personality was a continuous life, irrespective of the length of time between the gaps.

I regard this affair as a disruption of the normal. The normal A, the ego, is therefore composite. There are in all of us animal emotions and instincts, as well as the intellectual self. The normal can only be attained by a perfect adjustment of all the component sub-personalities. If a disturbance come, it is like the falling down of a building, new surfaces are presented.

I should term these cases of dual consciousness—disrupted personalities, because the sub-egos, or sub-personalities, are separate and complete in themselves. There are however partial disruptions where consciousness may remain, or be only slightly affected. Such cases are common. The upright honest man has a lapse into dishonesty, and he cannot explain it. The pious, virtuous man has a lapse into immorality; he cannot explain it. On careful inquiry we may find confusion, headache, or some physical sign occurring during the lapse. It would seem as if the joints and screws were loose, and the compact whole was dislocated in parts. These occurrences show great neural and mental instability, and explain why brainy people, often of fine personality, but frequently unstable, take the wrong turning in life.

We also find cycles in different lives. Cycles of goodness and cycles of badness. Many years ago I was consulted by some people in reference to their daughter, who at times was unbearable in the house, a fact peculiarly distressing as the family were so bound up in each other. I found she had three periods: in one she was normal, good, quiet and shy; this was followed by a time of excitement, good spirits,

always monopolising the conversation, especially before visitors; finally there was the stage of sulking and bad temper. Each period lasted about three months. Alienists have defined a somewhat similar cyclical insanity—*folie circulaire*.

In another instance a man, devoted to his wife, was extremely upset if she was irritable. The result was headache, sleeplessness, confusion, and a short but decided moral lapse.

There is a third state, that of incomplete or unfinished Egos. These include the degenerates or psychopaths, the so-called criminals. They have never properly developed to the normal level. We never see in them any approach to the normal Ego, because such normality does not exist. What we do see are incomplete, or imperfect sub-egos, driven by emotion. Here again I do not excuse but only attempt to explain. If my explanation be correct, then we must have one law for the normal A, and another law for the abnormal B. This is only physiological and at the same time just, though it may not be classic.

There is another feature which concerns each one of us. This person, Mary Barnes, has now lived for at least 12 years as B6, that is a part only of her whole self. She is to all appearances quite ordinary. The question arises, how many of us are normal? Some accident before birth, or after, may have so disrupted the Ego that a new, more or less fragmentary personality appears. The cross child is admittedly abnormal; but it may be a disrupted personality. We may have known the normal as an amiable child. The lesser intellectual man may be a fragment of his normal ego. The same applies to the less moral or less honest individual.

Normal man, raised to the level of *Homo sapiens*, or even in the upper strata of *Homo domesticus*, ought to be good, intellectual, and capable of self-control under all conditions. While we can condone and endeavour to improve our less normal brethren, we have always to question ourselves—Am I A, or am I B? If I be my normal self, A, should I not be more intellectual, happier, cleverer and more moral?

The same individual might have lived on a higher plane—perhaps been a bishop; on the other hand, if adversity had

dealt him a blow in early years, he might have only risen to be a bricklayer. Each one of us must search for himself or herself—Am I A, or am I B ? If B, which B ? And how are things to be rectified ?

I look upon Man not as an individual or Ego, but as a composite organism. Hence we should replace the term "I" or "ego" by "we" or "nos." Indeed the human Personality may be diagrammatically represented as a sort of octopus—a living centre, capable of sending forth or retracting its psychic tentacles according to stimuli.

Thus, in a religious assembly a religious tentacle is stretched out and frequently apparent ; but on another occasion, the opportunity of undue gain being presented, the religious tentacle retracts, being overpowered, and the tentacle of selfishness responds and is protruded. An object of healthy pleasure, acting as a stimulus, attracts the tentacle which is affiliated with happiness. Similarly the stimulus of lust draws out the lust-responding tentacle ; while the stimulus of knowledge reacts on another tentacle, and so on throughout our composite existence.

This explains how a man may be pious on Sundays and fraudulent on weekdays. It is a question of stimuli or attracting forces acting on an unstable equilibrium. The central body, if we may materialise the psychic entity, must be in a condition of perfect and powerful equilibrium, refusing to react to what experience shows to be injurious to the whole. Excessive stimulation in all conditions of life damages the organism. Over-stimulation must be resisted. This is the essence of mental balance.

But when all is said, we must admit that the whole subject is wrapped up in mystery which no human mind can penetrate,

CHAPTER XIII

THE PHYSICAL BASIS OF MIND AND PERSONALITY¹

"NEUROLOGY must be rewritten" is the dictum of one of the greatest of European neurologists.

There can be but little dissent from this opinion. It contains no trace of discontent with the many investigators who are filling our bookshelves and journals galore, even though much of what is written may be of very small value later. We must have these writings. If they are not bricks, they at all events form a foundation on which those who come after will build. It is, however, remarkable how much neurologists differ in their results and opinions. This makes the profession very cautious in what it accepts. If we observe the signs of the times, we see leaders who are thinkers and observers rather than experimenters. Following them, as the Staff Corps follow their generals, are groups of investigators; while the profession act as rank and file, carrying out the instructions of the Staff Corps.

A leader, or general, is conspicuous for his personality; the Staff Corps for energy and unfailing duty.

In our country perhaps the greatest leader was John Hunter; another leader was Sir James Simpson; while in our time we have had two, Lister and Hughlings Jackson. Virchow was a great leader. Flechsig is a leader.

A leader is also a philosopher. He is correct in the main thesis, though he may not always explain everything or even err in detail. Infallibility unfortunately is not permitted to any one of us.

Under the stimulus of Broca's observations, many observers mapped out the surface of the human brain, but we have

¹ This chapter is technical—specially addressed to the medical profession. The general reader may pass it over. The author apologises for the arrangement of the photographs, which are very numerous, but essential to the thesis.

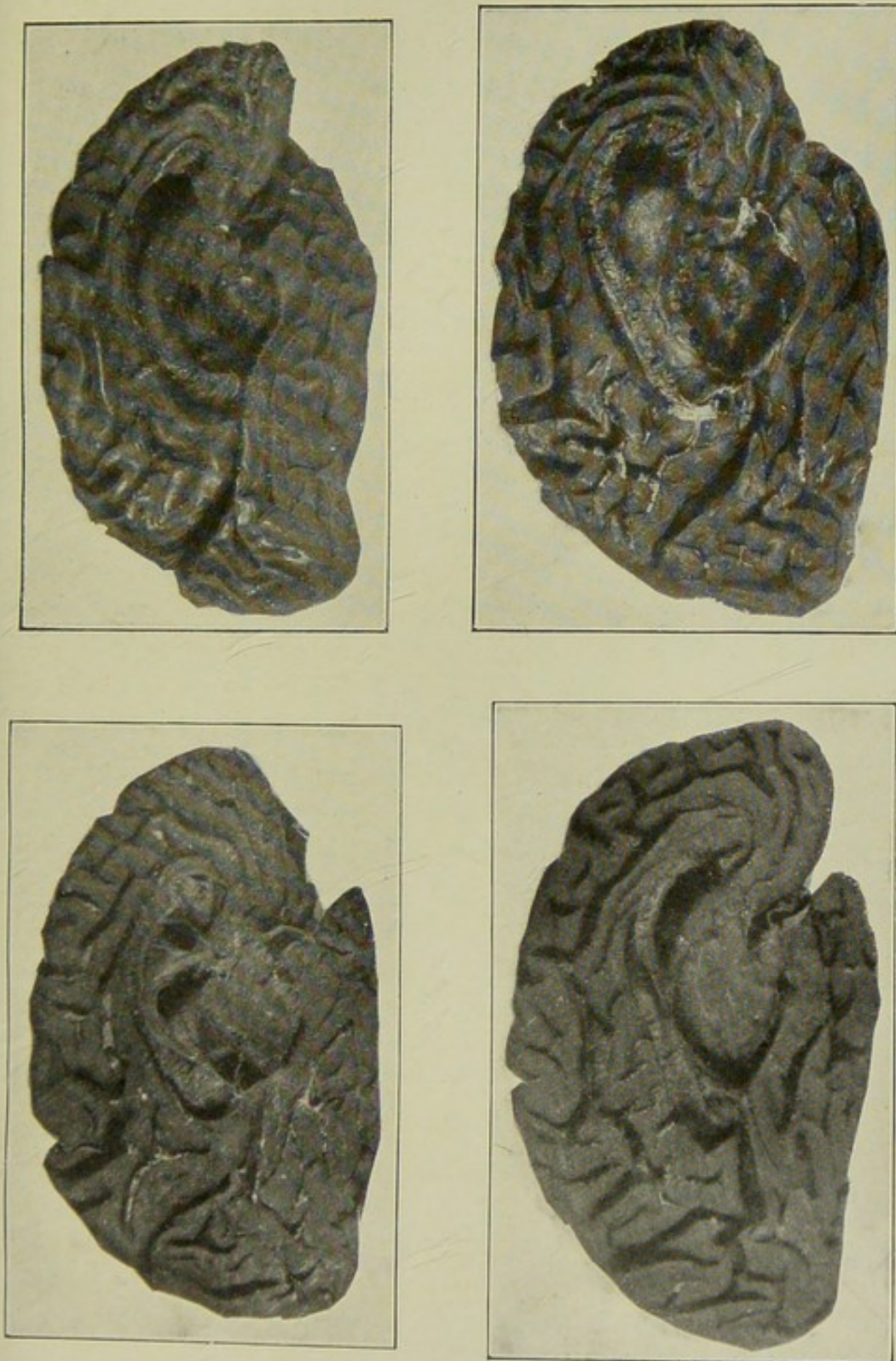
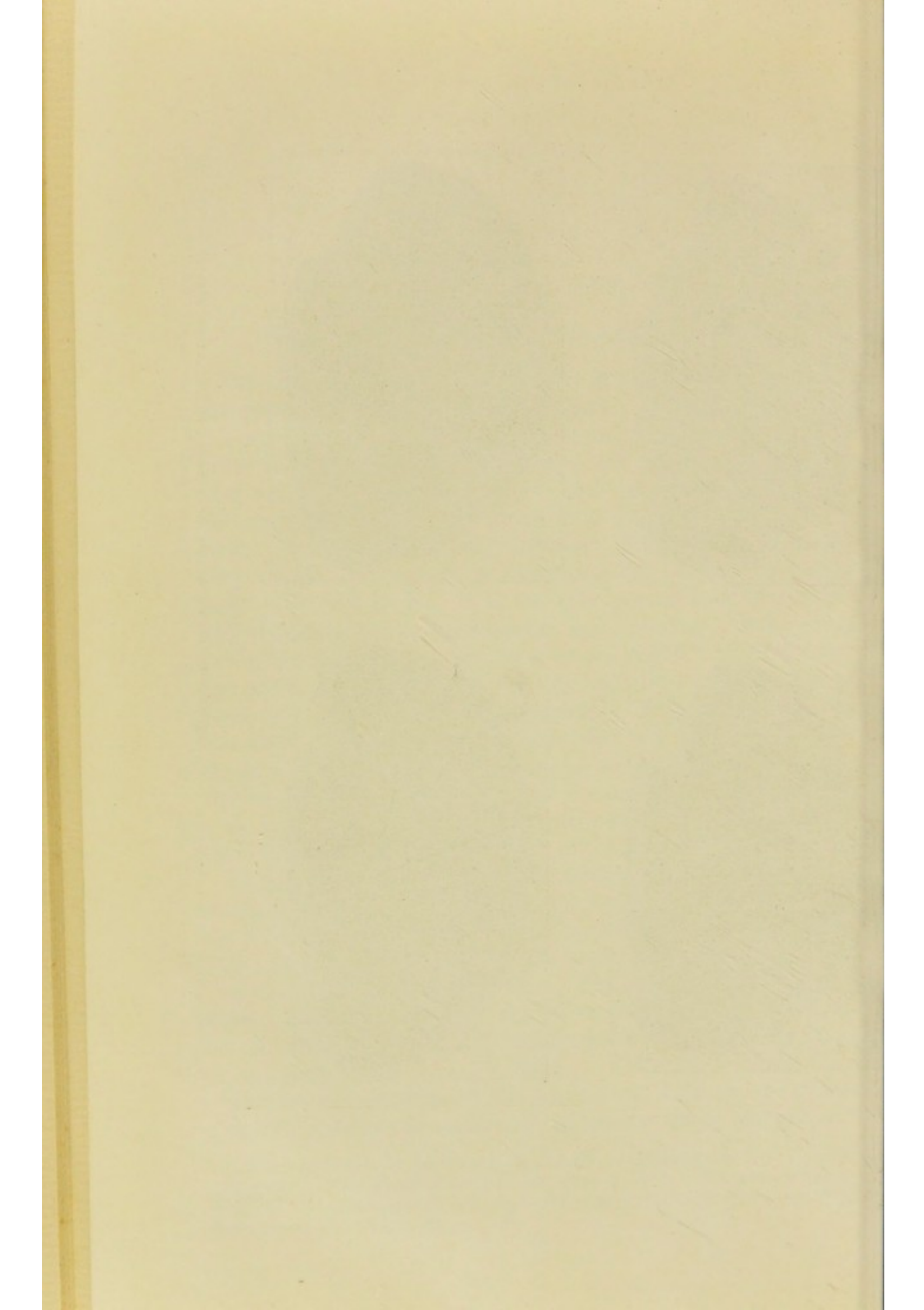
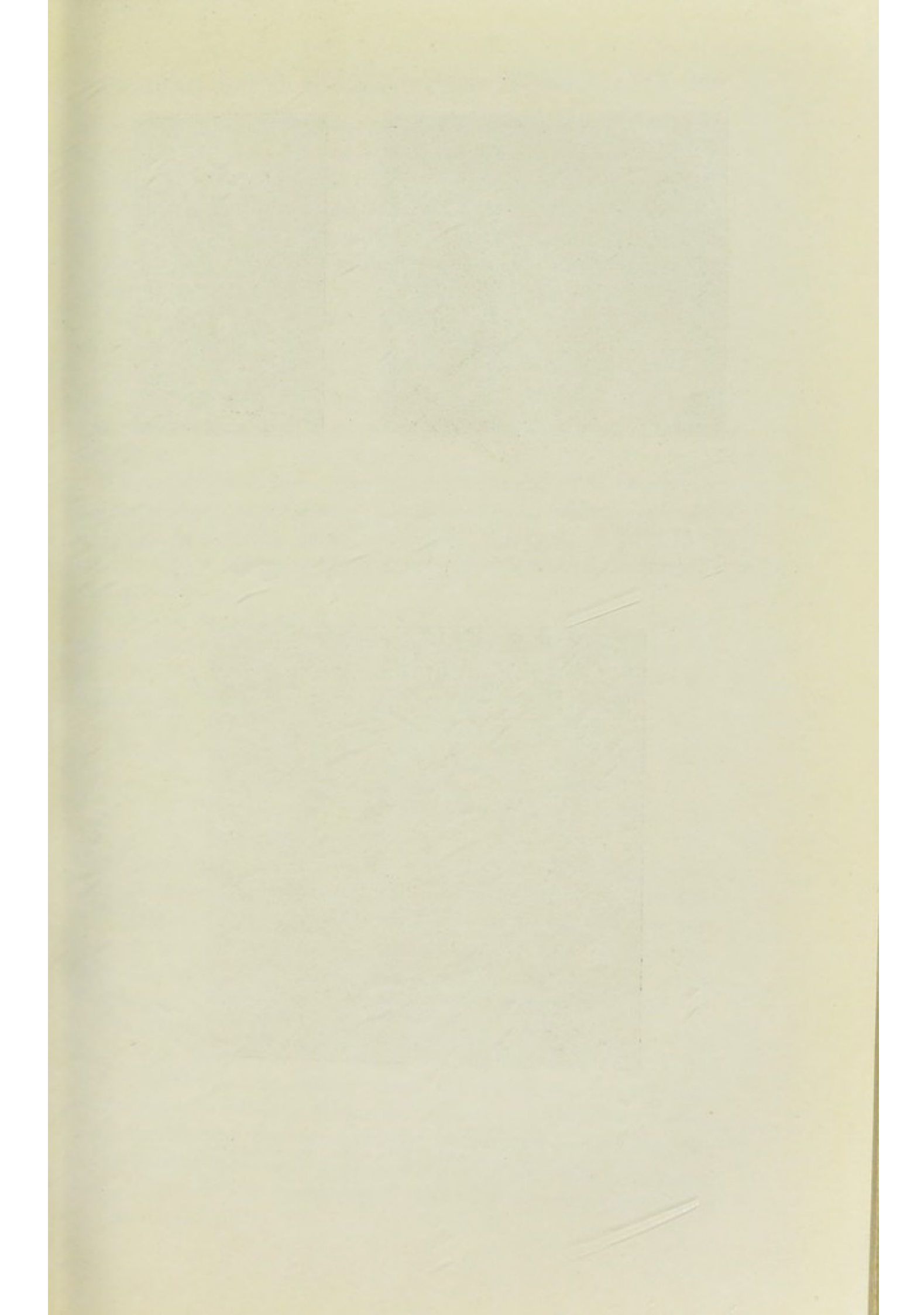


FIG. 34.

These four views of the inner surfaces of brains indicate in the clearest manner the very great variation in the details of pattern. For instance, compare the calcarine areas. If the machines differ so much, is there any wonder that the "output" differs in each? (For description see page 258.)





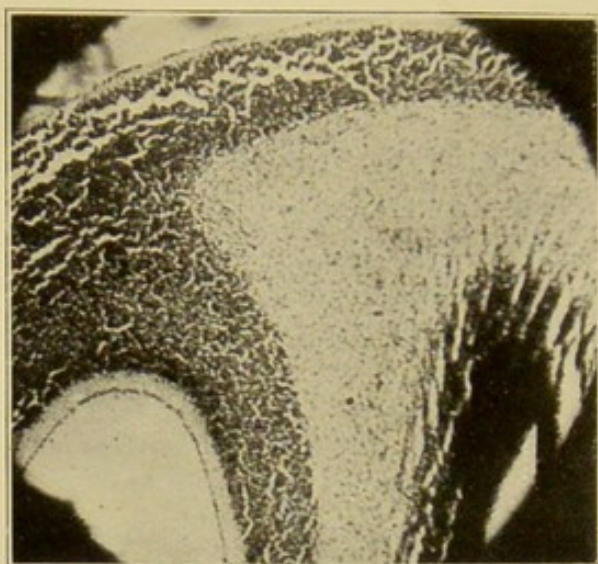


FIG. 35A.

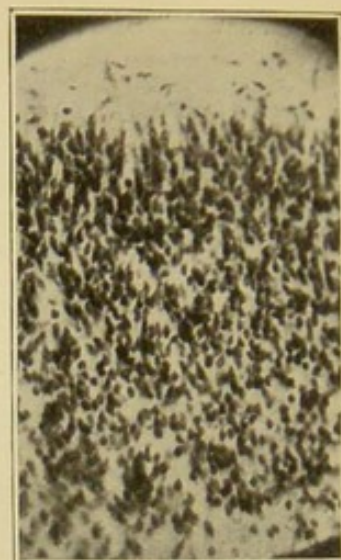


FIG. 35B.

A shows the appearance of the foetal neuroblasts at the fourth month. The view is of the anterior cerebral vesicle. B shows the higher magnification of the anterior band. There are only two layers: the outer clear zonal layer, layer I, in which we see vessels forming; and the cellular layer, which will not be differentiated until about the sixth month.



FIG. 35C.

This photograph, multiplied 165 times, shows the fibre architecture of the prefrontal cortex. Fine, medium and coarse fibres are apparent. I am indebted to Dr. Bolton for this photograph.

seen it mapped out again and again and still it remains incomplete. The leader, the philosopher—Hughlings Jackson, evolved the idea of levels—three levels.

The first, or lowest level, consists of the pons, medulla and spinal cord, representing simple and reflex actions.

The second level is the motor cortex, which “re-represents” complex movements.

The third or highest level is the frontal lobe, which represents the most complex movements and evolutions.

This is the conception of a philosopher and probably will lead us to truth; but we may have to carry it further to more than three levels, as we learn more about the psychic functions.

At a time when observers had only mapped out the motor and sensory areas, Flechsig described the so-called “silent” areas as association areas. His idea was that they linked up and associated other areas, and so far contributed to thought and memory.

It would appear as if this theory was now losing favour, being opposed by H. Vogt and others. If it be wrong we must let it go, but we must not lightly lay it aside. The five Association Areas described by Flechsig were—

- The Prefrontal area,
- The Parietal area,
- The Occipital area,
- The Temporal area, and
- The Insula.

Vogt has led us to think that the function of association is much more complex than Flechsig has suggested. In fact each area may be subdivided, or it may be that association goes on more or less all over the cortex in every convolution. Who knows? In the main we must for the present accept Flechsig's opinion. This view is strongly supported by observations in cases of general paralysis, which in the early stage is a disease of the higher centres of intellect. There is mental confusion, loss of moral control, ideas of grandeur, extravagance, self-importance and so on. It has been shown that the disease first attacks the prefrontal area, then the occipito-temporal and parietal areas. The Rolandic area, that is the motor (precentral), and the sensory (ascending

parietal) areas, stand out prominently above these atrophied, shrunken, diseased convolutions. In a former book¹ on this subject I showed photographs lent to me by Dr. Bolton which clearly demonstrate this.

If the "silent" areas when atrophied by disease be marked or blocked out distinctly from the sensory and motor, then we must conclude that functionally they stand closely related. It may be that the association areas of Flechsig will be subdivided into 10, 20 or even 50 more areas, but, as a vast complex, an area of association must remain an entity.

The term psychic has been applied to the association areas, and Bolton has demonstrated that the visual area is divided functionally into—

First, a visuo-sensory area, surrounding the calcarine fissure and distinguished by its richness in granular or stellate cells.

Secondly, the occipital area surrounding the calcarine region and distinguished architecturally by a greater depth of pyramidal cells. It is visuo-psychic in function.

The same type of architecture is found in the centre of hearing. The gyrus of Heschl and part of the first temporal convolution is audito-sensory; while the surrounding temporal convolutions are supposed to be audito-psychic.

It is necessary to remark that some of our neurologists do not accept these divisions into sensory and psychic areas. They suggest that perhaps the outer pyramidal layers exercise associational functions. Under these circumstances it is impossible to be dogmatic. Nor do all neurologists accept the limitation of functional areas as at present mapped out in relation to the convolutional pattern. Indeed, rather too much importance is being attached to size, weight and pattern, to the exclusion of the architecture of the Neopallium as revealed by the microscope.

We have not as yet got a clear notion of what the brain pattern should be. There is quite enough labour in that field of research alone to occupy any magnate in neurology.

We want an orthodox brain pattern, with a well-defined limit for variation. At present a description of brain pattern conveys but little to the ordinary mind. The brains of some

¹ *Education, Personality and Crime*, pp. 79, 103.

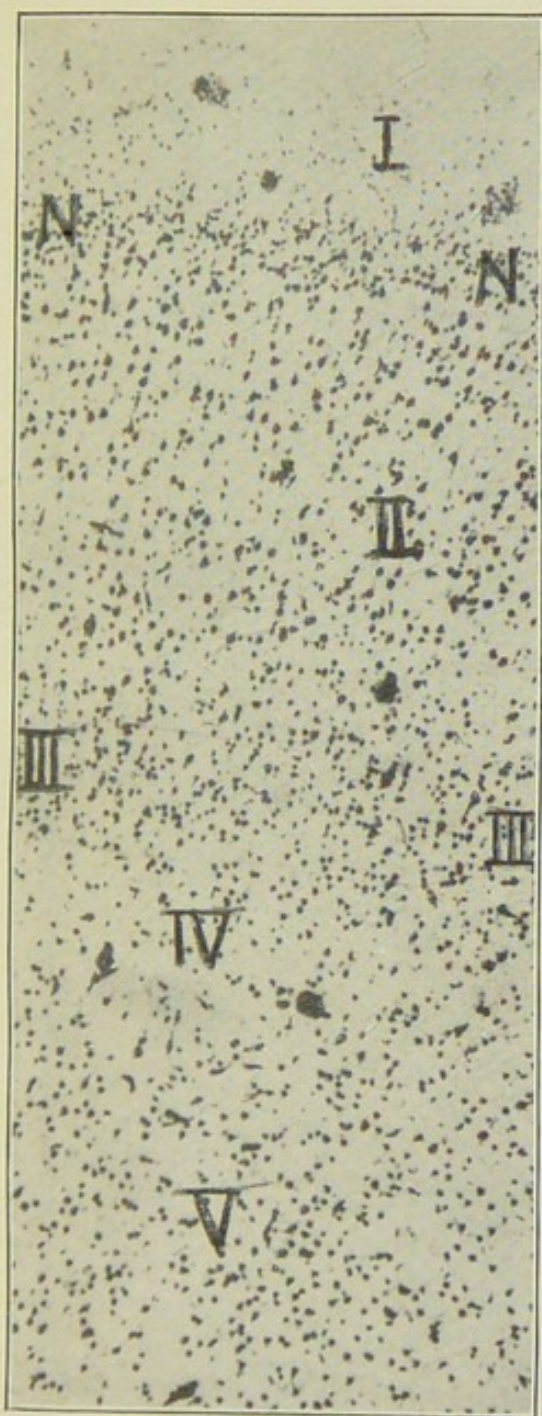


FIG. 36A.

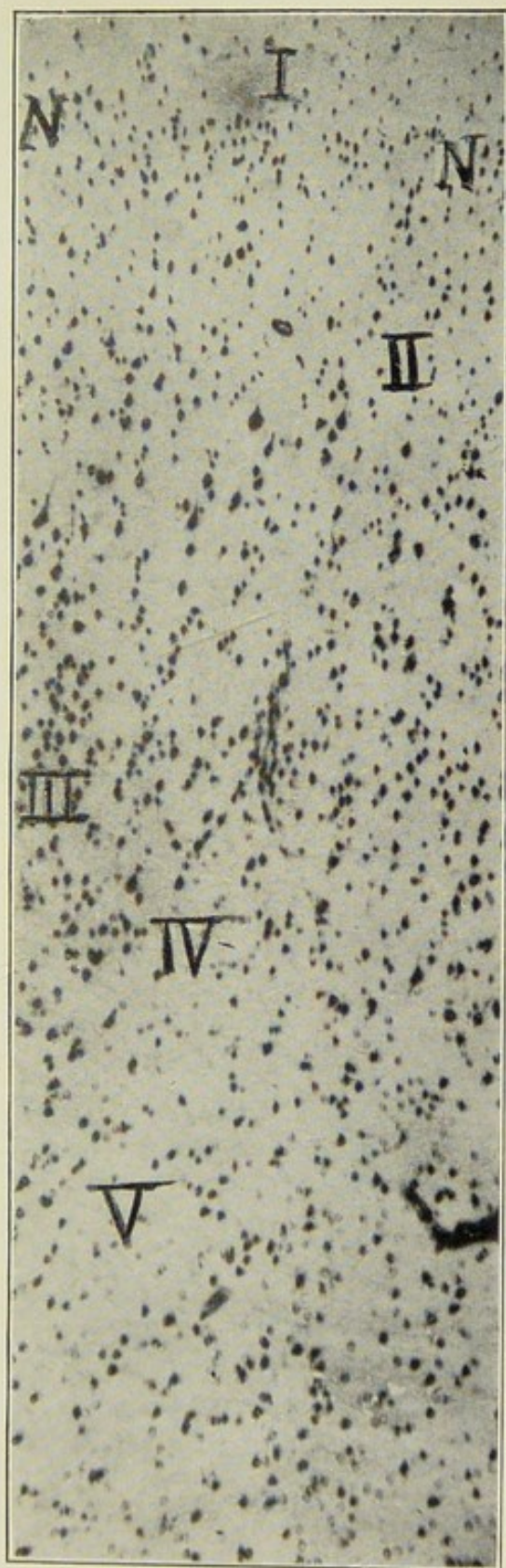


FIG. 36B.

A is the foetal and B the degenerate prefrontal cortex. They are divided into five layers, after Bolton. *N* shows the neuroblastic or postnatal layer.



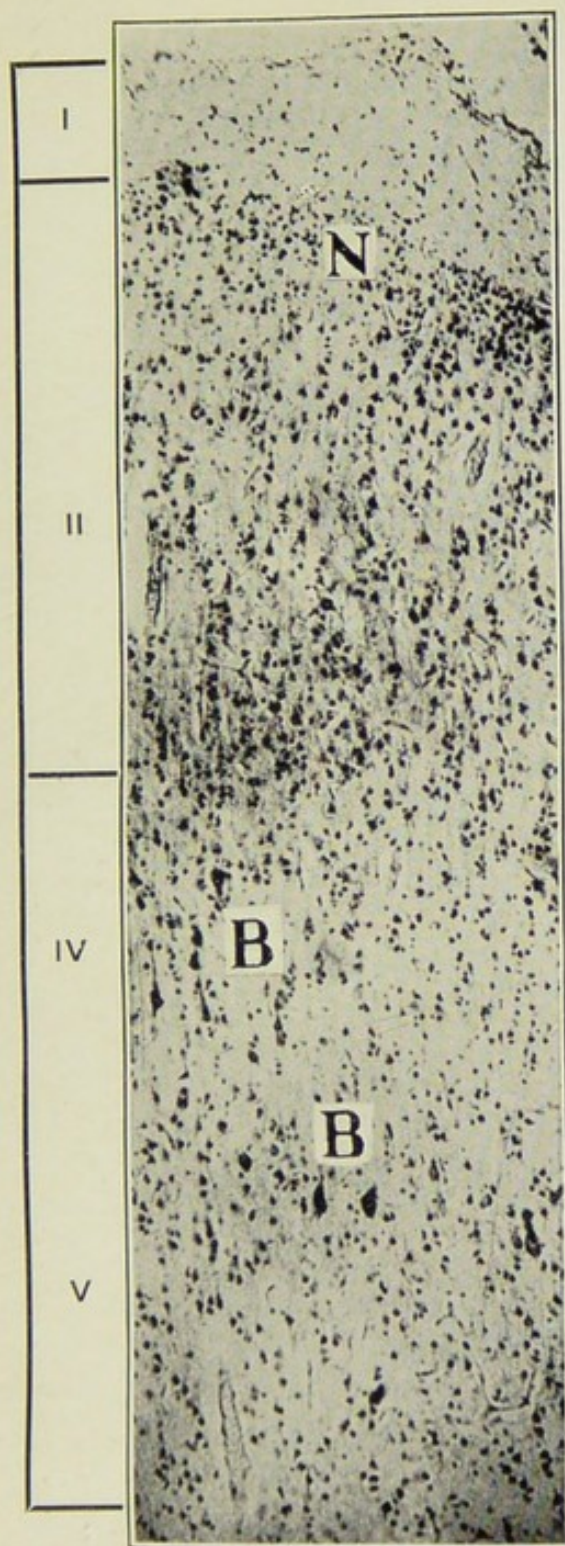


FIG. 37A.

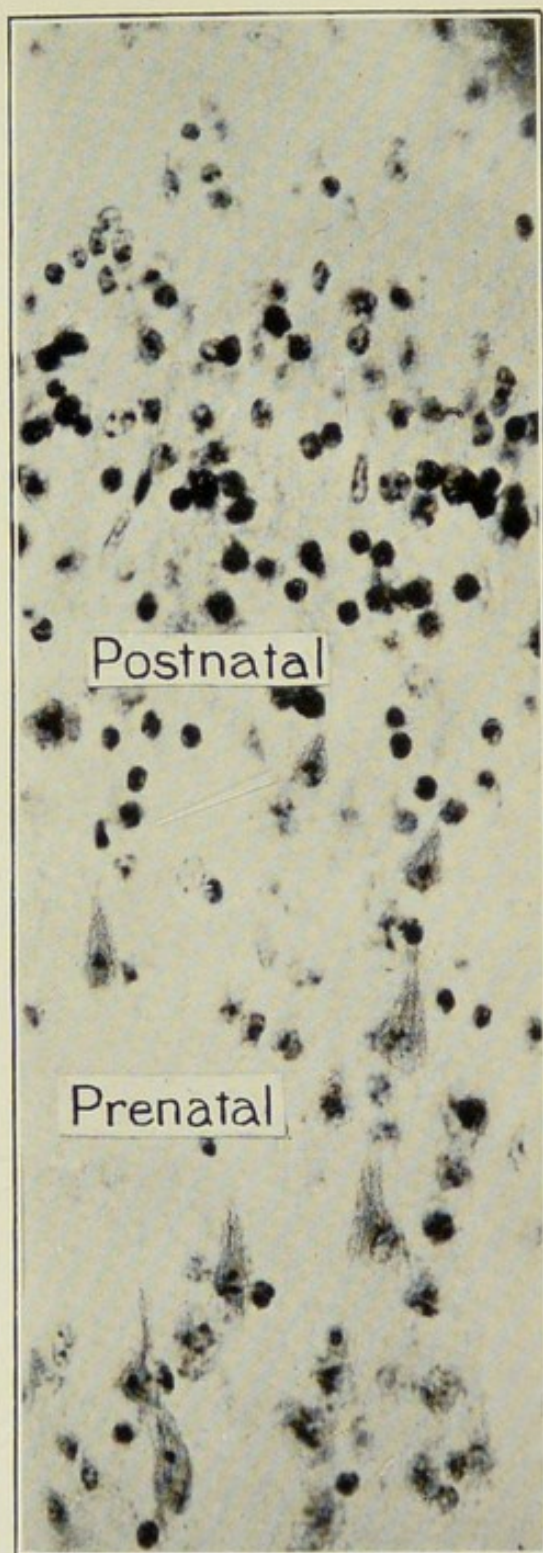
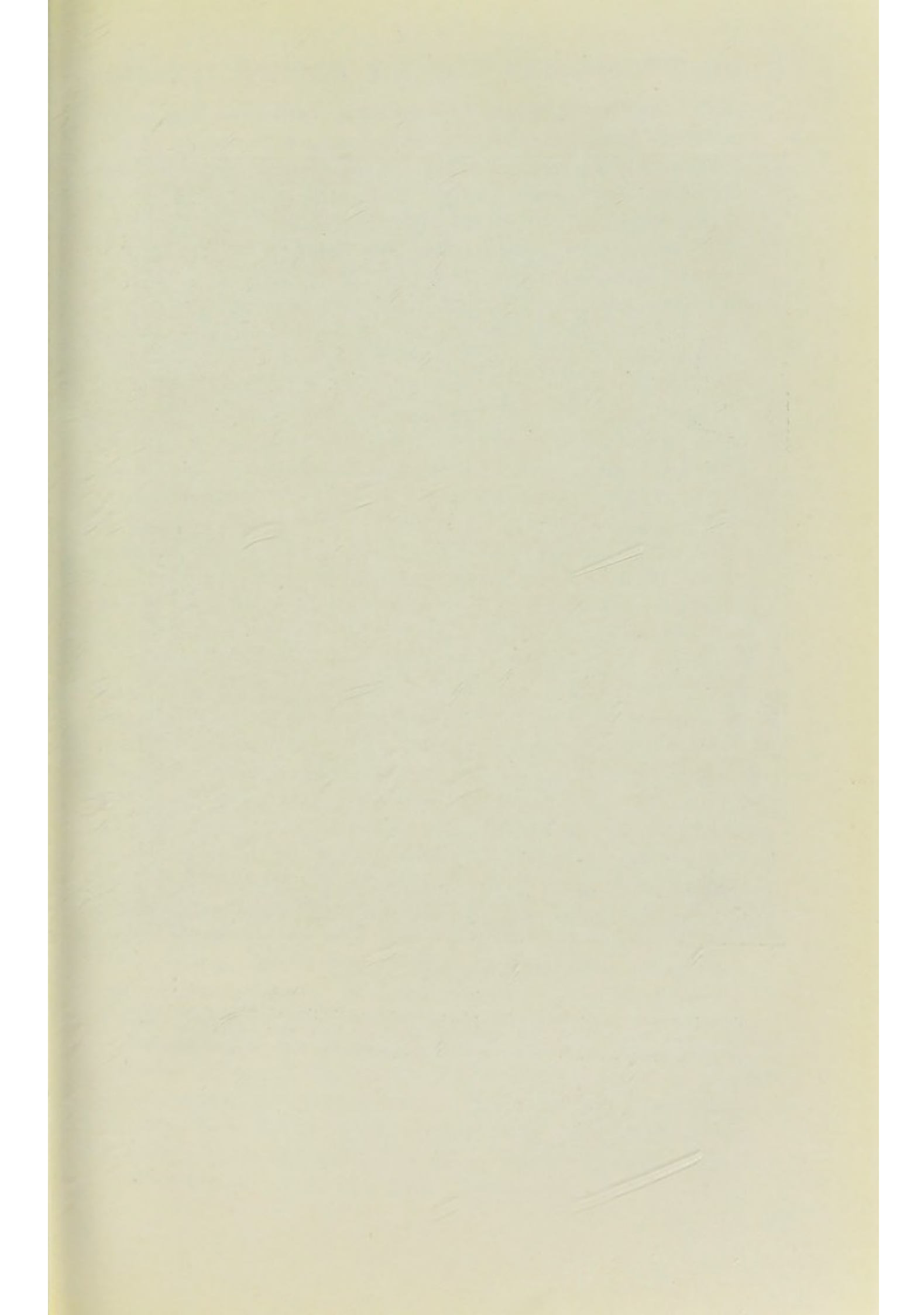
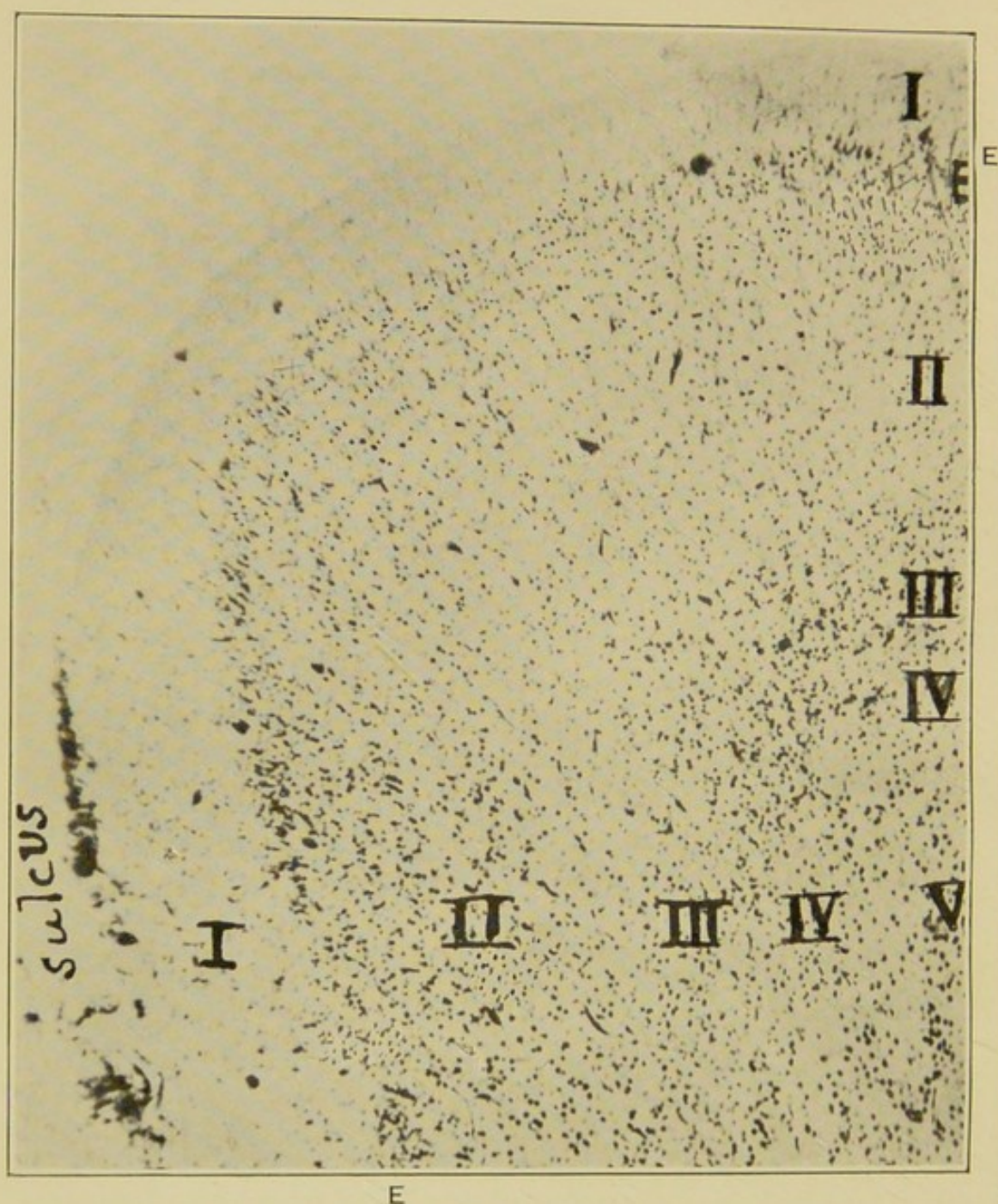


FIG. 37B.

This is the motor cortex of the child at birth. The neuroblastic layer *N*, which is marked postnatal in *B*, is clearly demonstrated. There are large motor cells (Betz) marked *B*. The granular layer is absent in the precentral gyrus.







E

FIG. 38.

To show the corner and groove, or sulcus, of a convolution at the time of birth. *E* marks the embryonic nuclei or neuroblasts. The layers are marked, and the varying depth of the layers is easily traced. This shows how those who measure the depth of the cortex may easily fall into error.

clever men have been of low weight and poor pattern. Conversely some navvies, and even criminals, including the murderer I describe, have large heavy brains and sometimes the convolutional pattern is good. Idiots and imbeciles frequently have very small, light brains with patterns which, though called reversions, are really arrests *intra utero*. Two of these I have shown in my former work and they are not so good as the ordinary orang brain.¹ It is, however, well known that many imbeciles have very large brains.

In support of this fact I must again refer to the case of an intelligent-looking girl, 11 years of age, who was imbecile and lost the faculty of speech about the age of 4. Until 3 she was a normal, healthy, clever child. About that time she became irritable and suffered from headaches and insomnia. She also got into the habit, if a person began a line of a hymn, of saying the end of it. Curious to relate, if a person now repeats a line of a hymn she will hum the tune, as if the auditory apparatus and cortical neurones were in working order. At the same time she takes but little notice of anything said to her, and at times seems to lack understanding. She has not spoken once since the age of 4. As it seemed a case in which one might legitimately explore, I asked Mr. Donald Armour if he would remove a plate of bone from the area of speech. A large piece was cut out exposing the brain fully. The brain pattern as seen through the pia mater was elaborate and beautiful. No good effects followed the operation. The cause of the imbecility is ambiguous. It was not structural but post-natal. The head was of hydrocephalic type. It measured $7\frac{1}{4}$ in. \times $5\frac{5}{8}$ in., cranial index 77.6. The circumference was $20\frac{1}{4}$ in., antero-posterior dome $12\frac{1}{2}$ in., and lateral dome $13\frac{1}{4}$ in.

If any one wish to benefit mankind by making a map of a normal brain pattern, I would suggest a way of preparing brains, which is useful for purposes of demonstration. I had some hemispheres which had soaked for 4 or 5 years in formalin solution. They were tough and leathery. I then allowed them to dry in the air. The result was interesting, for they dried up as hard as bone, with every convolution standing out, as in a cast or model. I have 4 left-sided hemi-

¹ *Loc. cit.*, *E.P.C.*, pp. 76, 77.

spheres lying on the table beside me, and the variations in corresponding gyri, or convolutional pattern, is most remarkable. The annectant gyri or bridges are well demonstrated. Many foreign neurologists maintain that in the plainer patterns these annectant gyri are absent, and such conditions have been described in the brains of criminals.

We must have a standard pattern, with a chronicle of variations, whether in size, curve, depth or breadth. We want to know something about the annectant gyri, and about the minute fissures or dents occurring on the surfaces of convolutions. These latter on section are often seen to penetrate like half-developed sulci. We want some magnate to tell us all about them. We should be informed not only as to the number and kind of variation, but the limits of variation, the limit upwards and the limit downwards, which may be met in normal brains.

As I look at the parieto-occipital and calcarine fissures of these dried brains, not one of them is like the other. They almost look as if they came from different species or families (Fig. 34).

With such variation in convolutional pattern, we can easily understand that great differences are possible in the intelligence, not to mention the capability of developing the intellect.

THE MICROSCOPICAL STRUCTURE OF THE GREY CORTEX

This ¹ subject has been rather thoroughly but not systematically explored. In the foetus at the fourth month the cortex is laid down in nuclei or neuroblasts (Fig. 35). Fig. A shows the anterior cerebral vesicle, the future cortex being represented by the dark band. There are only two layers visible: a narrow outer layer (*a*), which is clear and in which we see blood vessels developing, and a broader layer of neuroblasts, (*b*).

Brodman, Bolton and Watson, and other investigators, have shown that after the sixth month there are three layers

¹ As this investigation is directed toward the cell layers I am not touching on the subject of nerve fibres, but for purposes of demonstration show the fibres of the prefrontal cortex in fig. 35 C.

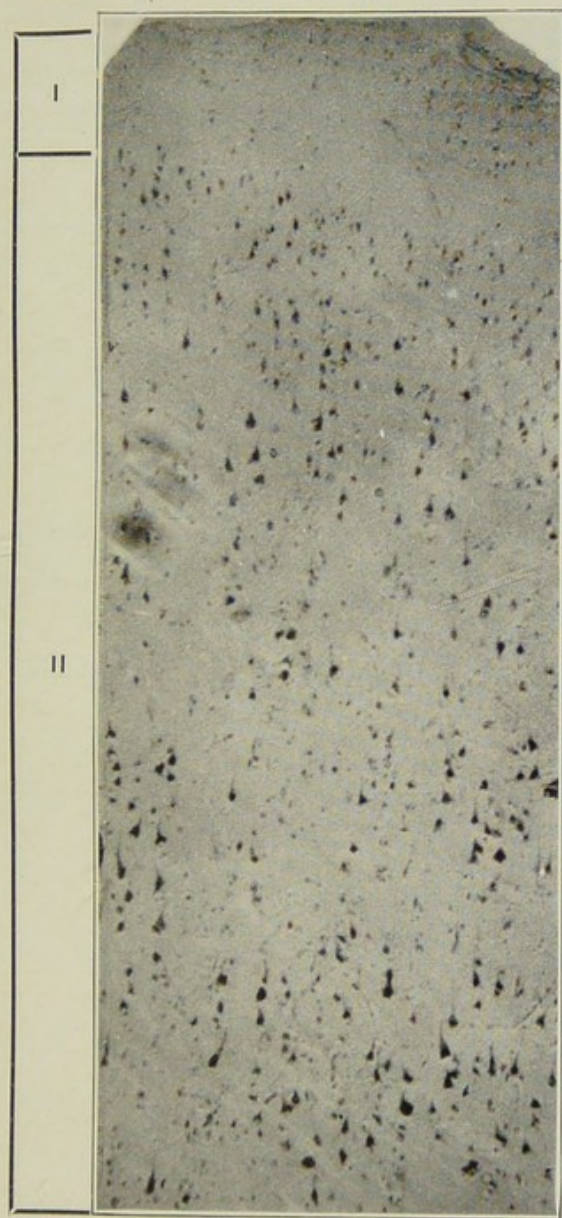


FIG. 39A.

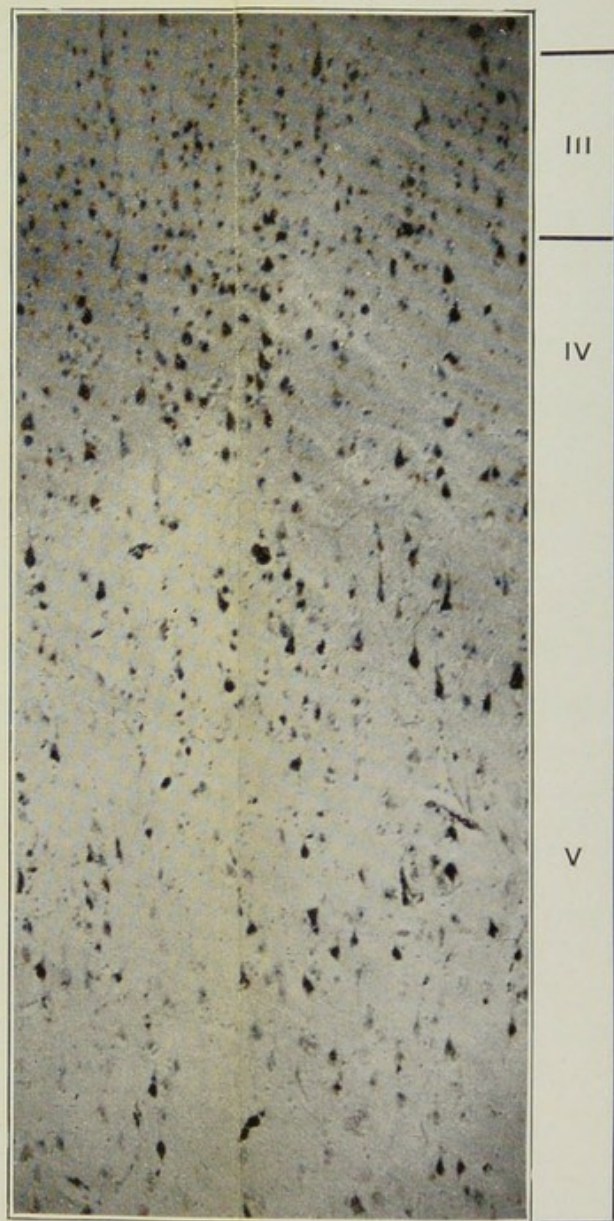
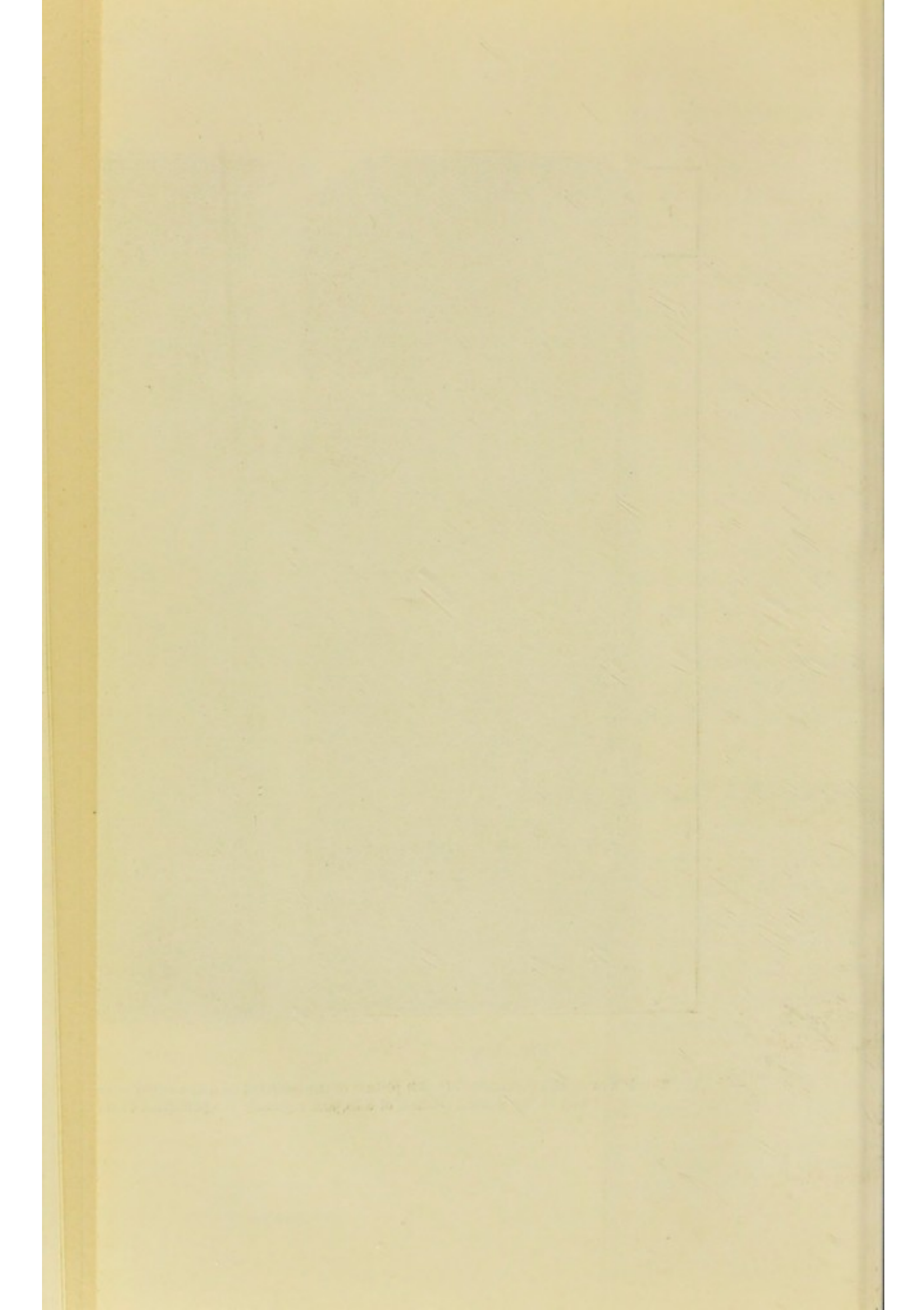
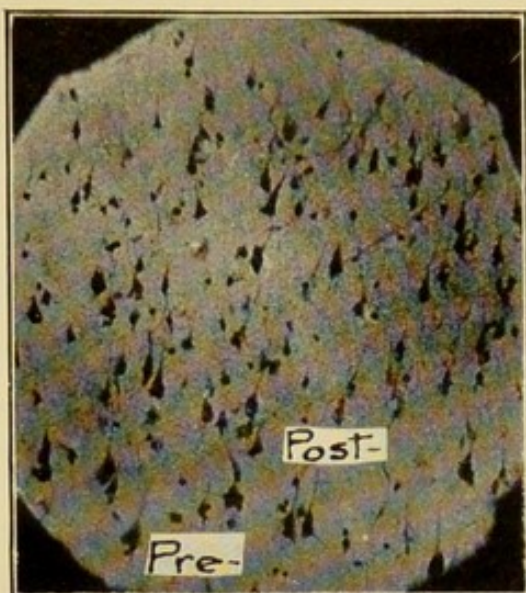


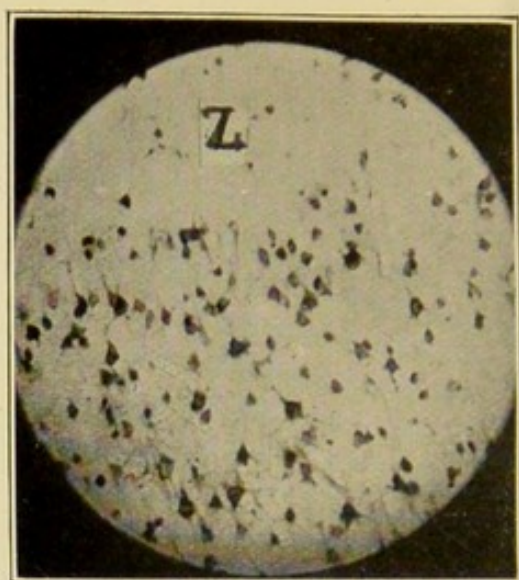
FIG. 39B.

This is a more highly magnified ($\times 80$) picture of the temporal area in a supra-normal man, to show the depth of layers I and II, the general richness of cells, and especially the perfection of the postnatal development.

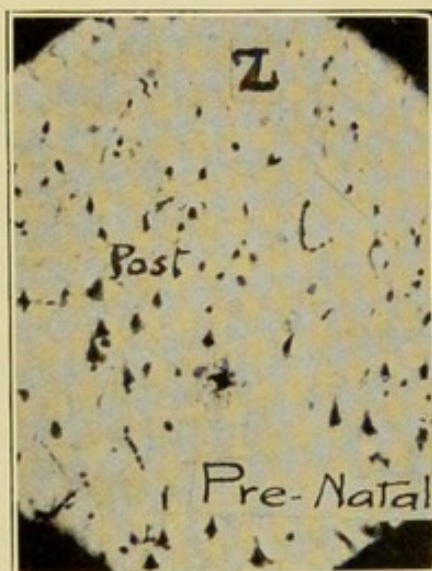




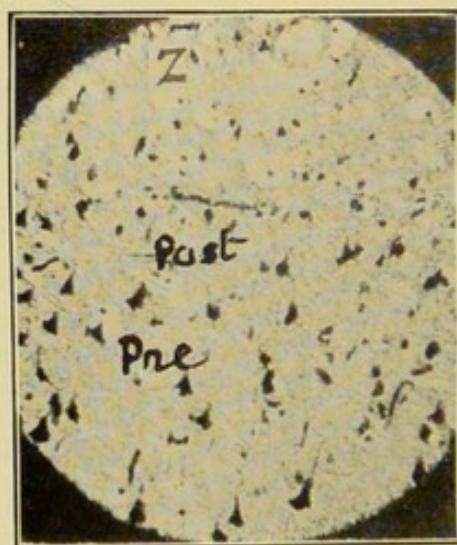
A.



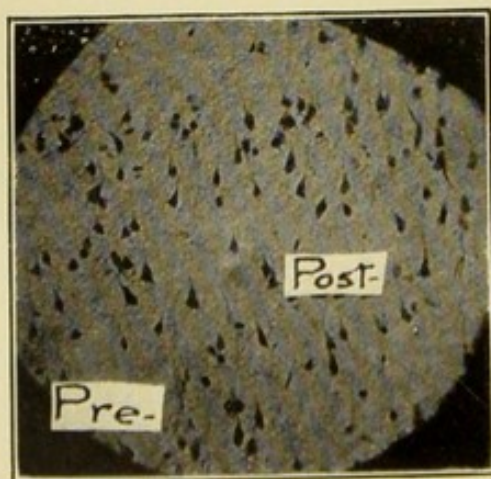
B.



C.



D.



E.



F.

FIG. 40.

These photographs illustrate the postnatal portions of the pyramidal layer in the adult. The zonal layers (Z) appear at the top. They are fully explained in the text, on pages 262 and 263.

[To face page 259.

visible. There is a middle narrow band of round or stellate cells—the granular layer; below a broader band of angular cells—the infra-granular layer; and above a shallower layer of pyramidal cells—the supra-granular layer. The infra-granular layer is formed first, and at the sixth month is $\frac{3}{4}$ of its adult measurement. The granular layer appears next, and is only half of its normal depth. At this time the pyramidal layer is only $\frac{1}{4}$ of its normal depth.

Bolton has carefully measured these layers, and carried his measurements to a great degree of refinement. Perhaps in these matters it is rather dangerous to claim too much accuracy and refinement of detail. I prefer Bolton's generalisations,¹ that at birth the whole cortex is about $\frac{2}{3}$ of its adult depth; and the pyramidal or supra-granular layer is only a little more than half of its normal depth, while the other layers have reached over $\frac{3}{4}$ of their adult depth. I attach special importance to the statement concerning the pyramidal layer and shall return to it later.

There always must be some confusion in comparing observations about the layer of the grey cortex, unless we have a sort of international standard. Barker makes 8 or 9 layers, Landois 7 or 8; the German school describe 6 and so on. In describing the cortex, different writers often mean different things. I shall follow the style evolved partly by Bolton and partly by Watson, referring to Fig. 36 for this purpose. The granular layer (III) is taken as the fixed point. Watson considers it as receptive or sensory in function.² This is usually accepted. The granular layer has a double development in the visuo-sensory or calcarine area, while it is practically absent in the motor regions. Bolton has carried us a little further and defines 5 layers, of which the granular is the central or layer III. Following the order of evolution and development I shall commence at the deepest part of the cortex—layer V.

The fifth layer is comprised of cells of all shapes and sizes, and therefore often called the polymorphic layer. This layer only degenerates in very advanced dementia, long after the individual is out of touch with his environment.

¹ "Functions of the Frontal Lobes," *Brain*, 1903.

² *Proc. Royal Soc.*, B. LXXVII, 1905.

It therefore appears to be concerned in the animal instincts ; whereas the pyramidal layer is the first to suffer when intellect goes, and for various reasons is now regarded as the layer of intellect. This description cannot be accepted as final. Fresh opinions and discoveries are always coming forward.

The fourth layer, described first by Baillarger, is a layer of fibres, but contains large cells. Those in the motor area, Fig. 37, *B*, are called after the discoverer, Betz cells. Their function is still in dispute. Campbell regards them as ganglion cells. Bolton's third layer is the granular which is cellular.

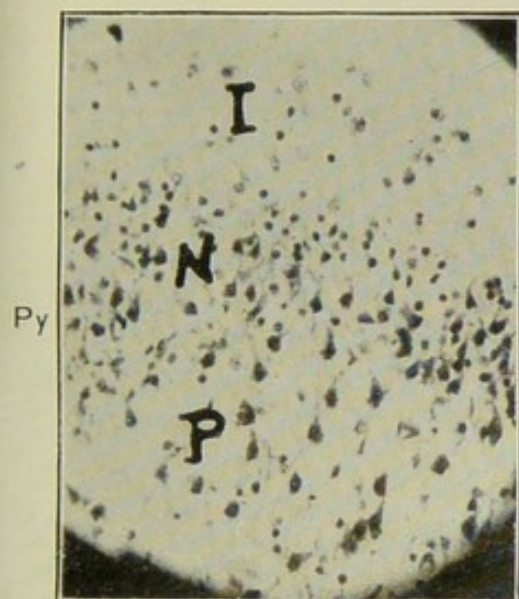
The second layer, number II of Bolton, is a cellular layer. It consists of pyramidal cells, and as aforesaid is only half its proper adult depth at birth.

The most cursory examination of the foetal cortex at birth shows that this half-developed layer consists mainly of well-shaped pyramidal cells below, and round nuclei or neuroblasts (*N*) above. These latter form a very striking appearance, like a band, underneath the pia mater. These nuclei obviously can only develop *after* birth.

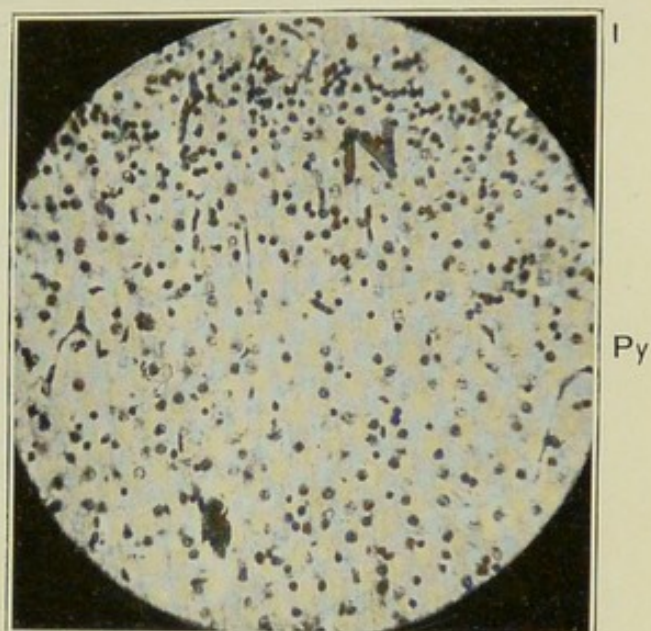
Bolton writes ¹ that "the pyramidal layer is the last layer of the cortex cerebri to develop, and it is also the first to undergo retrogression in dementia. It is the only layer which appreciably varies in depth in normal brains." I think it might be more correct to say "abnormal" brains, until we know something definite about the normal. Bolton here expresses half the truth, for by what many other observers have shown, it is the outer or small cell layers of his layer II, not the deeper large pyramidal cells, which are the last to develop, as is shown by this photograph ; but in addition these small cell layers, which develop post-natally, are the first to degenerate and disappear in dementia. The larger deeper pyramidal cells disappear later.

The outer clear layer, I, is composed of delicate fibres which have associational functions. Campbell calls it the Zonal layer ; others call it the Tangential layer. In general paralysis and dementia it is found to degenerate early in correspondence with the degeneration of the upper small pyramidal cells. It is $\frac{1}{2}$ or $\frac{1}{3}$ of its full depth at birth, because the small

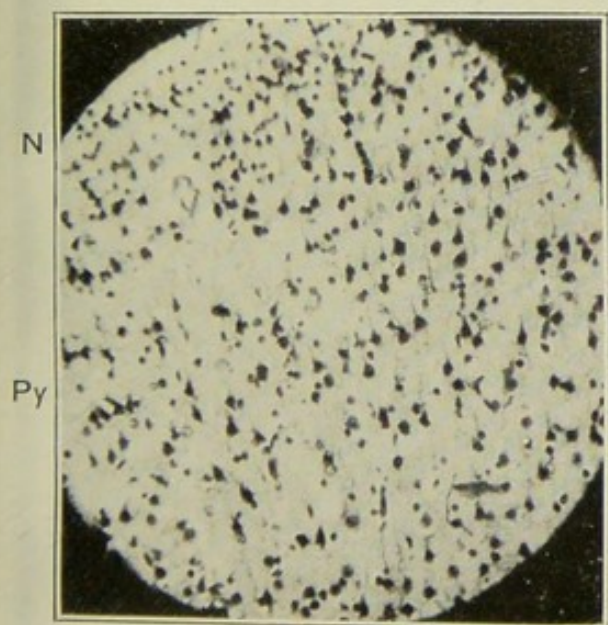
¹ "Amentia and Dementia," *Journal of Mental Science*, July, 1908.



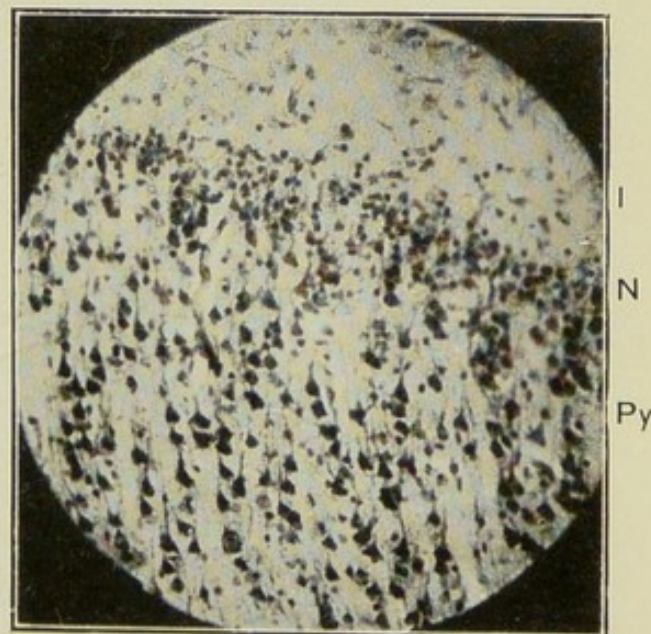
A.



B.



C.



D.

FIG. 41.

These photographs show the pyramidal layer (*Py*) in the foetal state. The neuroblastic layer, *N*, is postnatal in development. The prenatal architecture, below, is perfect. *I* is the zonal layer. (For description see page 265.)

[To face page 260.]

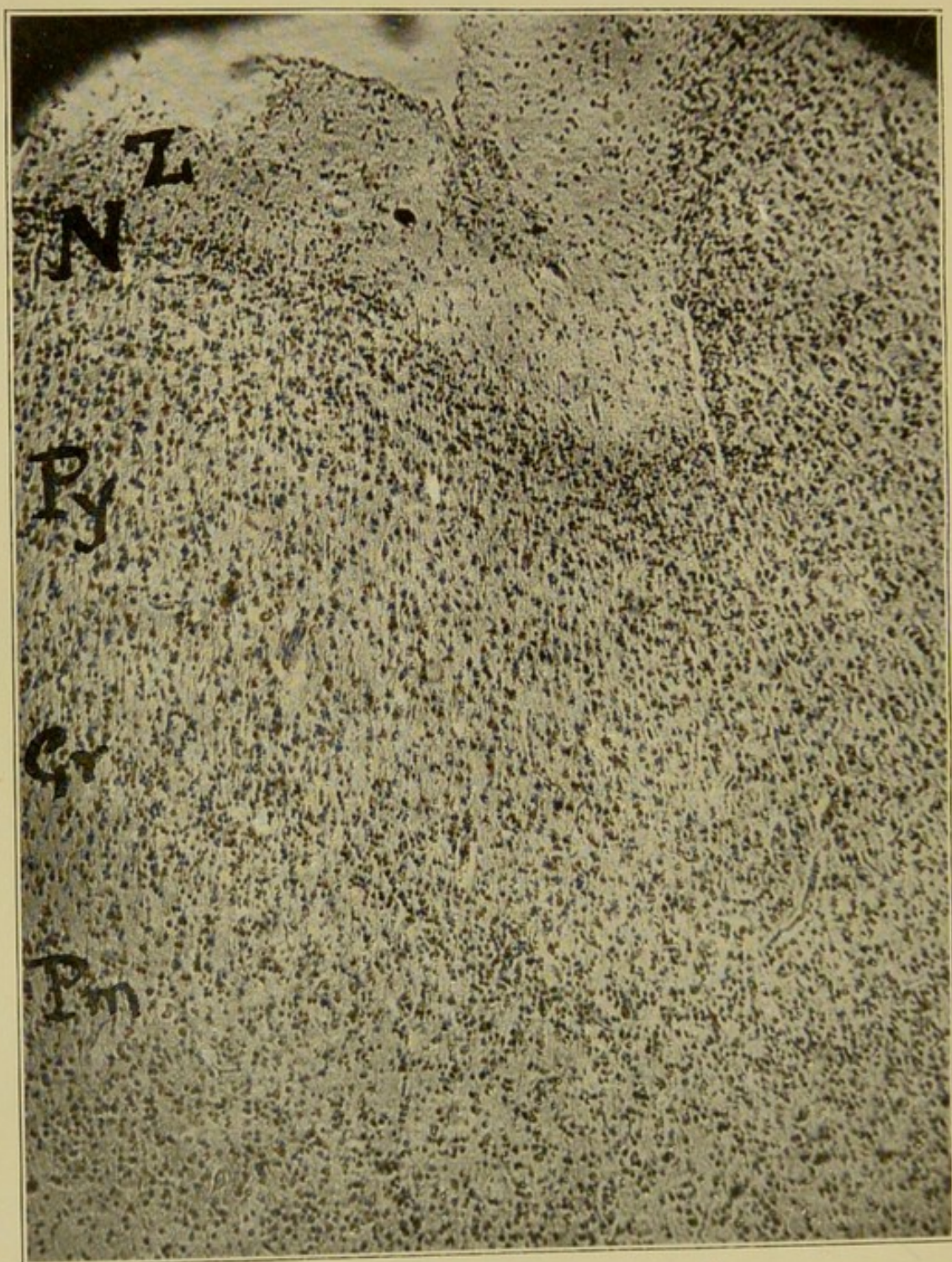


FIG. 42.

To show the lamination and arrangement of layers at birth. *Z* is the zonal layer; *N*, the postnatal layer; *Py*, the pyramidal; *Gr*, the granular; and *Pm* the polymorph or infragranular layer, much of which has been omitted. The layers curve round the upper indentation.

pyramidal cells are not then developed, and on this account there are no fibres laid down.

Great attention was paid by A. W. Campbell to the different types of cells in different convolutions. Each convolution has a separate type of cell, as if different functions were associated with variations in structure. In this manner he made a histological survey of the brain.¹ This is an extremely difficult subject, for if we take any gyrus and choose a place for examination, we find a certain arrangement of cells; half an inch one side or the other, up or down, the arrangement may be quite different, or the thickness vary. I think in addition to cutting sections across gyri, we should do so down the length of the gyrus—say for an inch in length, and then another transverse section. Here then comes the great difficulty in comparing observations even by the same experimenter. It is not enough to say this is from Broca's area, we must state exactly from what part of the area. Still worse is it to select from say the first or second frontal, or occipital, unless a photograph and diagram show the exact position, as the same convolutions vary so much in different brains. At such small distances apart, in one case a layer might be deep and in the other position close by it might be shallow. The outer flat surface of the convolution should always be chosen, as the grey matter is thicker at the angles and thinner down the sulci (Fig. 38).

While all these sources of error stand to the neurologist in the position of Scylla, not to mention that plastic condition, the personal equation, there is another insurmountable objection—our ignorance as to what is normal. This is indeed a fearful Charybdis. Campbell's work is based on the brains of "normal" lunatics, and Bolton's special measurements on normal people of the lower class. So far as I have observed no measurements, or representations of the cortex, have been taken from men of high or even moderate intellectual endowments. It is commonly said that we may get normal brains from the hospital or workhouse. These are normal to the type *Homo domesticus inferior*. What we now require information about is *Homo sapiens*.

I think we may regard geniuses and very clever men as

¹ *Histological Studies on the Localisation of Cerebral Function.*

of the class *Homo sapiens*; common, ordinary men as *Homo domesticus*—allowing a very wide average, ranging from superior to inferior, clever to stupid. Unfinished man, degenerates and lower criminals—*Homo simplex*—stand between the last group and the Aments. We know a good deal about Aments, but I want to discourse presently on the degenerate. We know a good deal about the poorer specimens of *Homo domesticus*, but very little about *Homo sapiens*. I show however the cortex of *Homo sapiens*. It is from the first temporal area.¹ He was a most distinguished man intellectually. Fig. 39 shows the same cortex magnified 80 times. Observe the great depth of his pyramidal layer (II) and especially the fine development of the small pyramidal cells which are marked "post-natal" (Fig. 40 A).

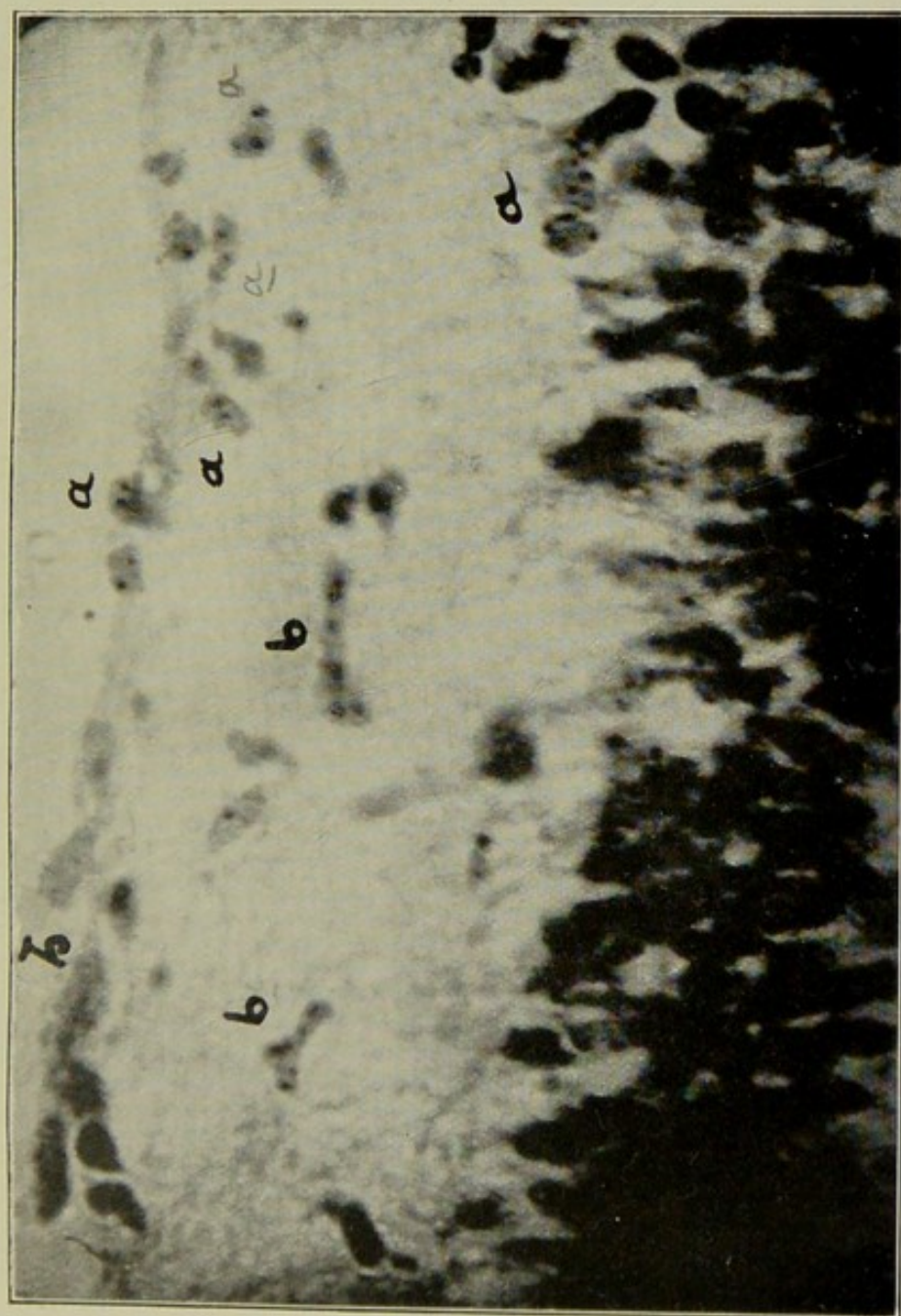
I wish now to demonstrate, and I hope to do so conclusively, that this part of the pyramidal layer, which is marked post-natal, represents the higher intellectual part of man, perhaps his personality and certainly his educatability. The evidence is as weighty and of a similar character to that which has led to the opinion that the pyramidal layer is associated with the higher mental or psychic processes. It tends almost to point to the smaller pyramidal cells as being of greater importance than those cells which are formed and visible at birth, the prenatal. Of what value is it to be a man unless an intelligent man.

As a matter of demonstration in opening up this important subject I show (Fig. 40) six microphotographs of the Post-natal Layer from different adults and different areas, selected at random. They are to show, or prove, that the proper normal architecture of the cortex demands perfectly shaped cells right up to the zonal layer.

A is the first temporal, the sensori-auditory area, from the above-mentioned intelligent normal man. Nearly the whole of this is post-natal; about the lowest $\frac{1}{5}$ is pre-natal.

B is the same area from a general paralytic. The upper post-natal area, attacked by the disease, has grown shallow, but the remaining cells are very good. It shows the clear zonal layer above (Z). About $\frac{1}{5}$ only of the upper cells is post-natal and the lower layers are prenatal.

¹ Chap. xi. p. 229. Fig. 26.



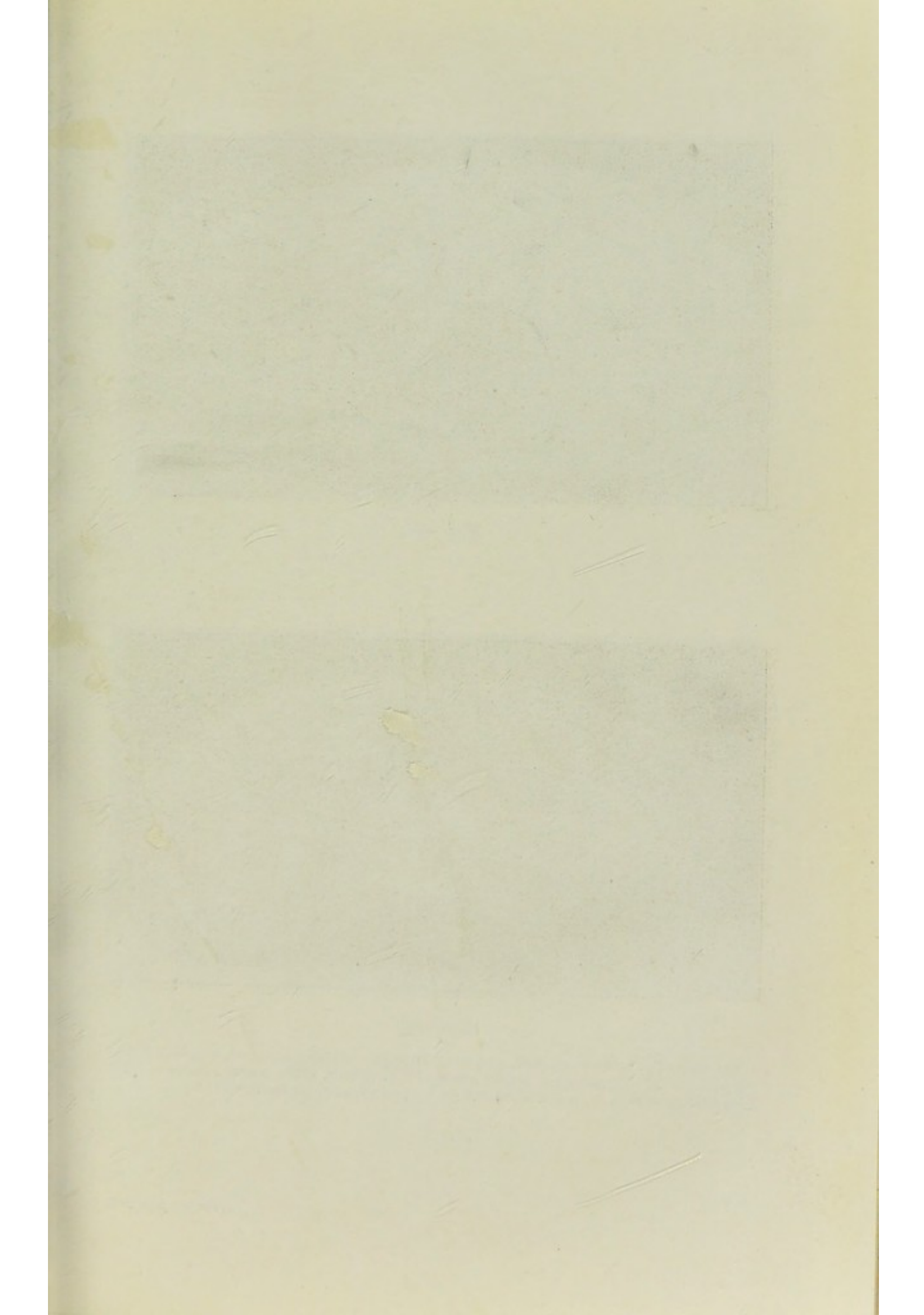
Zonal
layer, I.

Neuro-
blasts.

FIG. 43.

The fetal cortex at the fourth month, under an oil immersion lens. It demonstrates cells *a* with double nuclei, perhaps in process of division. It also shows mesoblastic cells, *b*, elongating into capillary blood vessels. To demonstrate karyokinesis different fixation is necessary. See page 267.





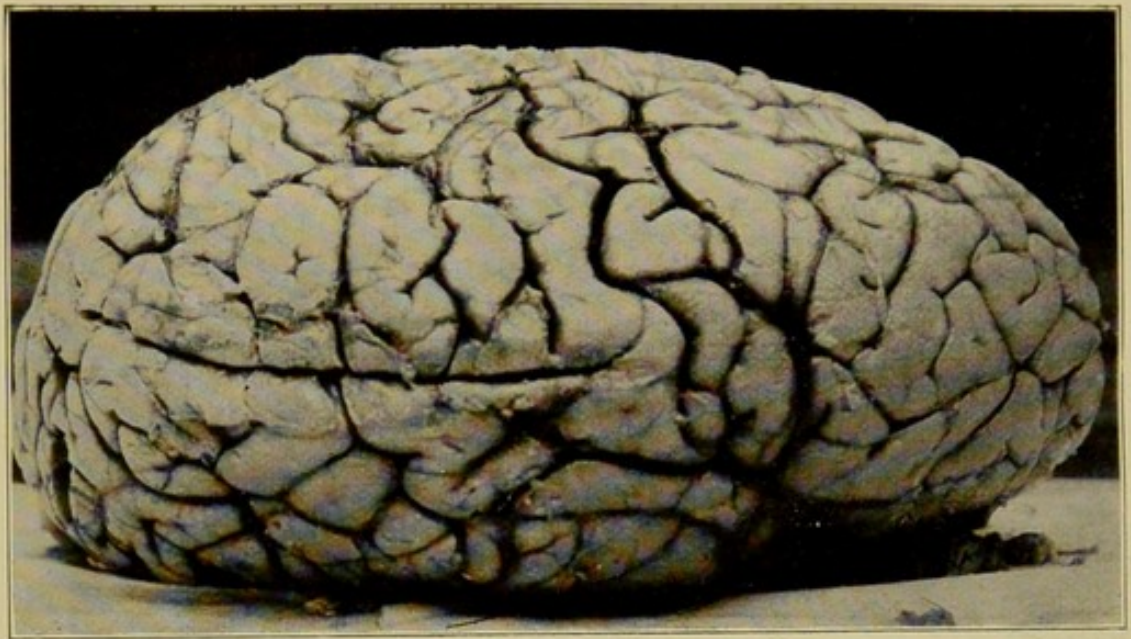


FIG. 44A.

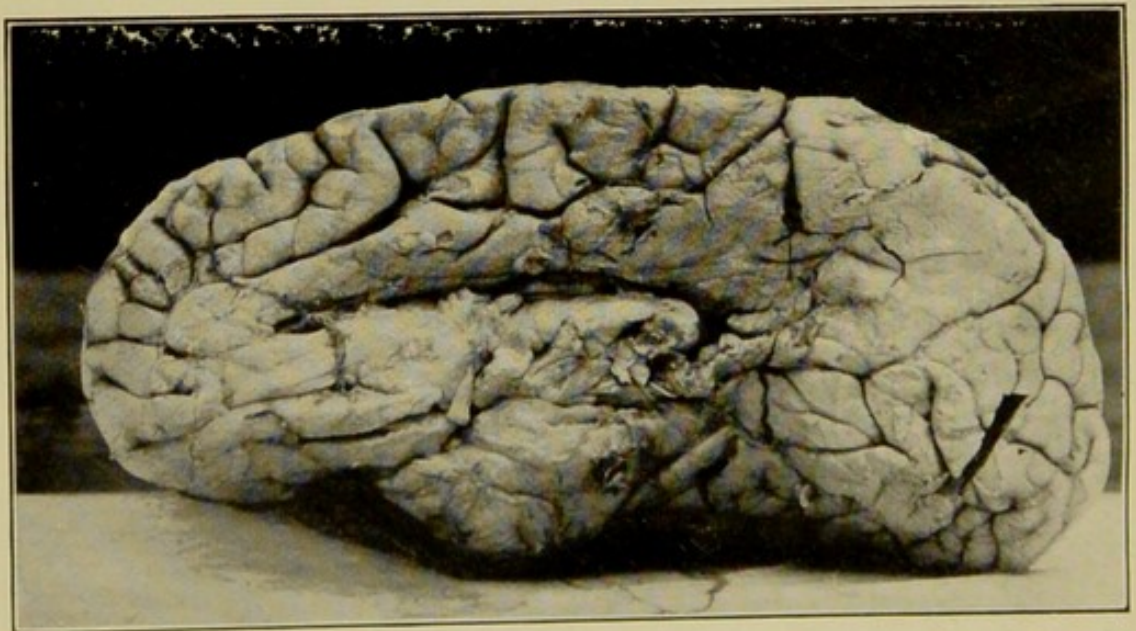


FIG. 44B.

The brain of a supra-normal child, aged five. It presents a highly developed, and still developing pattern. The appearance is slightly affected by meningitis, which caused adhesions. (The horizontal mark in A is an accidental incision.) (See page 269 for description.)



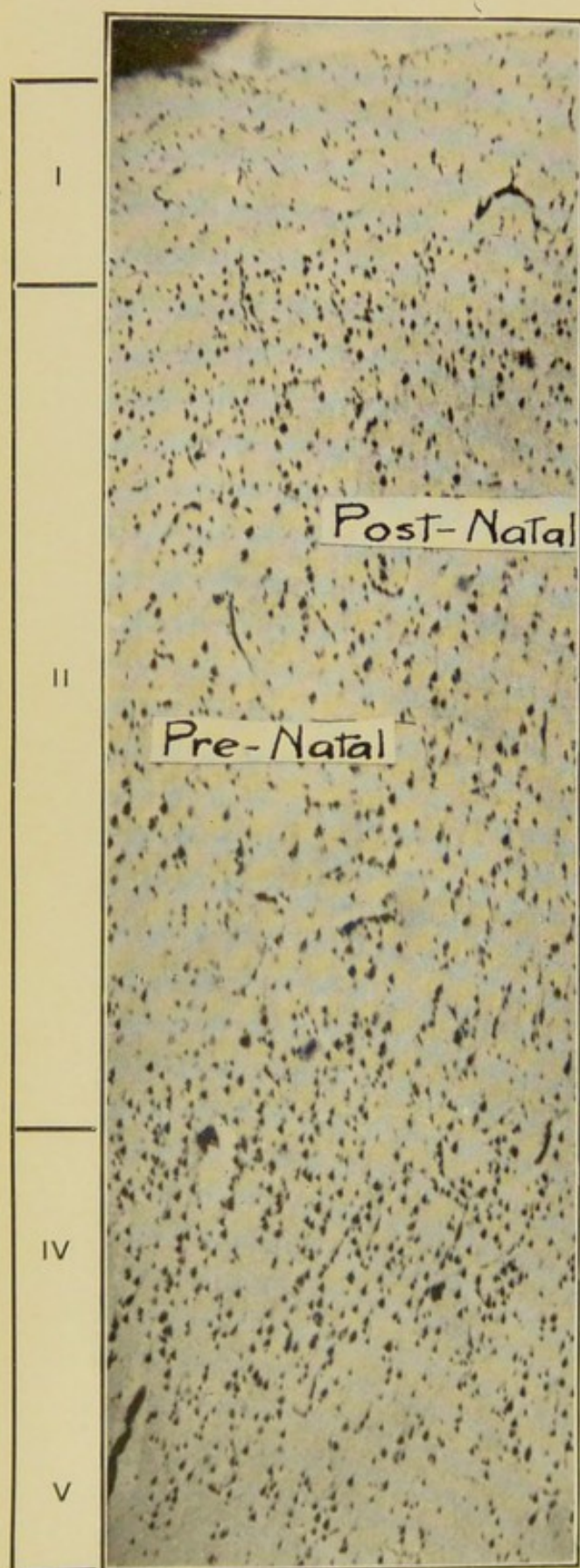


FIG. 45A.

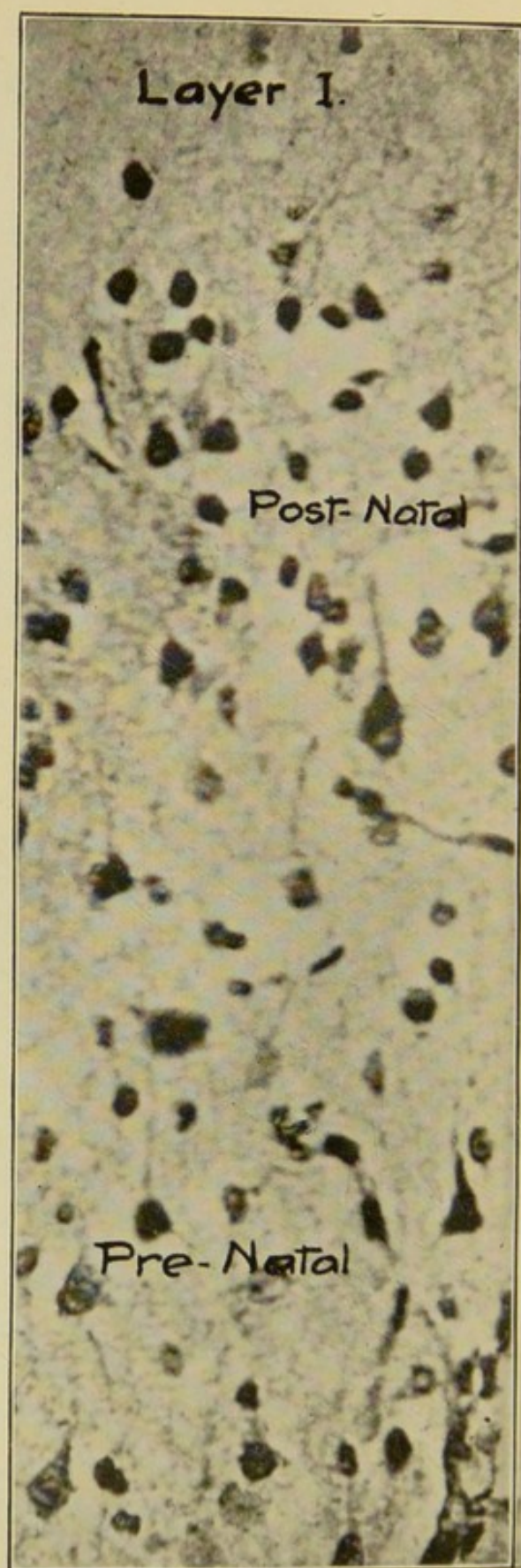


FIG. 45B.

This is the motor cortex of the child of five. Layers I and II are of full depth, twice as good as that of the degenerate (Fig. 49). Observe the almost perfect formation of the postnatal cells in B, as well as the depth of the layer in A. Half of layer V could not be included. Layer III is practically absent in the motor regions.

C is Broca's area from a "normal" lunatic, a female.

The upper half represents the post-natal stratum and is poor, but the cells are good individually.

D is from the same area in an alcoholic female dement.

The post-natal layer, which occupies the upper third or fourth, has nearly disappeared. We might almost say burnt out or chemically destroyed by drink.

E is the calcarine area from a "normal" female lunatic.

The post-natal cells are good.

F is the visuo-psychic area from the same patient, and her post-natal cells are good. In these last two photographs the post-natal stratum, being undamaged, occupies $\frac{2}{3}$ of the upper part of the pictures.

To prove this great problem in relation to post-natal development, it is essential to go step by step, and not to proceed without acceptance of past data for future opinion to rest upon. I may fairly presume that the pyramidal layer is the physical basis of psychic processes, after all that Bolton has written on Amentia and Dementia,¹ and Watson on the evolution of the Cortex in mammals,² a short résumé by H. Vogt³ confirming the general idea, and the work of Ariens Kappers⁴ on the subject of the Cortex in imbeciles and idiots.

Brodman and Bolton have both demonstrated the wealth of neuroblasts or nerve nuclei in the foetal cortex. They have each independently followed up the development into cell layers.

H. Vogt emphasises the fact that during the intra-uterine period the growth is chiefly infra-granular, but after birth it is the supra-granular layer which develops. He confirms the usual belief that a poverty of cells in the foetus, or of the pyramidal elements, or an excess of nuclei, means idiocy. Non-development of the deeper layers, which support the upper layers, also indicates idiocy. Vogt appears to attach more importance to the relative than the absolute depth of the pyramidal layer. This dictum is of service to me,

¹ *Archives of Neurology*, 1907.

² *Archives of Neurology*, 1907.

³ *Wien. Med. Wochensch.*, 1908, XXXIV, p. 1886.

⁴ *Archiv. Neurol.*, 1908. *Folia Neurol.*, 1908.

for in the cortex of the degenerate I found the whole cortex was about $\frac{2}{3}$ of the normal depth, but the relative depth of the pyramidal cortex was correct.

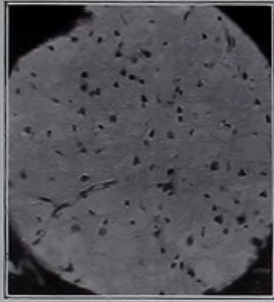
In addition to an actual absence of cells, the idiot cortex contains too many neuroblasts, and the nerve fibres are shorter than the average. In some cases, however, an arrest has occurred in the growth of the cortex. Where this has happened the cortex is normal in the deeper parts, which were laid down previous to the arrest. This is an important observation, for it throws a great light upon the whole problem of degeneracy. It emphasises its negative, rather than its positive character. Some consider the degenerates are imbeciles. We all freely admit that they tend downwards, towards amentia, rather than upwards. It resolves itself, however, into a question of what an imbecile is, and what distinction we make between an imbecile who is recognised as insane and a degenerate who may be sane or insane. I shall endeavour presently to define the two positions.

Vogt points out that in the imbecile or idiot we may have two conditions—

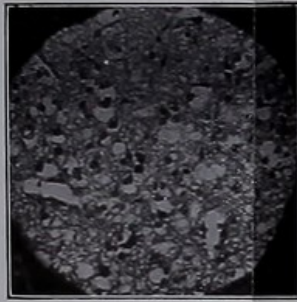
Arrest in the Phylogenesis, where the type *Homo* does not evolve, where the brain pattern falls to that of the ape or below, with a corresponding arrest in cell development. Or there may be an arrest of Ontogenesis, whereby the development, which is on the high road to normality, is stopped at some stage of growth. Both of these may be intra-uterine and congenital. The former alone can be inherited or germinal as a result of weak parental stock.

In the case of the degenerate which I examined, I think the conditions in utero were normal, for the cortex appears normal up to the date of birth. He was not materially damaged either by his alcoholic inheritance or by congenital conditions. The injury to his brain seems to me to have occurred after birth, and to have shown itself in an arrested development of the subpial neuroblasts, or as I venture to call them the post-natal pyramidal layers. The cause is obscure. It may be that the parental alcoholism deprived him of the power or impetus to develop when a child.

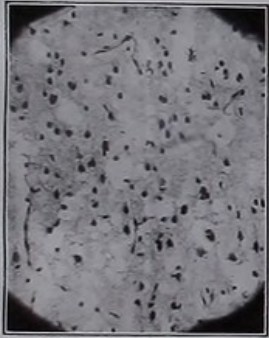
If future cases confirm this idea, we have at once a workable basis for separating the imbecile from the degenerate.



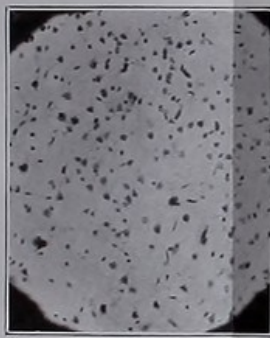
A.



B.



C.



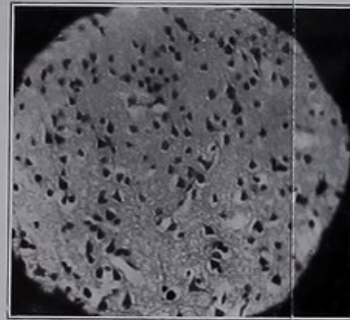
D.



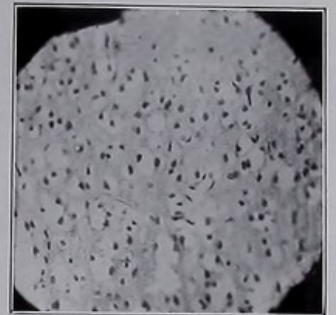
E.



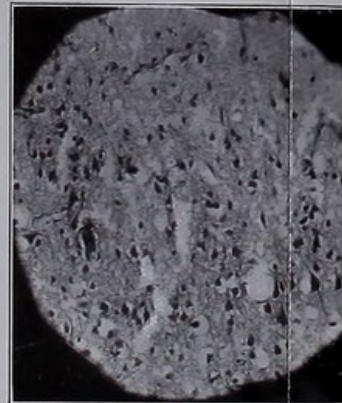
F.



G.



H.



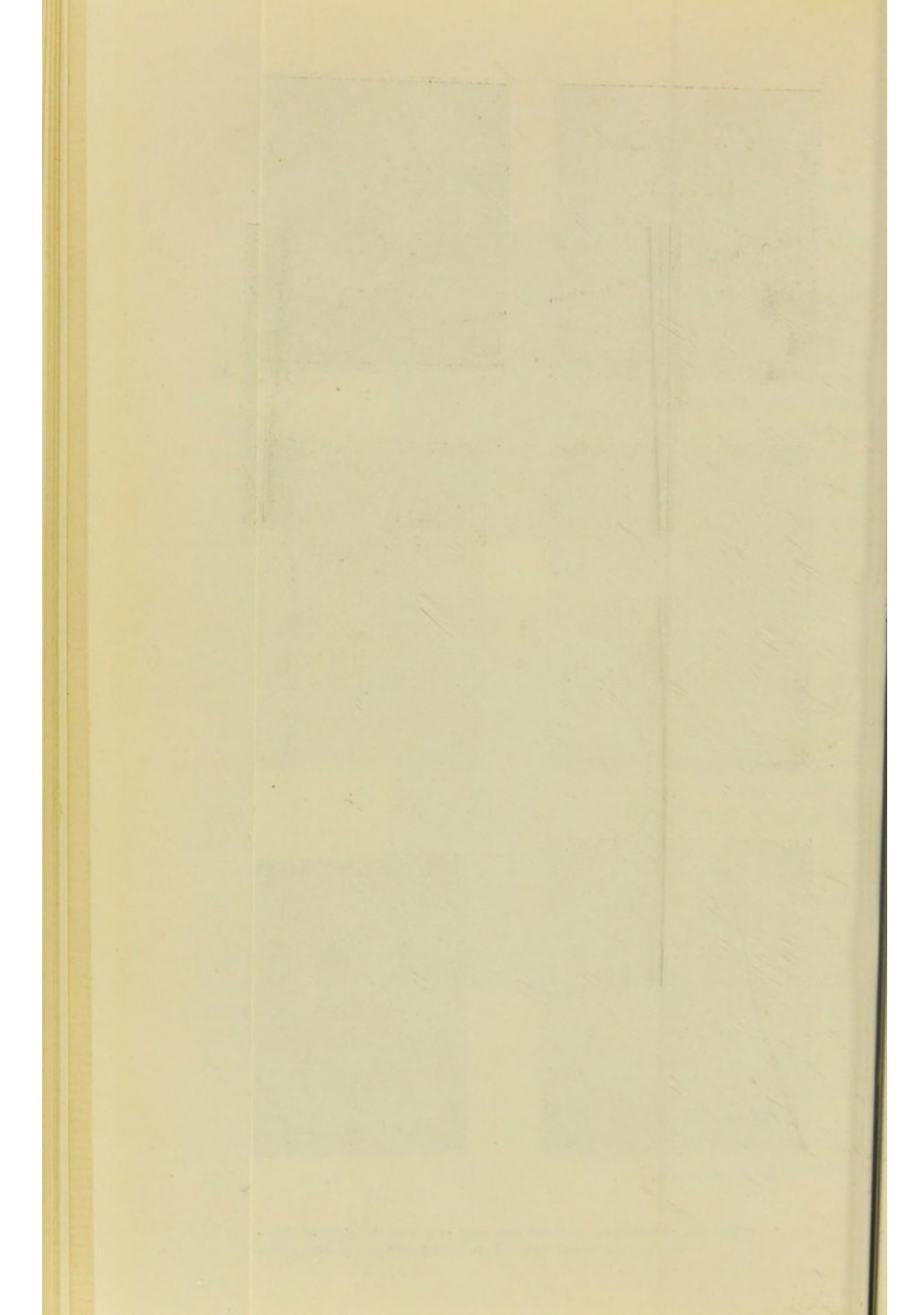
I.



K.

FIG. 46.

These ten photographs show the postnatal cortex in the child of five, and are explained in the text. Some of them, as B and D, are damaged by tubercular invasion and infiltrated with round cells. Expanded lymph spaces also appear where there had been patches of oedema. The brain was fixed in 10 per cent. formalin. (Described on page 270.)
(To face page 264,





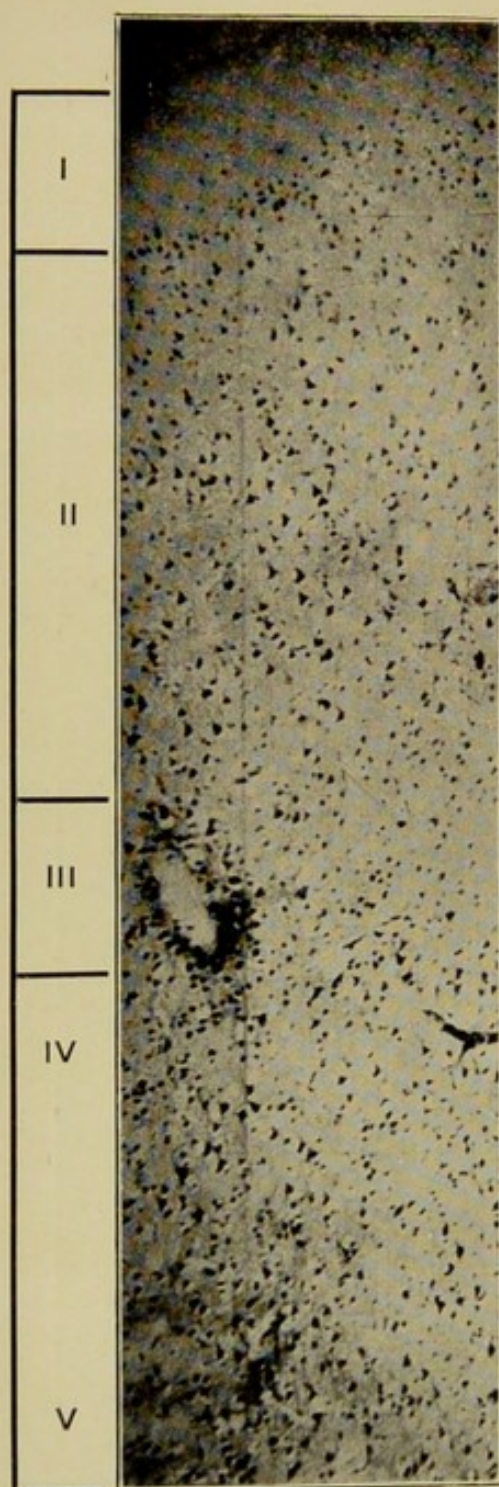


FIG. 47A.

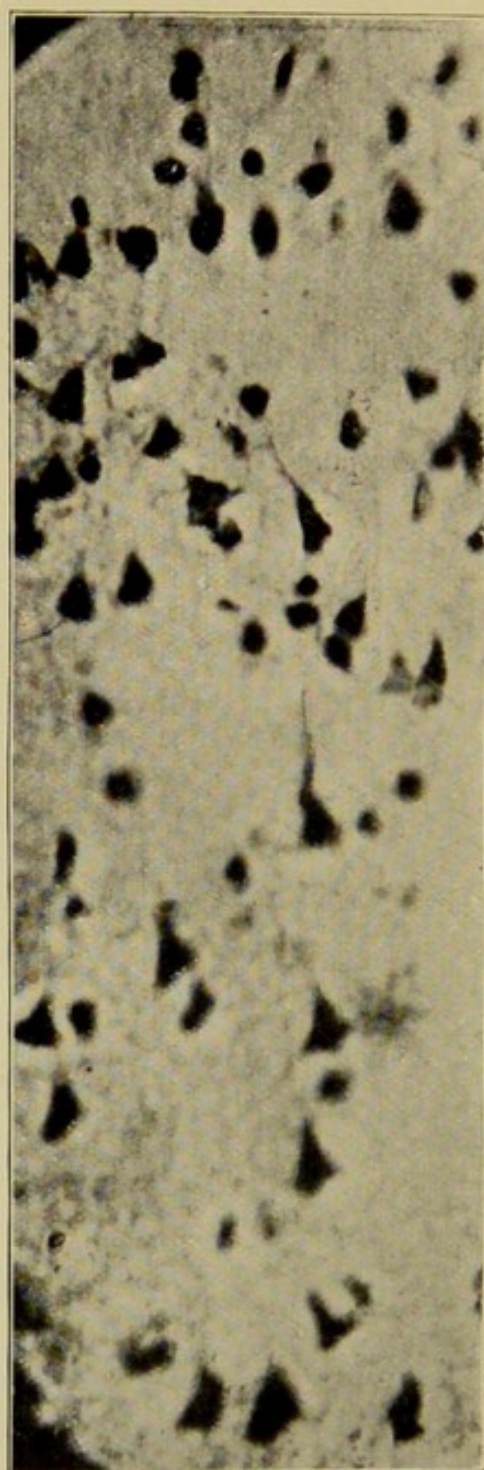


FIG. 47B.

The cortex of the orang is introduced to show the finish of the upper part of the pyramidal layer (B). A is more highly magnified ($\times 80$). It is from the anterior part of the brain. We do not yet know how much of the cortex is finished at birth, among the lower animals, and how much unfinished.

The former is prenatal, the latter the product of post-natal conditions. Yet I know this is not a perfect definition, because some imbeciles are said to have an arrested development of the post-natal layer. I have not, however, been able to trace records of such. To define it more accurately, an imbecile may be a prenatal or a post-natal product—born or made; the degenerate however is post-natal—he is made. But the two classes fuse into each other.

The first proposition I have to make must be accorded after the dicta of the authorities I have just quoted. It is this—

(1) At birth the foetal cortex attains a certain, somewhat advanced, condition of development; but the upper stratum of the pyramidal layer is undeveloped and consists of rows of cell nuclei or neuroblasts. This upper stratum is called a subpial layer, but this is an incorrect term, for the zonal or tangential layer lies between it and the pia mater. It is therefore more accurate to make two subdivisions of the pyramidal layer. We have been already accustomed to divide the pyramidal layer, in every part of the cortex, into at least three portions—

(a) The larger pyramidal cells in the deeper part, occupying according to Bolton half the adult thickness, though it appears to me rather more than that. These are necessarily more ancient in Time than the aforesaid neuroblasts.

(b) The medium sized cells.

(c) Above these the small cells, some of which are pyramidal, some are stellate. These subdivisions may be recognised in the different photographs of the cortex.

As the neuroblast layer is more evident where the magnification is 300 than 50, I show four microphotographs to prove this (Fig. 41).

A is from the second frontal convolution. Layer I, the tangential layer appears above, then the nuclei of the post-natal layer, *N*; below are the well-formed prenatal pyramidal cells, *P*. This is a motor area.

B is of very special interest. It is the prefrontal cortex, the last to develop. The post-natal nuclei (*N*) above are quite distinct, but the prenatal cells instead of being

well-shaped pyramids as in the other areas shown, consist almost entirely of round nuclei. They will not be required for some time, and their formation or completion is therefore retarded.

C is from the first frontal convolution about midway. Layer I does not appear in this.

D is from the superior parietal area, which is probably more or less connected with the post-central sensory area.

In both C and D the foetal neuroblasts are well marked.

None of these sub-layers of the pyramidal cortex can be separated definitely, like the granular can be from the supra or infra-granular layers. They fuse into each other. In the average adult cortex, perhaps in the normal cortex, the cells of prenatal development occupy $\frac{1}{2}$ to $\frac{2}{3}$ of the lower part of the pyramidal layer; while the smaller pyramidal cells, those of post-natal development, seem to occupy about $\frac{1}{3}$ or more of the upper part of this stratum. Beyond this to be dogmatic or assertive exposes the flank to a destructive attack. We must in neurology generalise considerably before we specialise.

It being recognised that at birth the upper stratum of the pyramidal layer is not developed, it follows that it only can develop after the child is born. No one can dispute this; but it opens a debatable point, when does this post-natal layer develop? Some think that it develops just at the same rate as the lower parts of the cortex. Is this possible?

But this is only half of the picture. It has been shown that the pyramidal layer at birth is only half of the adult depth. This is easily perceived by comparing the different photographs in this book. Fig. 42 is a very good representation of the foetal cortex at time of birth. The layers are very distinct.

The remaining half depth could not be made up by the post-natal layer as we see it. There are too few neuroblasts to build up half or even $\frac{1}{3}$ of the adult cortex. How then is this deficiency to be made up? Our present staining methods as applied in neurology do not demonstrate the same nuclear changes, which are found to occur in the lower animals and plants. The process of nuclear karyokinesis must always be going on in the foetus and in the growing child. The rich-

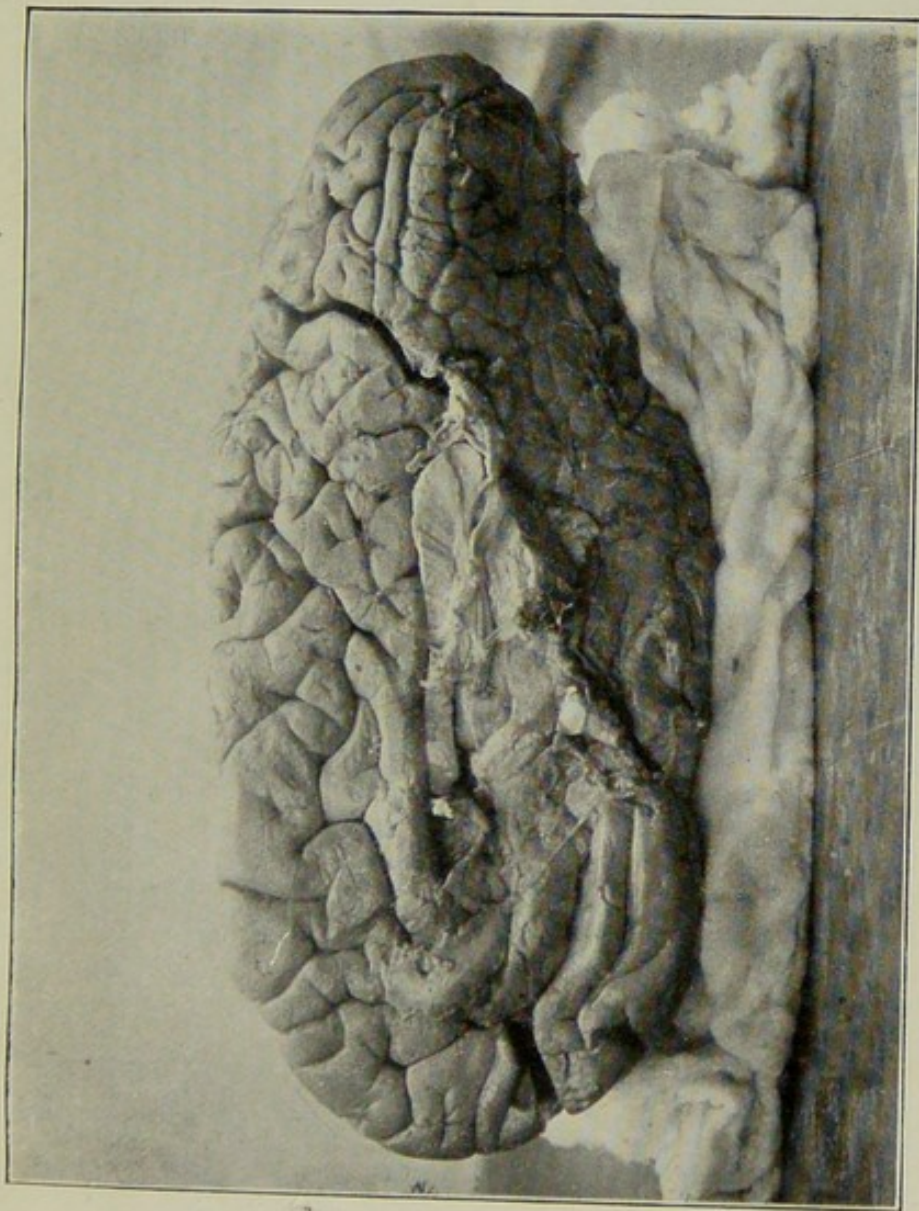
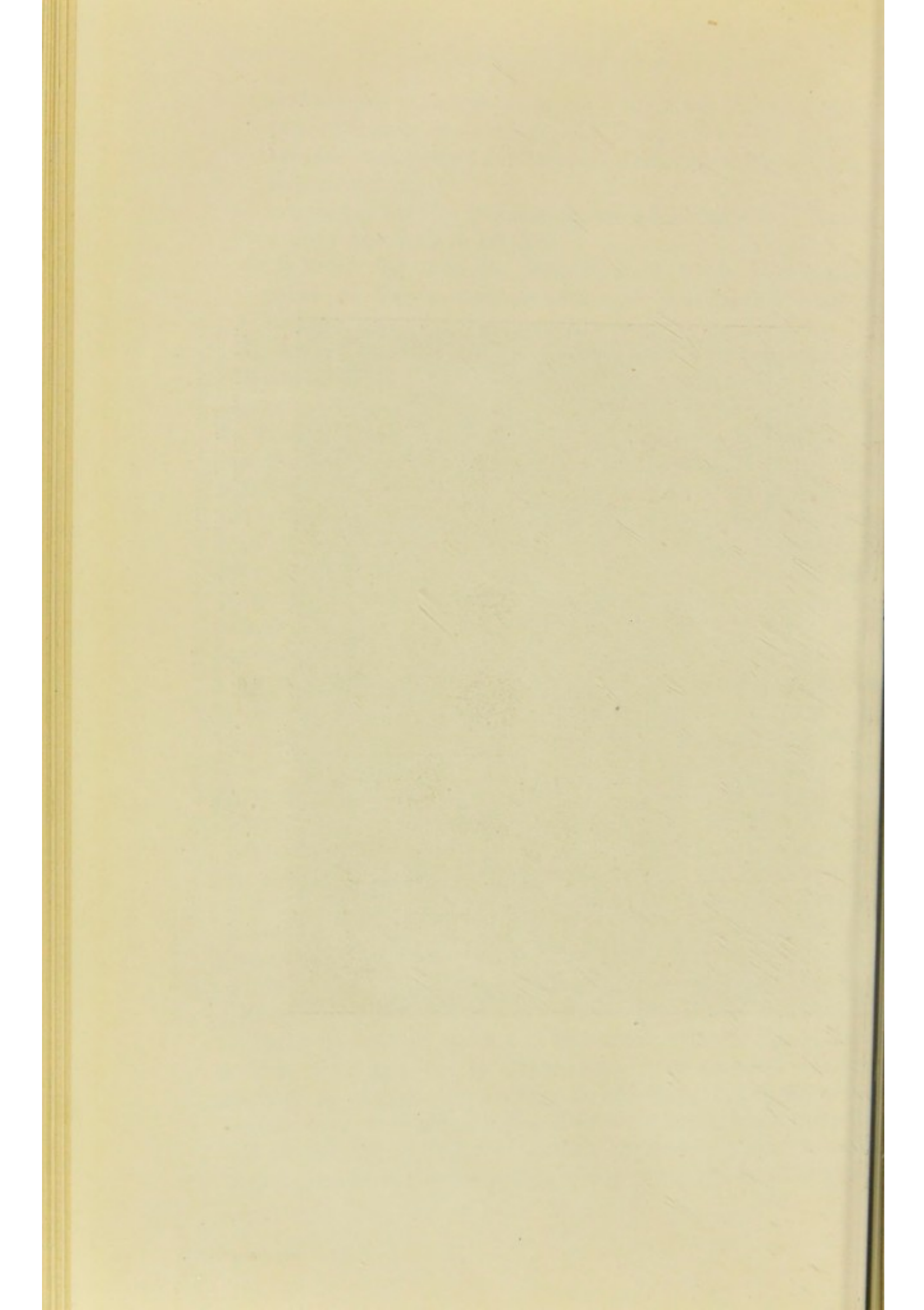


FIG. 48.

This is the internal surface of the murderer's brain. The pattern is good, but the occipital portion is shrunken. The brain was fully photographed and shown in my former work. While the calcarine or visuo-sensory area is almost normal, his visuo-psychic (occipital) architecture was exceedingly bad. (See page 272.)



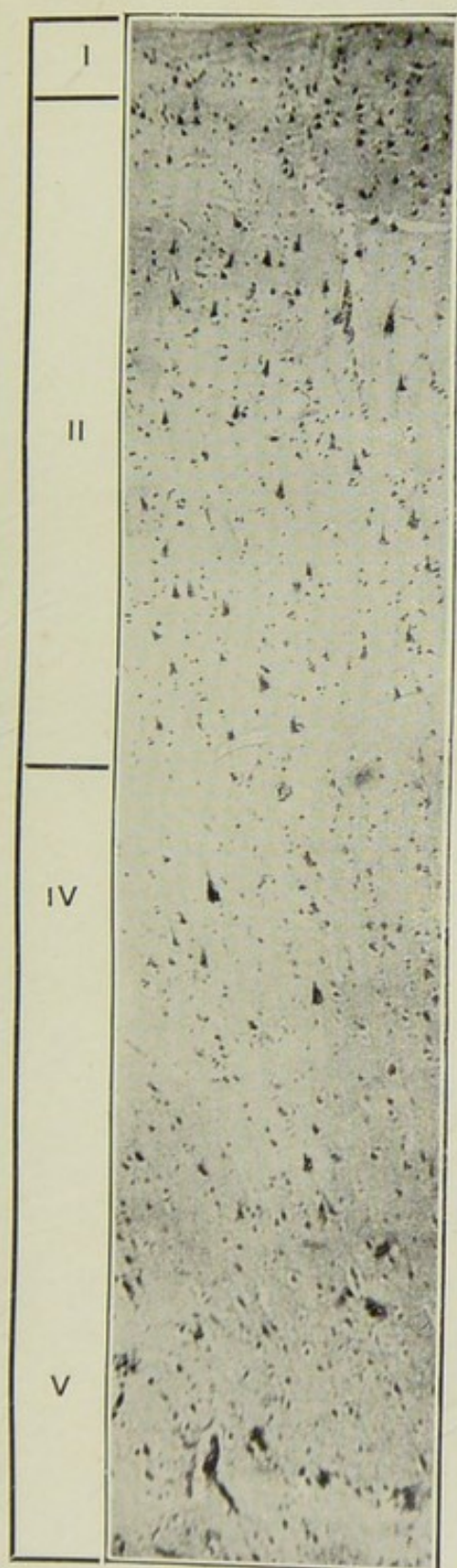


FIG. 49A.

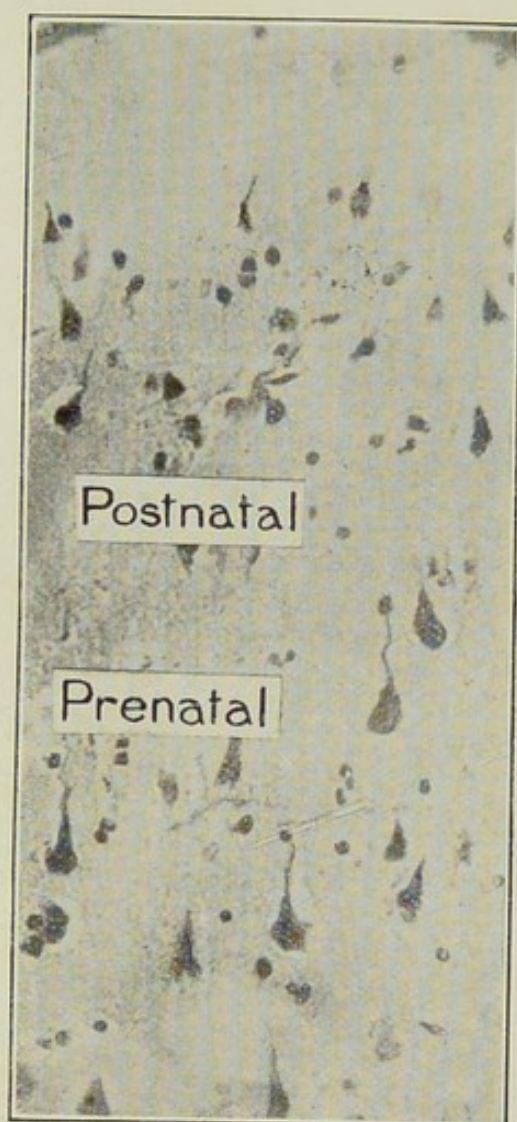
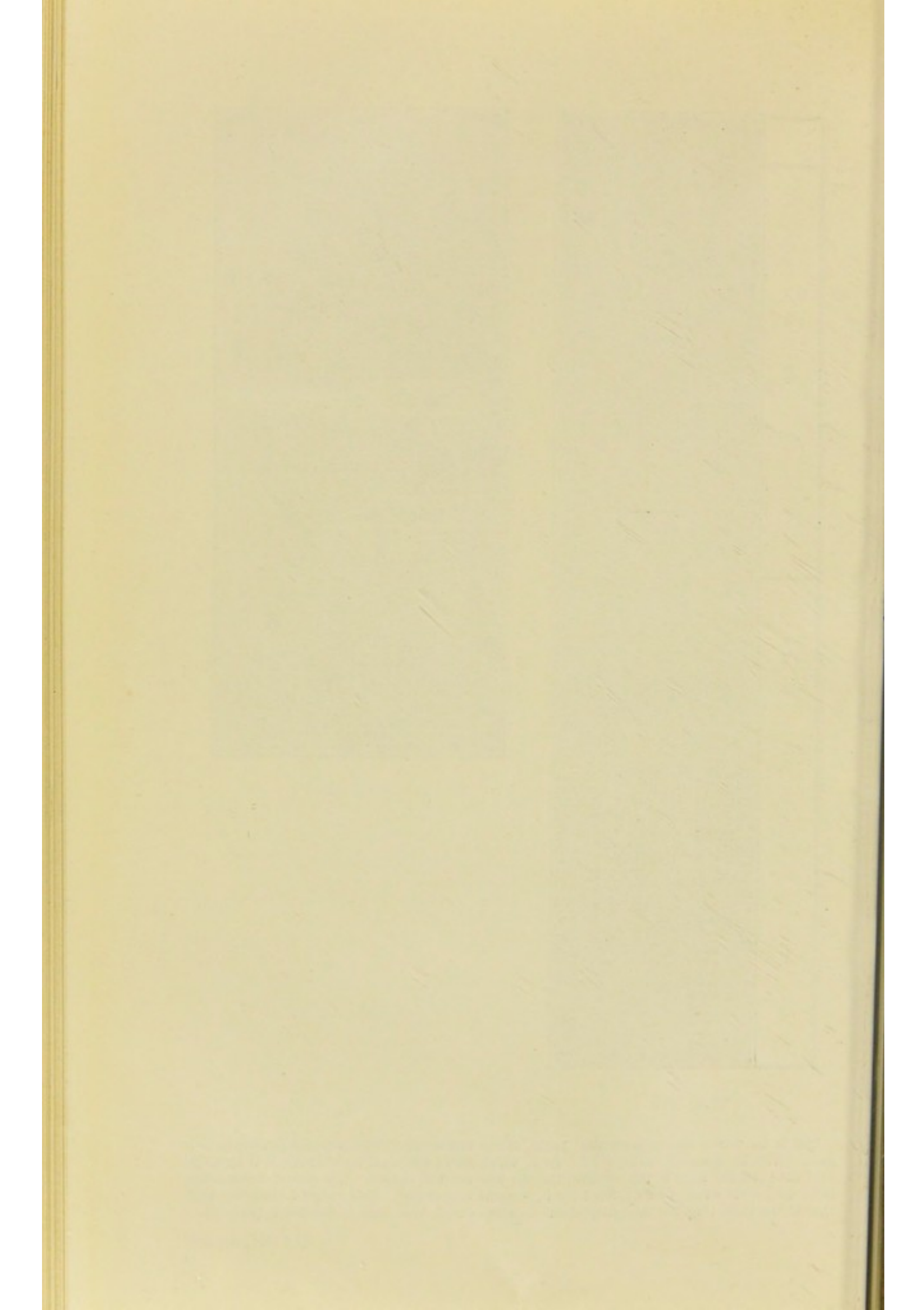
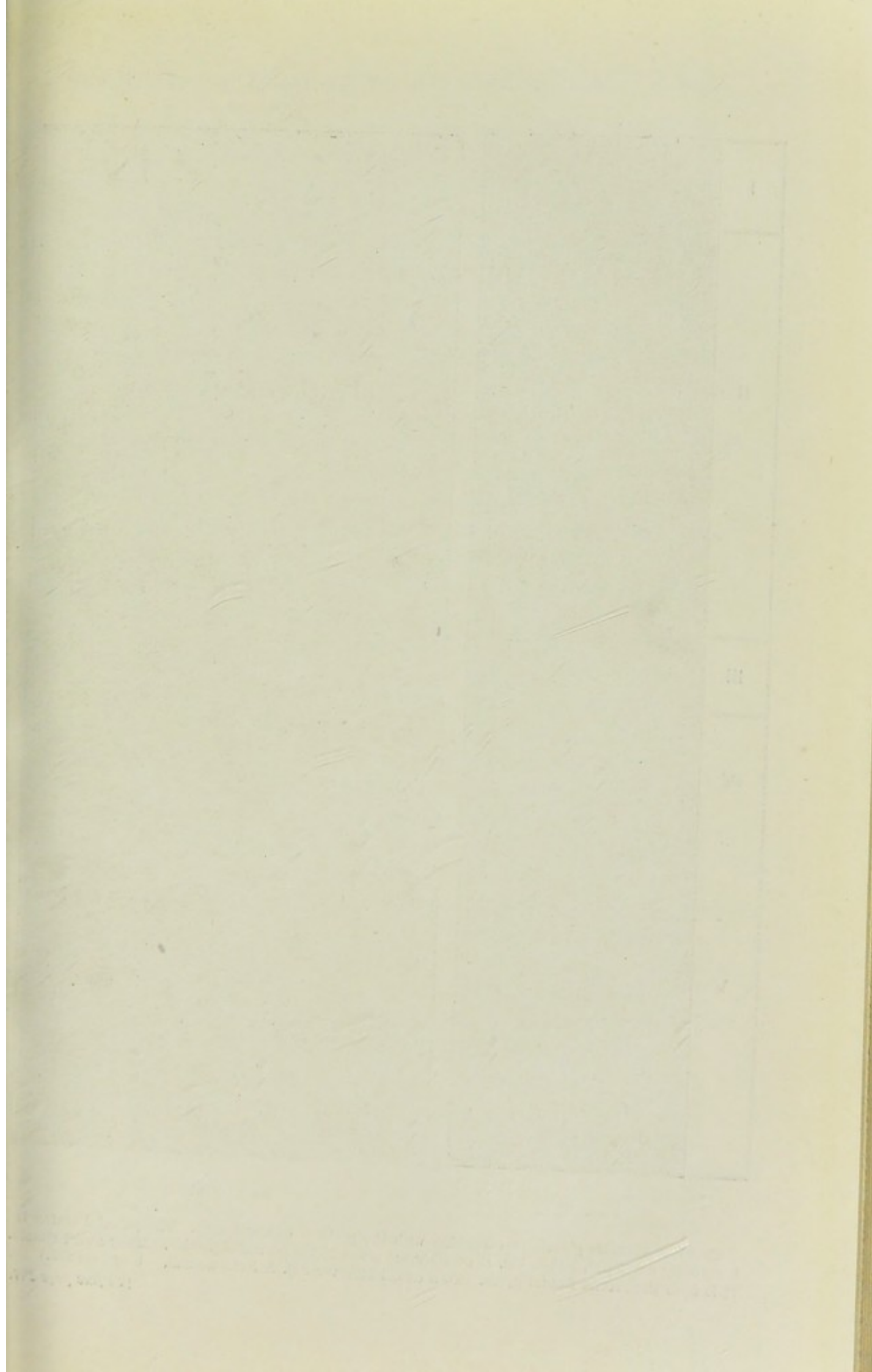


FIG. 49B.

This is the motor cortex, precentral gyrus, of the degenerate. The prenatal development is good. Note the Betz cells in layer IV. In B, which shows the zonal layer above, it is apparent that the postnatal layer is very shallow, but the cells are well shaped. The sensori-motor areas, being ancient in Time, would suffer least in physical degeneracy. This cortex is shallower than that of the child (Fig. 45), and only about one-fifth deeper than that of the foetus (Fig. 37).





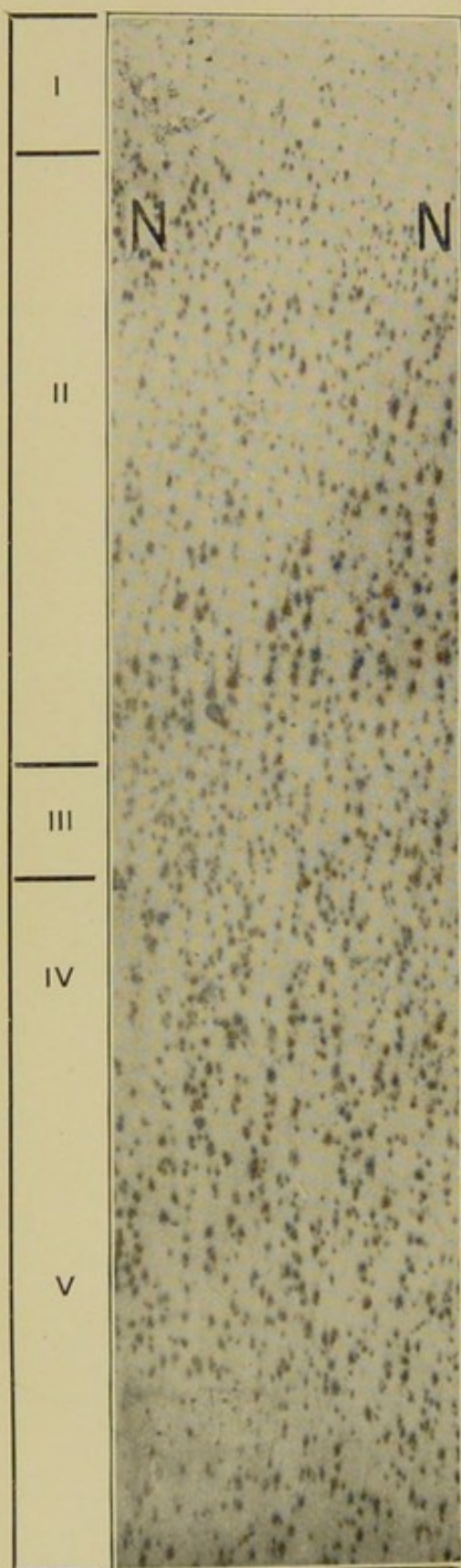


FIG. 50A.

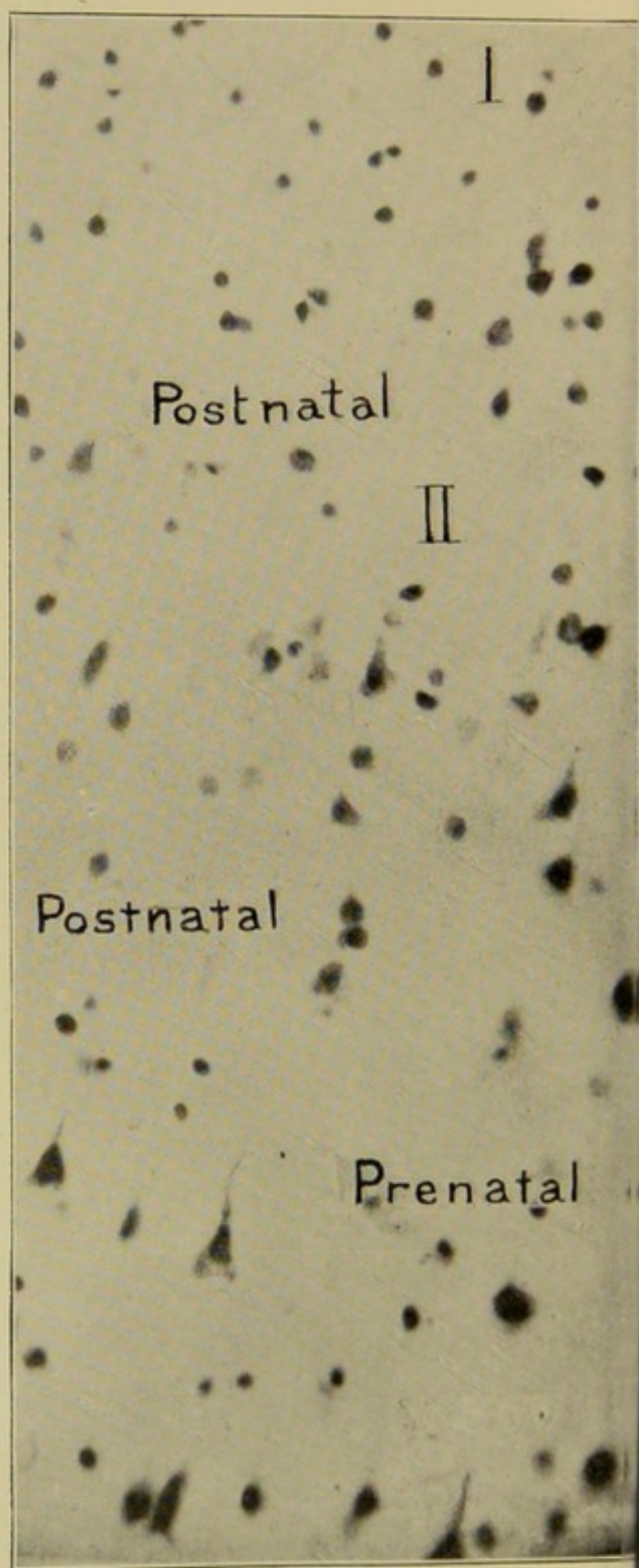


FIG. 50B.

This is a valuable picture in connexion with the problem of degeneracy. The prenatal cortex is beautifully developed, but in Fig. B we see great arrest in the postnatal portion. Many nuclei remain. It is from the second frontal gyrus. To a casual observer Fig. A looks normal. (See page 272.)

[To face page 268]

ness in the layers of neuroblasts in the foetal brain is entirely due to this continued and repeated division of nuclei. It cannot occur when once the nerve cell is built. One nerve cell cannot divide and make two, but, though it has not been demonstrated, one neuroblast must divide to make two, and continue to do so until the architectural pattern has been achieved.

To properly understand brain development we must bear these facts in mind. Here and there all through the prenatal layers we see neuroblasts. During growth they undoubtedly divide and multiply, enriching all the cell layers.

Fig. 43 is a magnification with an oil immersion lens of the neuroblasts at the fourth month (see also Fig. 35). The cells marked *a* show two nuclei in each, as if cell division were in process. The cells marked *b* are connective tissue or mesoblastic cells, elongating into capillary vessels. Improved fixing methods would probably demonstrate karyokinesis or the process of cell growth and division.

The post-natal layer of neuroblasts must do the same. This is a telling argument in favour of this miscalled subpial layer being placed there for post-natal development. The neuroblasts must continue multiplying by division, till there are as many neuroblasts as are required for the full number of nerve cells. As the brain cells form and enclose the neuroblasts, so does this process of karyokinesis gradually cease.

We might try to place these facts in absurd relief, by asking why should not the neuroblasts continue growing and carry the intellectual powers to an immeasurable height? The answer to this is that when the limit of the type is reached, growth ceases. If the limit be exceeded we may get a sport?

We may compare the brain cortex to a magnificent and perfect architectural design. If all goes well the building is completed, but if the builder is starved in finance, which is the essence of the thing, or in material, which is the source of supply, then an inferior incomplete edifice is the result. And so with the brain. If it has time, neuroblast adds neuroblast, and the result is perfect. But if its vitality, its power to grow, or the wherewith be held back, an incomplete cortex is the result, and that is the degenerate. Degeneracy, then, is a question of degree.

At birth the brain weighs about 1 lb., and if development continued at the same rate, these neuroblasts would be perfectly developed, at all events in six months, if not by the third month of the child's life. This appears to be Bolton's opinion,¹ for he says that the visuo-sensory pyramidal layer is complete at the age of one month; and that the visuo-psychic pyramidal layer is "less than $\frac{3}{4}$ of the adult depth at the age of one month, and but $\frac{5}{8}$ at the age of three months."

Bolton shows that the chief development of the cortex after birth consists in doubling the depth of the pyramidal layer. The neuroglia has to increase, cell bodies have to be formed round the neuroblasts, dendrons and axons have to be laid down. This requires increased space and size, and is accompanied by increase of weight. At the age of 5 the brain is doubled, weighing on the average 30 oz., while by 20 the brain is the full weight, 46 to 50 oz. It would seem as if Nature laid down structure well in advance of requirement, which is exactly what any good, prudent architect should do. Would it be possible for this post-natal development of neuroblasts and fibres to come off so rapidly as six or even twelve months, without almost doubling the weight of the brain? It is highly desirable that we should have a series of sections of the infant's cortex for reference, at various ages, as at three, six, nine and twelve months, and every year up to the age of 10.

(2) *A priori* we must be free to regard the post-natal development of these neuroblasts as a slow process, taking perhaps years rather than months. It is the most important epoch of human life, for if an arrest occur through unfavourable environment, it means more or less imbecility, degeneracy, or feeble-mindedness.

If this opinion be correct we are justified as a matter of convenient nomenclature in speaking of the prenatal and post-natal cortex; or the prenatal pyramidal layer and the post-natal, quite apart from the fact that part of the pyramidal layer must be of post-natal development.

I had the opportunity of confirming this opinion by an examination of the cortex of a very intelligent child, 5 years of age. He was a supra intelligent boy, with a good memory,

¹ "Amentia and Dementia," *loc. cit.*, *Jour. Ment. Sci.*, p. 14.

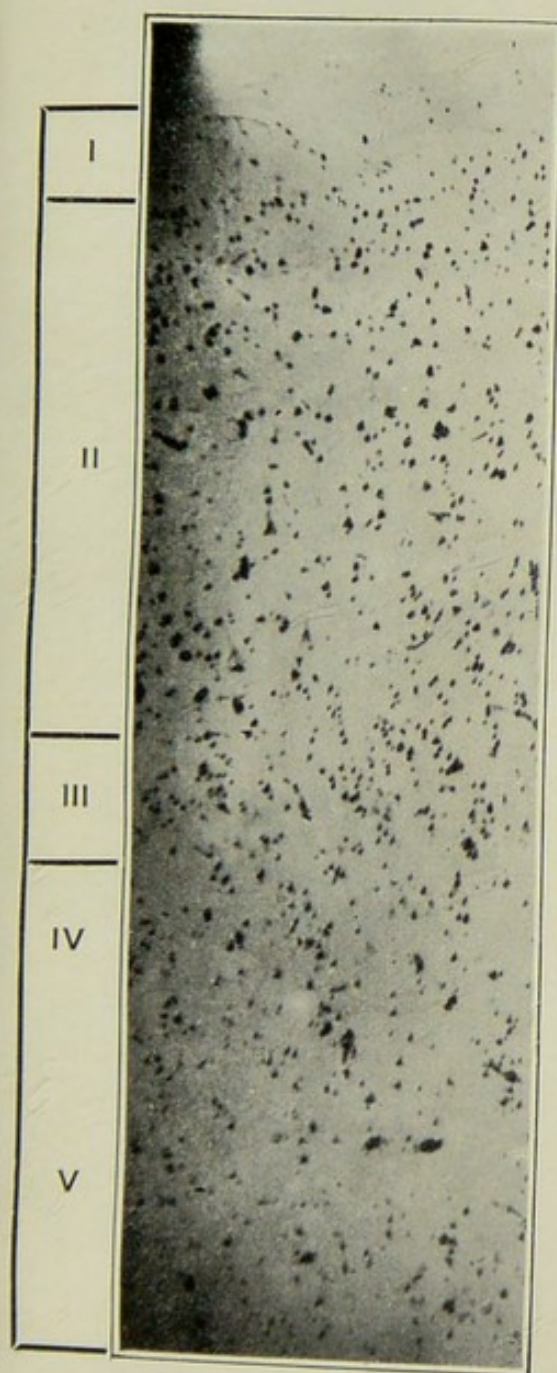


FIG. 51A.

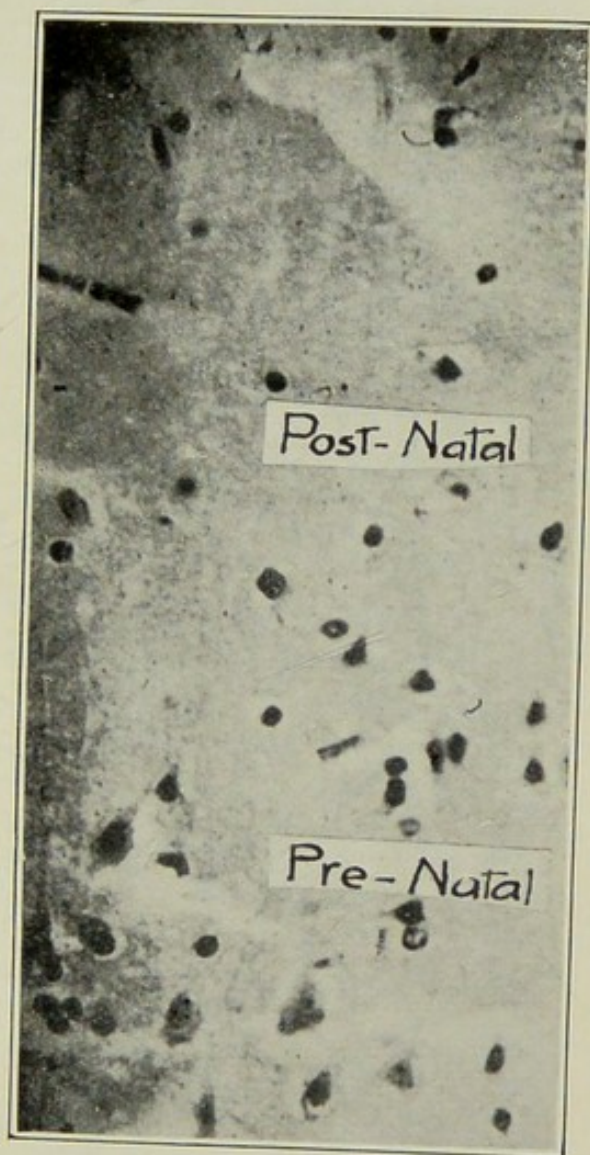


FIG. 51B.

This is from the post central cortex near the vertex. It is very shallow, and a poor postnatal development (B). Criminals are said to be very deficient in the sense of touch. The section is oblique, and only shown to illustrate the postnatal layer.

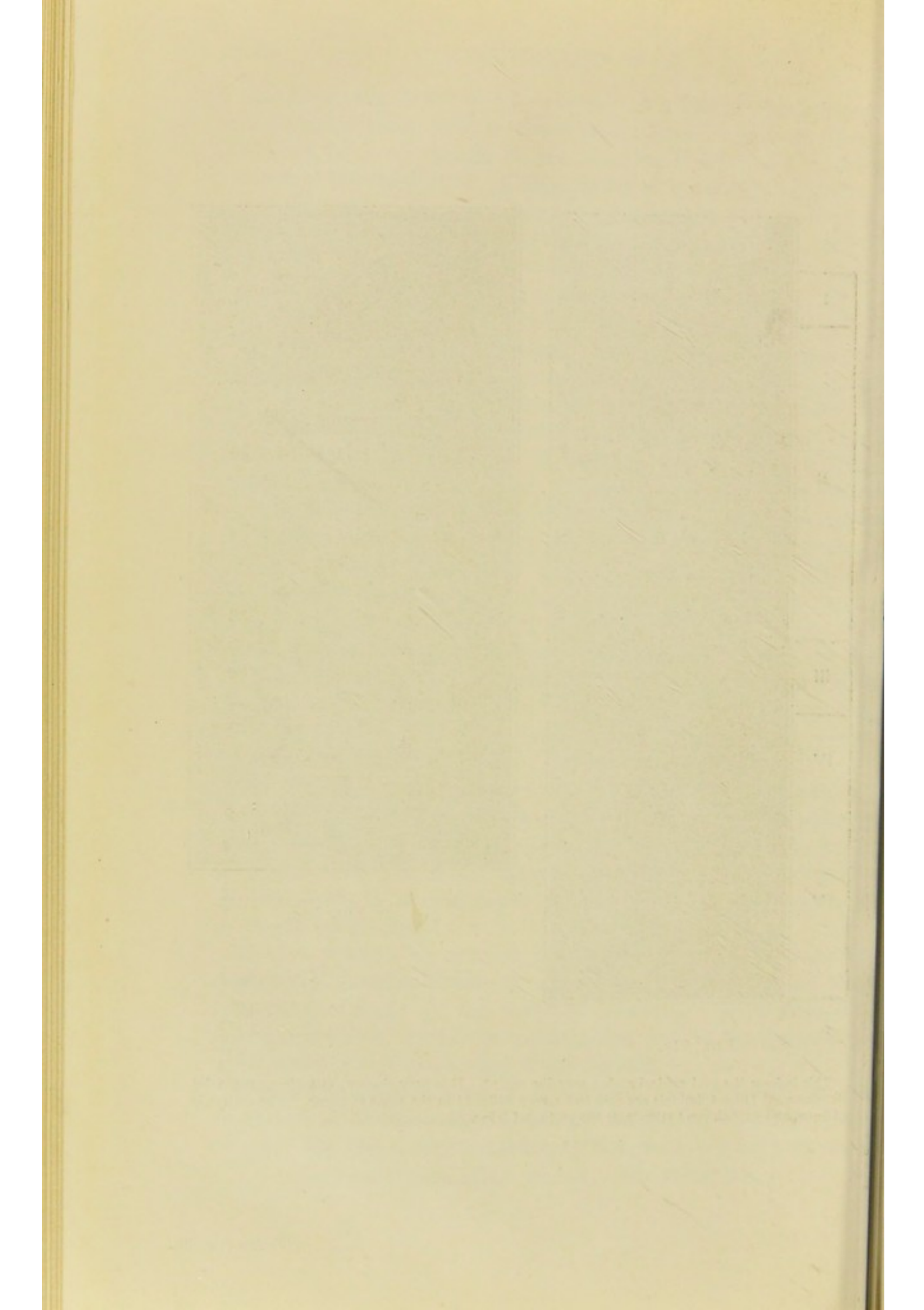




FIG. 52A.

This is from the post-central gyrus of an insane (delusional) female lunatic. The post-natal cells are good.

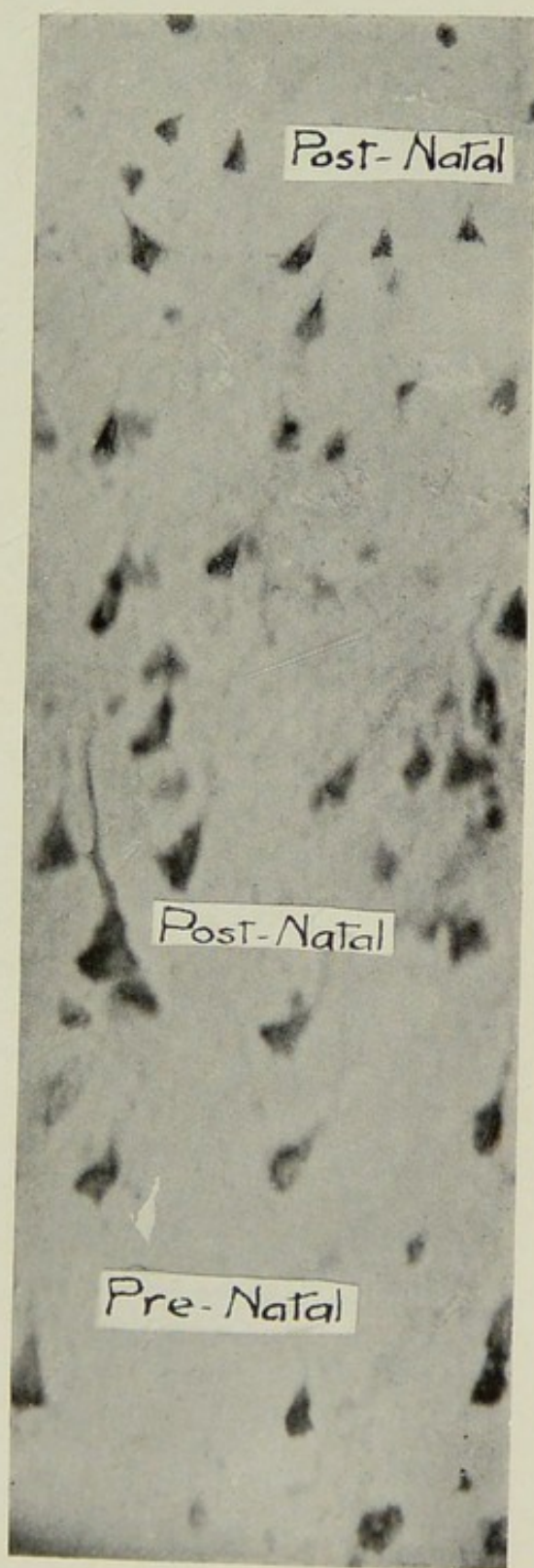
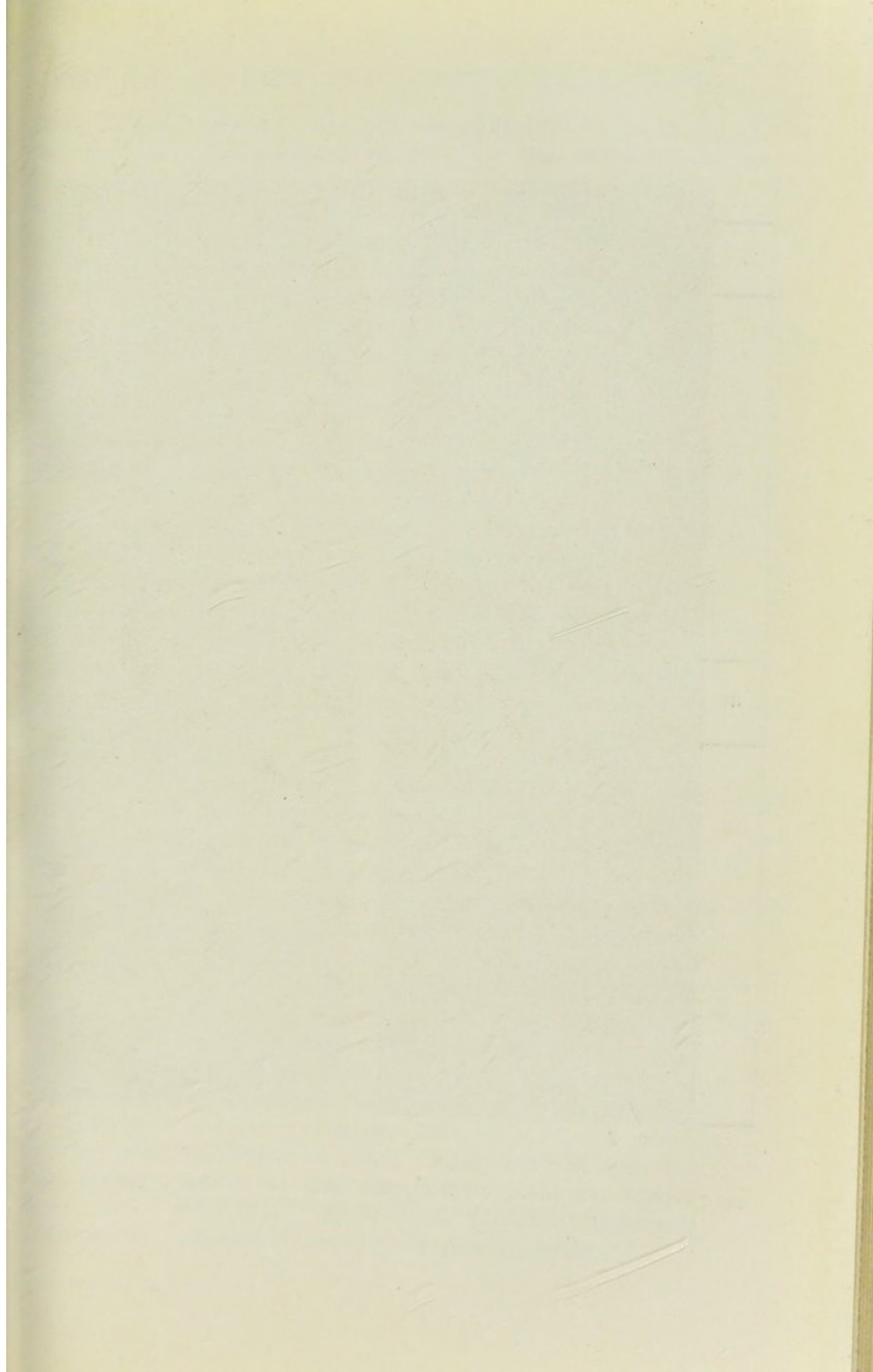


FIG. 52B.

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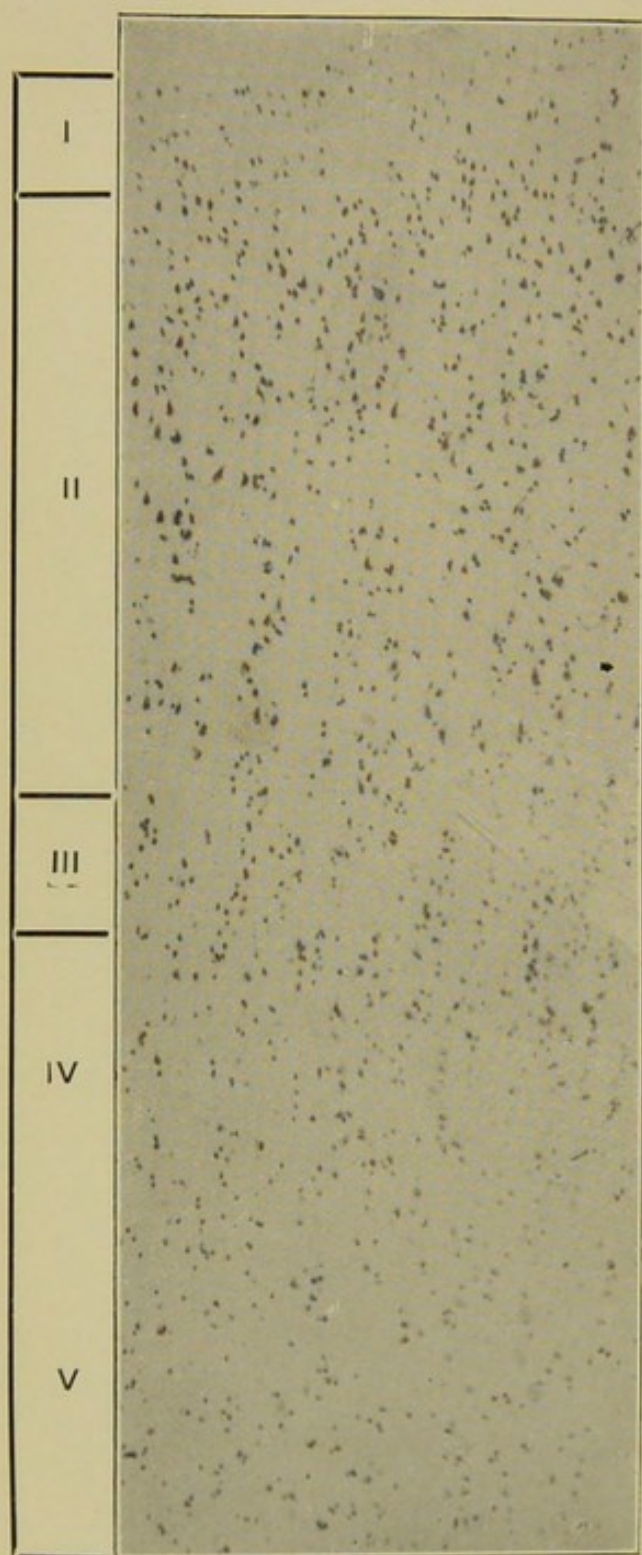


FIG. 53A.

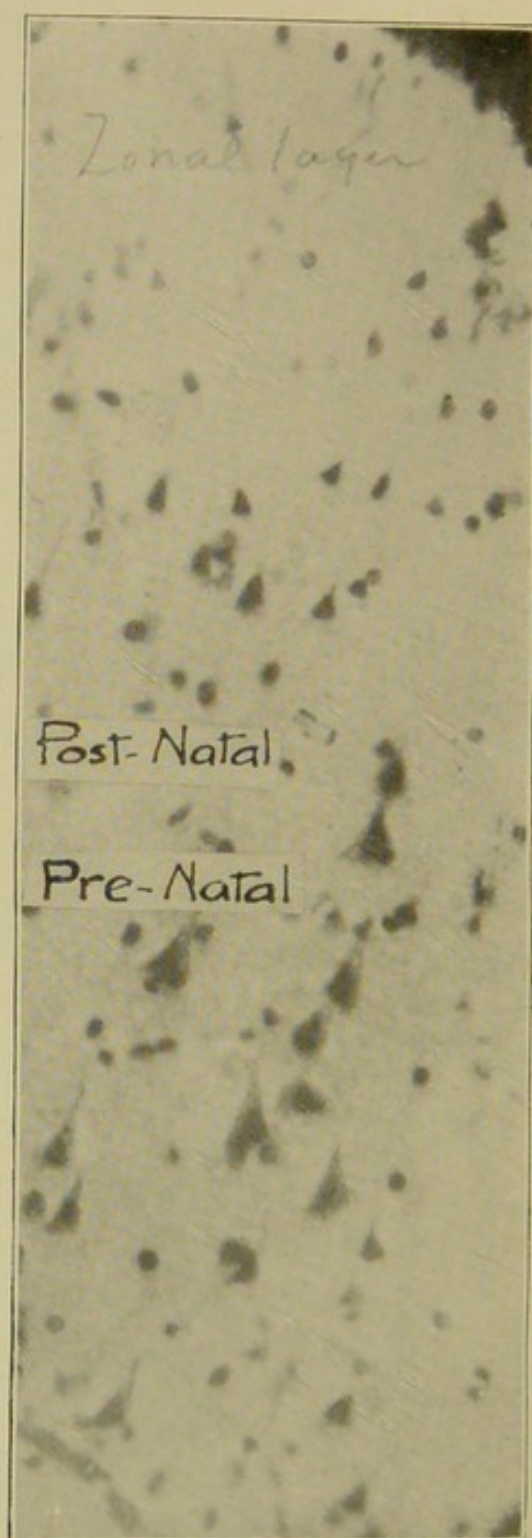


FIG. 53B.

This is from the parietal area near the vertex. The postnatal cells (B) are poorly developed. The whole cortex is shallow. The degenerate's brain (see page 273).

and quick of learning. His skull was of hydrocephalic type but the ventricles were not dilated, nor the convolutions thinned out. The skull measurements were $6\frac{7}{8}$ in. \times $5\frac{3}{4}$ in.; Index, 83.7; circumference, $21\frac{1}{2}$ in. The brain weighed 41 oz., which is about the weight of an average child of 10. I think we may assume that this was a young specimen of the variety *sapiens*. Fig. 44 shows the outer surface of the right hemisphere, and the inner surface of the same hemisphere. The left occipital lobe was infiltrated with a tubercular mass. As I cut blocks out at once, and had to harden before photographing, the pictorial merits are lessened. It will be observed that there is a rich convolutional pattern, and the sulci are deep. The pia mater is adherent over the parietal area.

The examination of the cortex is of great importance, for it shows that while the post-natal pyramidal layer is considerably developed, yet it is difficult to say that the development is completed. It seems to be in process of development, neuroblasts being still sparsely scattered about. There is a great difference in the depth of what I call the post-natal layer as compared with that of the foetus or even the murderer. It approaches that of the adult normal. I do not pretend to show corresponding areas, for such an undertaking is extremely difficult and would always be open to pungent criticism. Nor is it necessary to do so. It is entirely a question whether the upper pyramidal layer of any convolution, say the first temporal or occipital, or frontal, is neuroblastic at birth, nearly developed at 5, and completely developed after 12 or 15. I wish to show that all parts of the cortex have this post-natal layer at birth; and that at the age of 5, it is well developed, though perhaps not completely finished.

Let us therefore examine some of the photographs of this 5 year old cortex. Fig. 45 is taken from the motor cortex; the precentral. It will be noticed that the post-natal layer is very well developed and deep. Only half of the infragranular layer is shown. Compare this with Fig. 37, which shows the motor cortex at birth. These are the so-called "projection" areas; a bad nomenclature, for in sensory areas the "projection" fibres carry impulses backwards and inwards; whereas the word *pro* means forwards.

I have made microphotographs of the post-natal layers from different convolutions (Fig. 46):—

- (A) The prefrontal shows many neuroblasts. It is the last to develop.
- (B) The second frontal is more advanced. This area was invaded by tubercle, and was œdematous, the lymph spaces around the cells are dilated.
- (C) The same convolution further back has still more perfect cells.
- (D) Broca's area is also invaded by tubercle, and is infiltrated with leucocytes; *E*, the precentral, and *F*, the post-central, are well developed.
- (G) A psychic area, the second occipital, is good but shallower than the former ones. It also contains some undeveloped neuroblasts.
- (H) The calcarine; and *I*, the temporal, both sensory, are deeper and good. *K* shows the fifth or polymorph layer of the temporal convolution.

I examined an orang's brain some years ago and Fig. 47 shows a section of its prefrontal cortex. *A* is doubly magnified as compared with the others. In *B* we observe very good cells. There must, however, be some different arrangement in the post-natal cerebral development of the lower animals, because they are much sooner equipped for their environment than are the human race.

If I have carried my two propositions we shall proceed to consider the problem of feeble-mindedness, or, as it is called, degeneracy. We have agreed that—

(1) There is at birth, above the pyramidal layer, a band of undeveloped neuroblasts which develop post-natally. These neuroblasts form the layers described as the smaller sized pyramidal cells.

(2) The development of these layers is more gradual than the pre-natal development, which occupies 5 to 6 months. It may take years for complete development after birth.

I am prepared to emphasise the opinion that—

(3) These smaller pyramidal cells have higher associative functions. Their non-development is associated with lowered intelligence and even imbecility. In the normal (Figs. 26 and 39), they are beautifully developed right up to the zonal

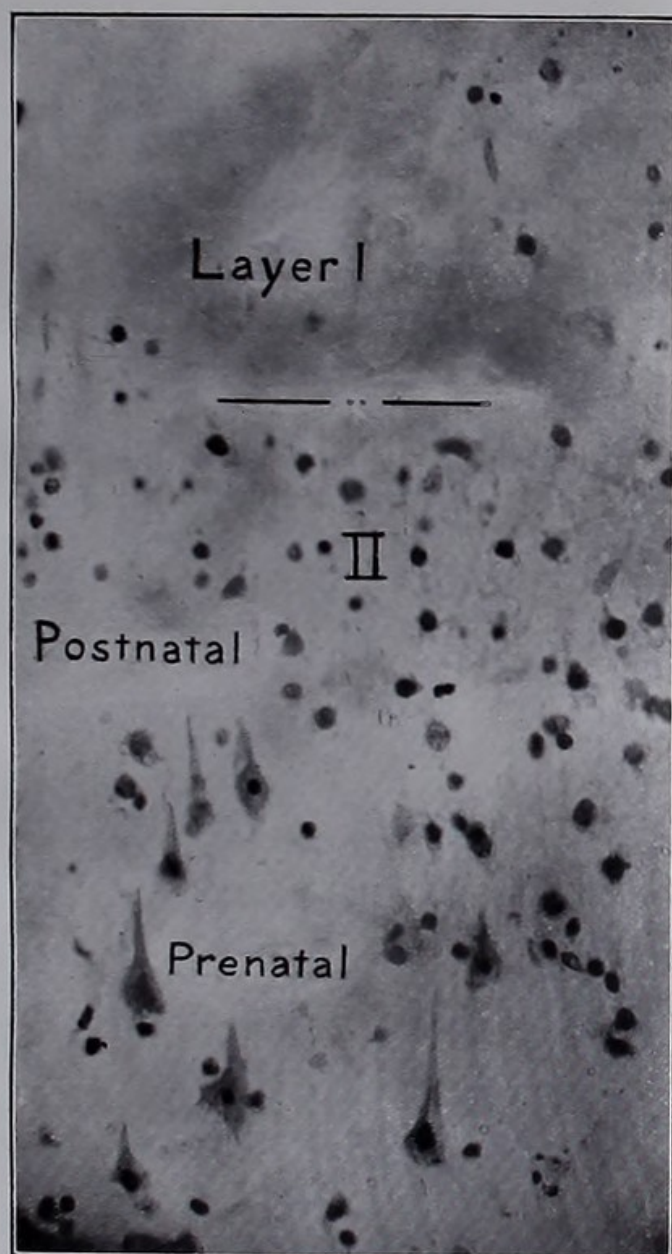


FIG. 54A.

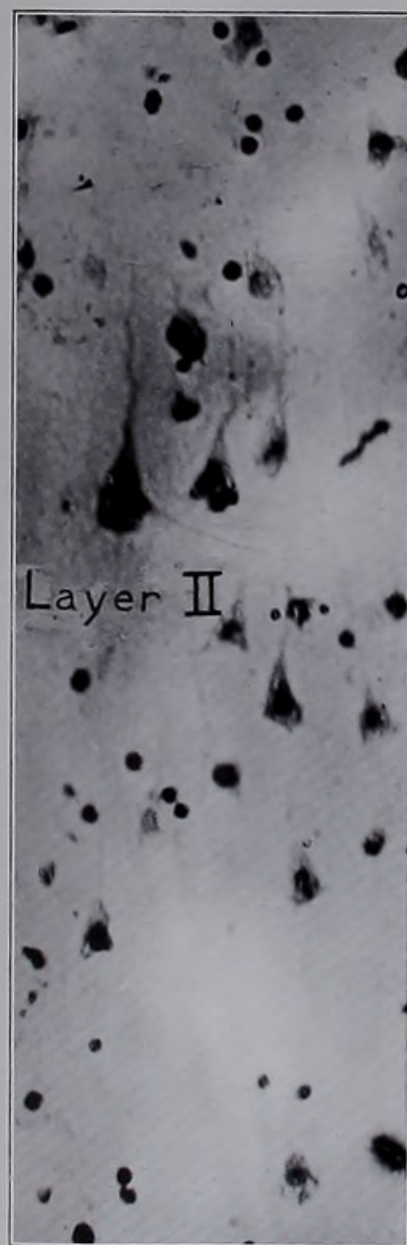
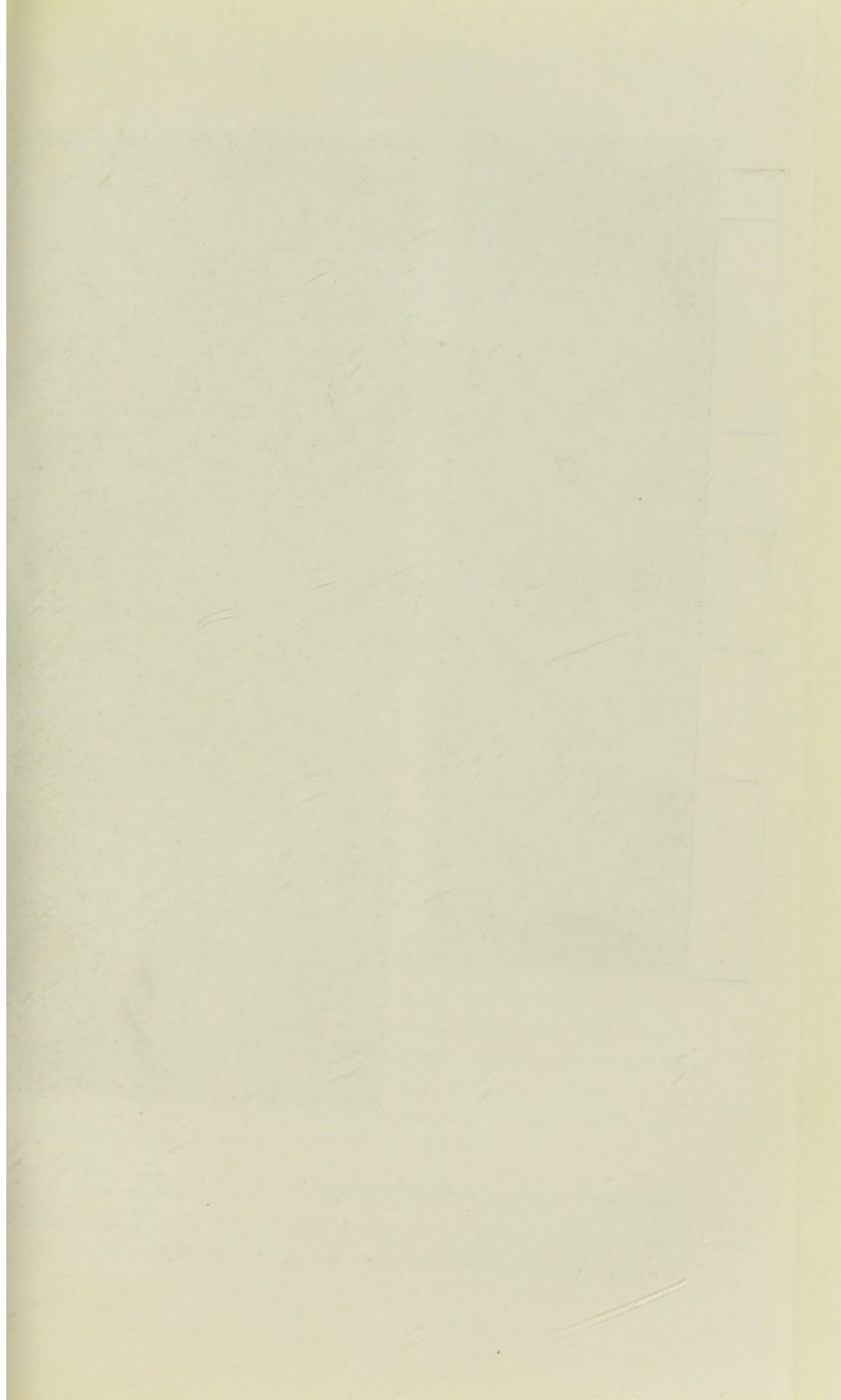


FIG. 54B.

These pictures are important, being from the prefrontal of the degenerate. It is regarded as the seat of control and higher psychic functions. The postnatal development is much arrested, and there is a preponderance of neuroblasts throughout. This is the most undeveloped part of the whole cortex, as, indeed, we might expect, considering it is the highest and last to evolve.

B is situated immediately below A, and thus they represent the whole thickness of the pyramidal layer (multiplied nearly 400 times).

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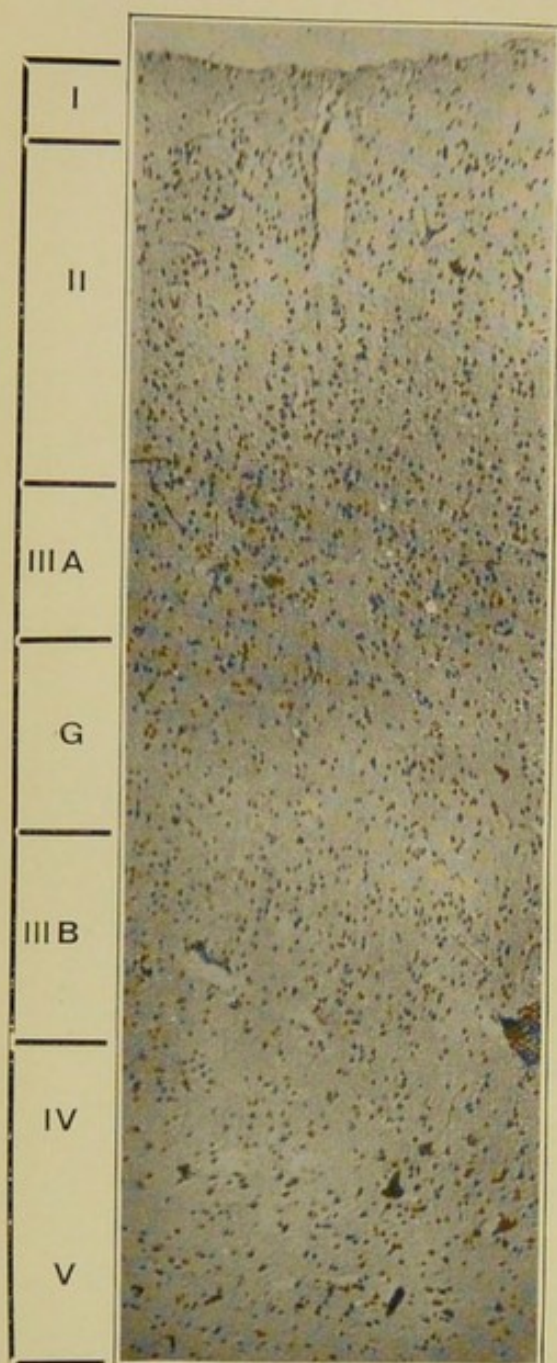


FIG. 55A.

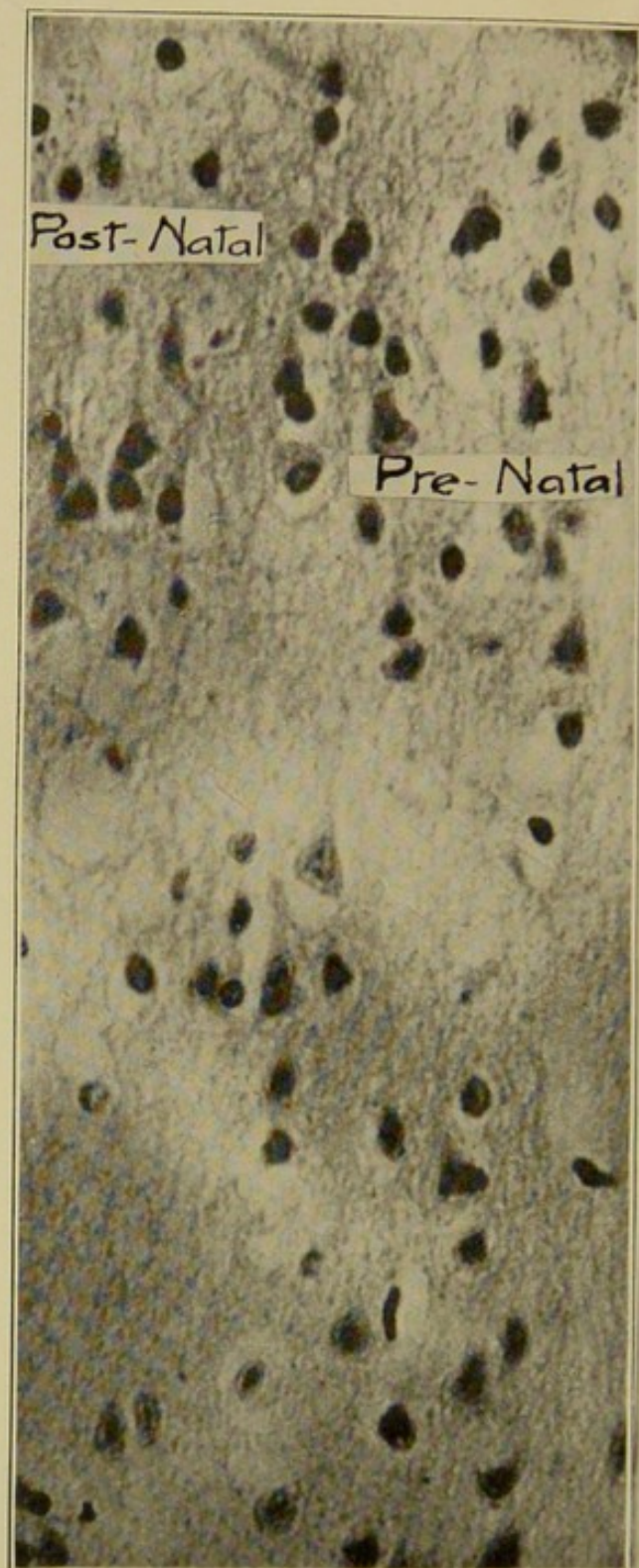


FIG. 55B.

This is from the left calcarine fissure of the degenerate. The cortex is only two-thirds of the normal depth, but relatively the different layers are correct. There are two granular layers—IIIA, the outer, shallower, and IIIB, which is deeper. G is the line of Gennari, which is the termination of the optic radiations. The pyramidal layer is shallow in the calcarine area, as it is an area of vast visuo-sensory receptive functions. The postnatal cells (B) are well formed, but rather scanty.

or tangential layer. Are we therefore justified or not in regarding this later development, as representing the higher intelligence, the ego—in fact, the personality of the individual? It appears as if this were the only logical conclusion, but to confirm it we require to examine several brains of the variety *sapiens*. Up to the present we have had quite sufficient of the lower types of *Homo domesticus*, not to speak of “normal” lunatics.

(4) Finally, it is my object to associate a poor development of the cortex, or more especially this post-natal layer, with human degeneracy. The human degenerate is weak in will power; he is devoid of self-control, moral sentiment, imagination, ideation, and his intellectual powers are far below the average. He is, however, not an imbecile. We must draw a broad line or zone between the two. They often meet in this zone and a sharp definition, or separation, of the two classes is just as difficult as it is sometimes to separate the sane from the insane. We must, however, all agree that these degenerates cannot be measured by the same code of responsibility as normal people. The degenerate, a sketch of whom I show (Fig. 25), passed through the usual miserable existence of his class. He was not a heavy drinker, but his father was a drunkard. The stock was damaged and of poor quality. He murdered a nagging, drunken wife—about the only thing open to a man of that type. He was not hung; probably the keen judgment of the prison surgeon diagnosed him as an irresponsible. The prison doctor, during his 18 years or so of incarceration, labelled him, W.M., or weak-minded. I saw him in his convict garb and after a conversation with him, supported a recommendation for his release, when he was transferred to the care of the Salvation Army. But the rigorous cold weather as compared with his warm cell, soon killed him and about 30 hours later I procured his brain. The general temperature was ranging round about freezing point, and the body was placed in a coachhouse, which was as good as a freezing chamber.

POST-MORTEM EXAMINATION

There were some adhesions between the skull and the dura mater in the parietal region. The central venous sinus broad-

ened out posteriorly to about $1\frac{1}{2}$ inches, and on removal of the dura mater it was apparent that the occipital poles markedly diverged. The occipital lobes were smaller than normal, and presented a very shrivelled appearance. There was no atrophy of the convolutions. I showed the brain to two expert cerebrologists, who both said it was not the brain of an insane person. Both of the occipital lobes were far below the average development, although their pattern was good. The brain pattern was simple and coarse. The calcarine areas were average (Fig. 48). The sulci were deep except in the occipital area. The parietal area was the best developed of any. In the frontal area there were four convolutions instead of three.

I examined blocks from nearly every convolution on both sides. In every part the cortex was shallow. One neurologist, looking at the photographs, said I had only got in half the cortex, but on more careful examination found that every layer was represented. The pyramidal layer, though actually shallow, was relatively about normal, a matter previously referred to by H. Vogt. Allowing for this shallowness of layers, the cells proceeding from below upwards were quite of the average types. I avoid the word normal as we hardly know what normality is. The prenatal pyramidal layer appeared normal, but in all cases, over the whole cortex, the post-natal pyramidal layer was poorly developed. It was best developed in the Rolandic area, as may be seen in Fig. 49. The low power illustration shows the shallowness of the whole cortex, the presence of Betz cells, and the absence of the granular layer, which is distinctive of the motor area. In fact, it has been called the *regio agranularis*.

Further forward in the second frontal convolution, perhaps the hand centre, this post-natal development has been arrested. This is clearly seen in Fig. 50. The prenatal cortex is perfect (A), the granular layer is present, but shallow. The post-natal pyramidal band is quite distinct. In B we find the post-natal layer contains some well developed cells, but a large number of embryonic nuclei remain. Dr. A. W. Campbell, in his monograph, describes the portion of the first, second and third frontal convolutions, immediately in front of the ascending or precentral gyrus, as having a higher function



FIG. 56A.

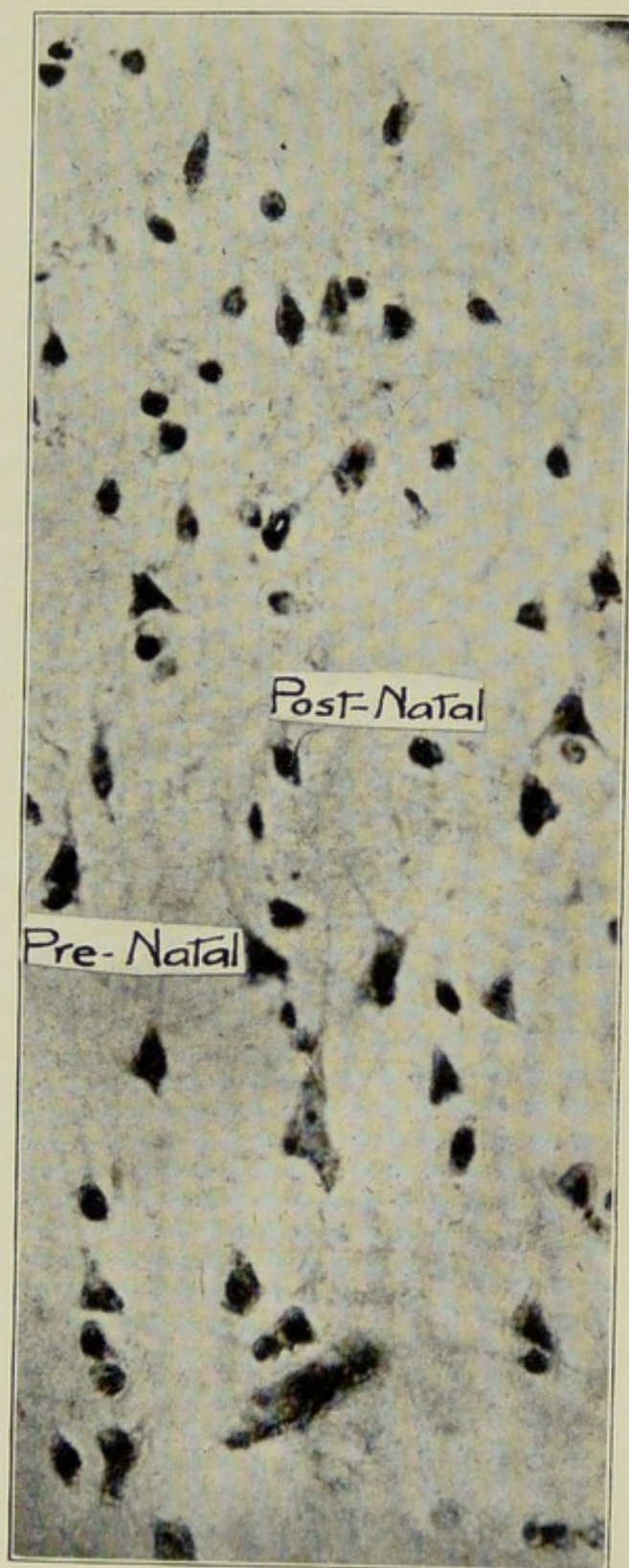
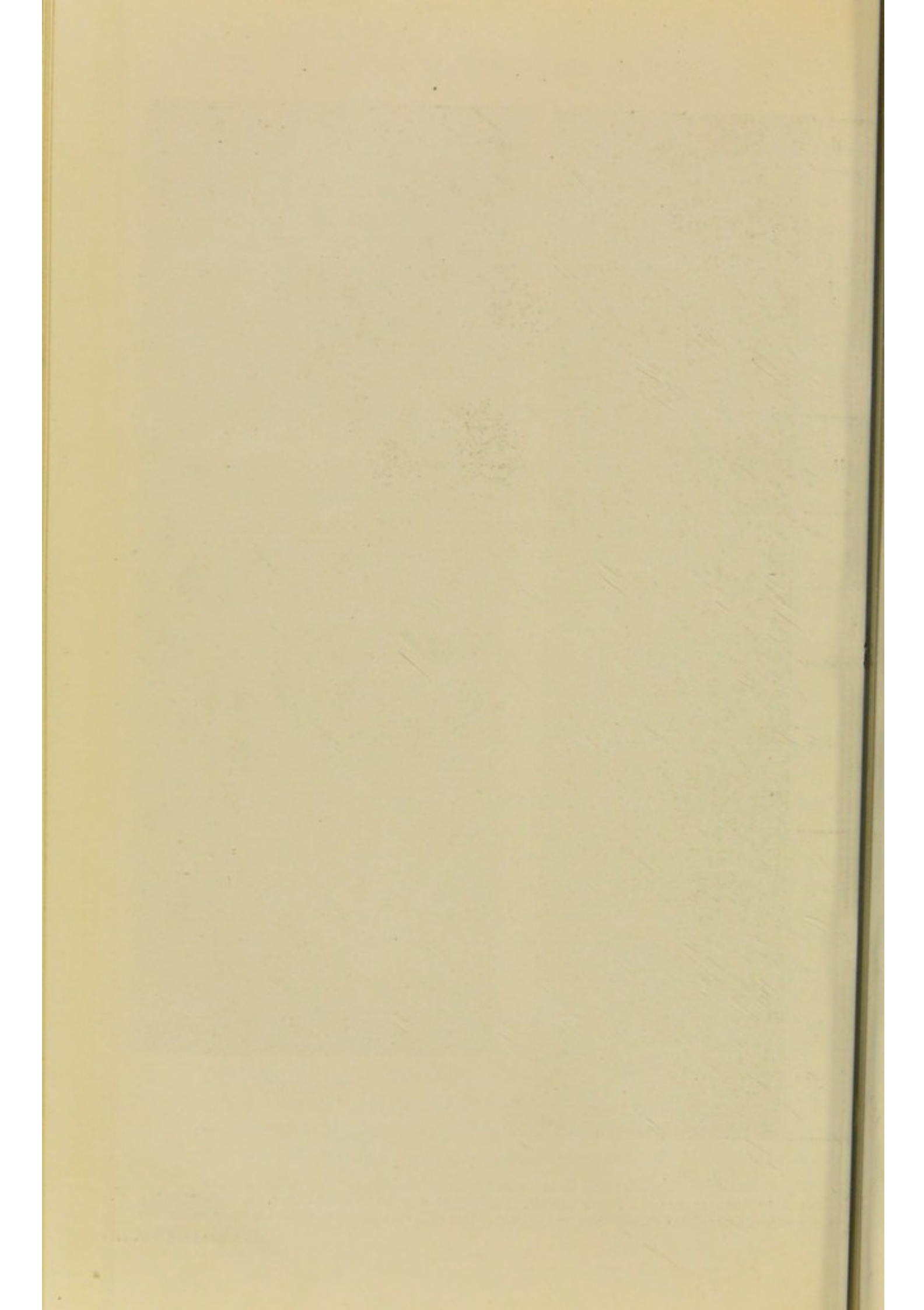
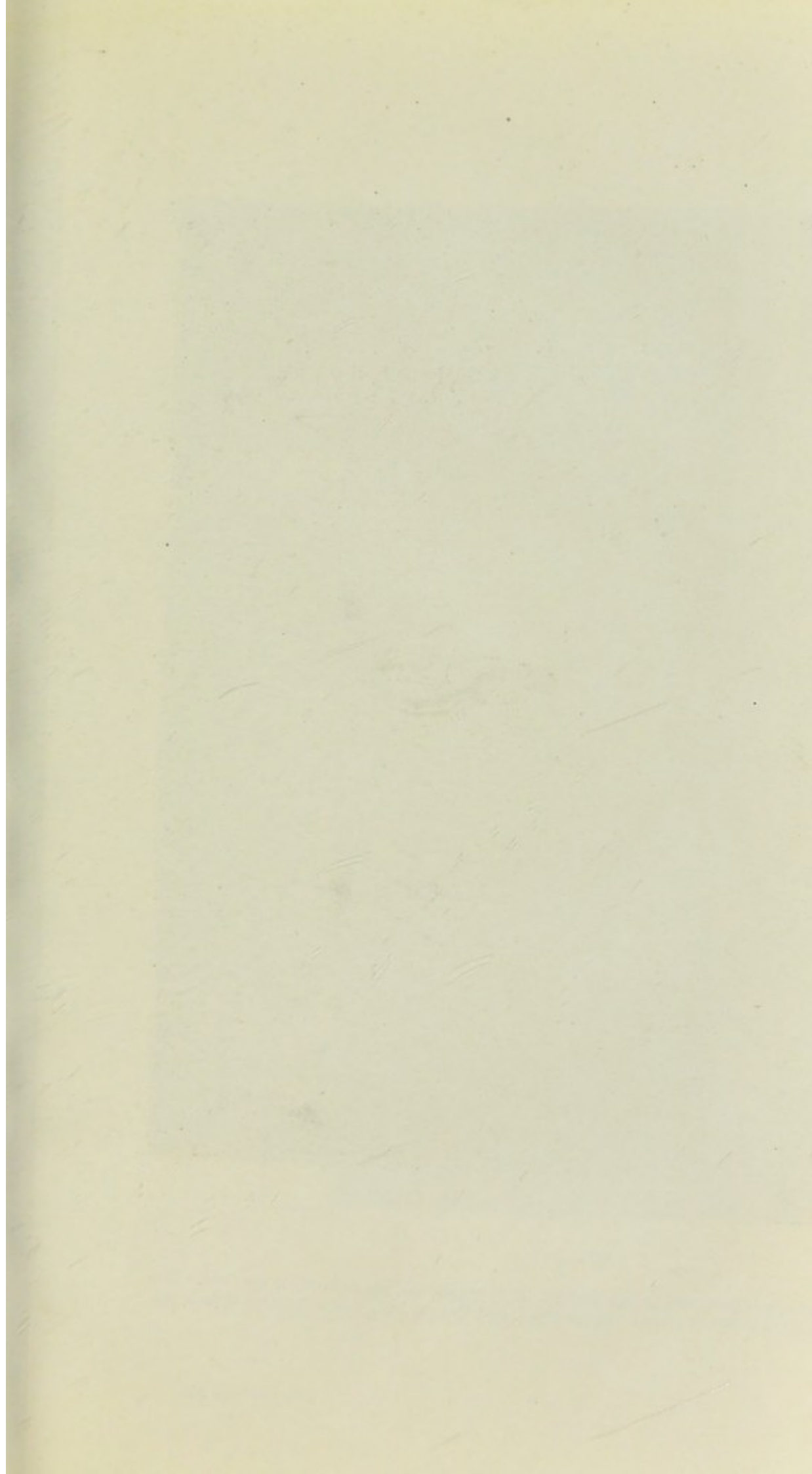


FIG. 56B.

This is the calcarine area of a female lunatic. The lettering is the same as in Fig. 55. Observe that it is a deeper, richer cortex than in the degenerate, and that the postnatal development is more perfect (B).

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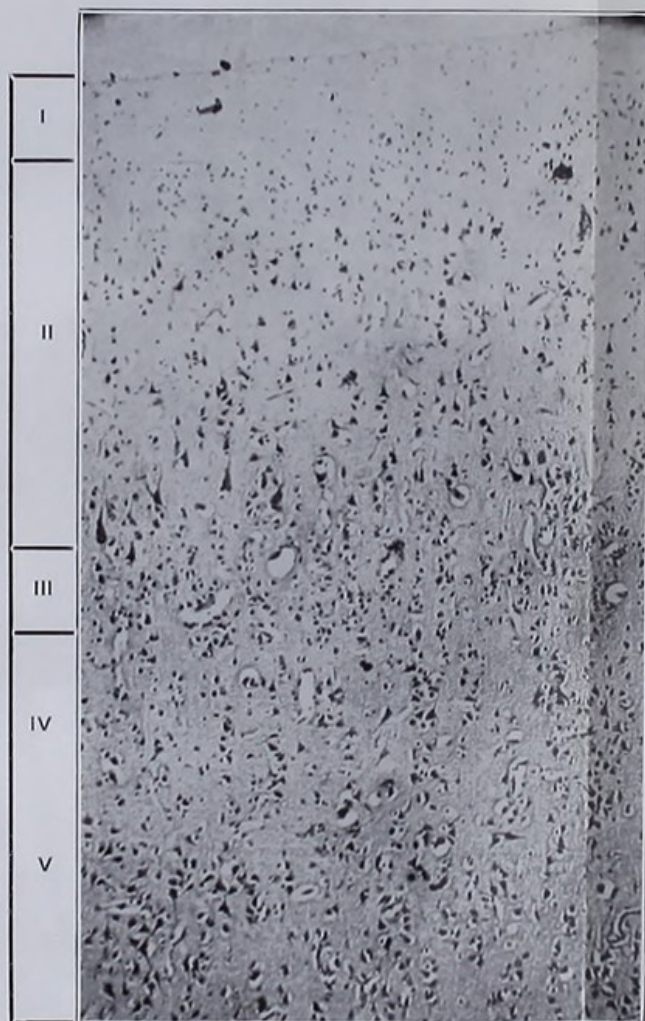


FIG. 57A.

This is from the occipital pole of the degenerate. The prenatal development is good, and though the whole cortex is shallow, yet relatively it is correct. The post-natal development, however, is almost nil. The few postnatal cells are very well shaped. It was in this part that the brain wore a shrunken appearance.

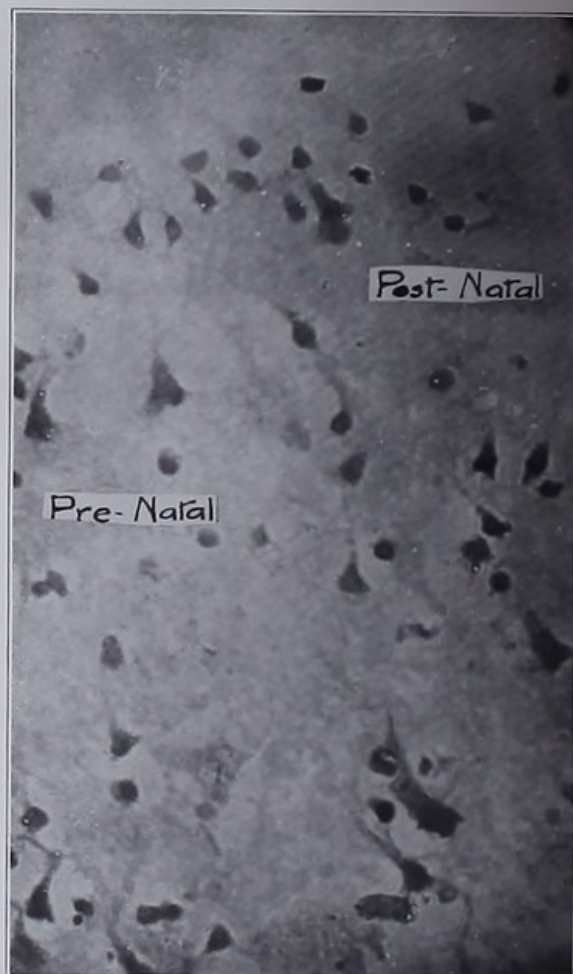


FIG. 57B.

of a directing character. In fact, his observations support and enlarge Hughlings Jackson's theory of levels. Campbell found that the character of cells changed to a higher type, with greater pyramidal depth. Hence the areas surrounding these motor-sensory convolutions must be regarded as of more complex function. Bolton aptly describes¹ them as "regions of lower association." If the prefrontal is the director, the frontal (Broca) is the foreman, and the precentral is the operator or workman. Campbell points out that Broca's convolution, the third frontal, is not purely motor or mechanical but directive or psychic. It represents mental speech and directs the vocal, or speaking apparatus, in the precentral gyrus. I am extending what Campbell suggests, so that if I am wrong, the error must not be attributed to him. But he points out that in a lesion of Broca's convolution there is not permanent loss of speech, unless the lesion is so deep as to destroy the fibres which pass, underneath the sulcus, backwards to the precentral gyrus.

The application of Campbell's theory is confirmed in the case of the degenerate, for the higher the function the poorer its development. His body is perfect, and that is all the layman or the lawyer goes by. We in the profession, who understand, regard him as malformed and below the average. On further examination we find that his lower sensori-motor functions and structures are the best part of him.

Fig. 51 is from the ascending parietal cortex of the degenerate, while Fig. 52 is from the same area in a "normal" female lunatic. Both are well represented in the granular layers being sensory areas. In comparing 51 *A* with 52 *A*, it is apparent that the degenerate cortex is one quarter shallower than that of the female. The post-natal cells (Fig. 52, *B*) are very much superior in the lunatic than in the murderer (Fig. 51, *B*).

The psychic areas are defective in structure and therefore in function. For example, Fig. 53 shows the cortex of the left superior parietal convolution (the layers being marked at the side). The high power, *B*, shows a very undeveloped state of the post-natal stratum.

¹ *Jour. Ment. Sci.*, July, 1908, p. 19.

If we now pass forward to the prefrontal, a truly psychic area, thought by some neurologists to be structurally imperfect—a sort of stepping-stone to super-man, we observe a further arrest of post-natal development. I refer now to two photographs, Fig. 36, *A*, of the foetal left prefrontal cortex, and Fig. 36, *B*, of the same from the degenerate. *N* marks the neuroblastic layer in the foetus, and there are some remains of the same in the degenerate. Continuing this examination, Fig. 54, *A*, shows the higher magnification of the degenerate's prefrontal with a considerable arrest of the post-natal layer. While lower down there is a very fine development of pyramidal cells (Fig. 54, *B*).

The temporal (sensory) area of the degenerate is shown at Fig. 29 and it is of poor quality.

Fig. 55 shows the visuo-sensory area. It is shallow, but there is not a great post-natal arrest. As a comparison I show (Fig. 56) the calcarine area of a "normal" female lunatic. The point to observe is the better definition of her post-natal cells, and the comparative shallowness of the degenerate cortex (55, *A*, versus 56, *A*).

Fig. 57 is from the second occipital gyrus. It is extremely shallow, while the post-natal development hardly exists. It looks as if the post-natal neuroblasts had been forgotten before birth. It is the special seat of damage in this man's case, as if his mental vision never approached the normal.

It would be well here to refer to Fig. 30¹ for the third occipital convolution.

Fig. 58 shows a section of the marginal gyrus. Its pre-natal cortex is good, but the post-natal is quite embryonic.

I have appended 6 microphotographs. Fig. 59, *A*, *B* and *C* represent the post-natal, pyramidal and polymorph layers of the right prefrontal of the degenerate.

Observe the neuroblasts in *A*. The post-natal portion of the left prefrontal cortex is shown in *D*. It is also full of nuclei.

E shows the post-natal layer of the ascending parietal which is good. *F* shows the same in the calcarine; it is fairly good.

By way of comparison for post-natal development only, I show the second occipital, from the brains of the degenerate

¹ Chap. xi, p. 233.

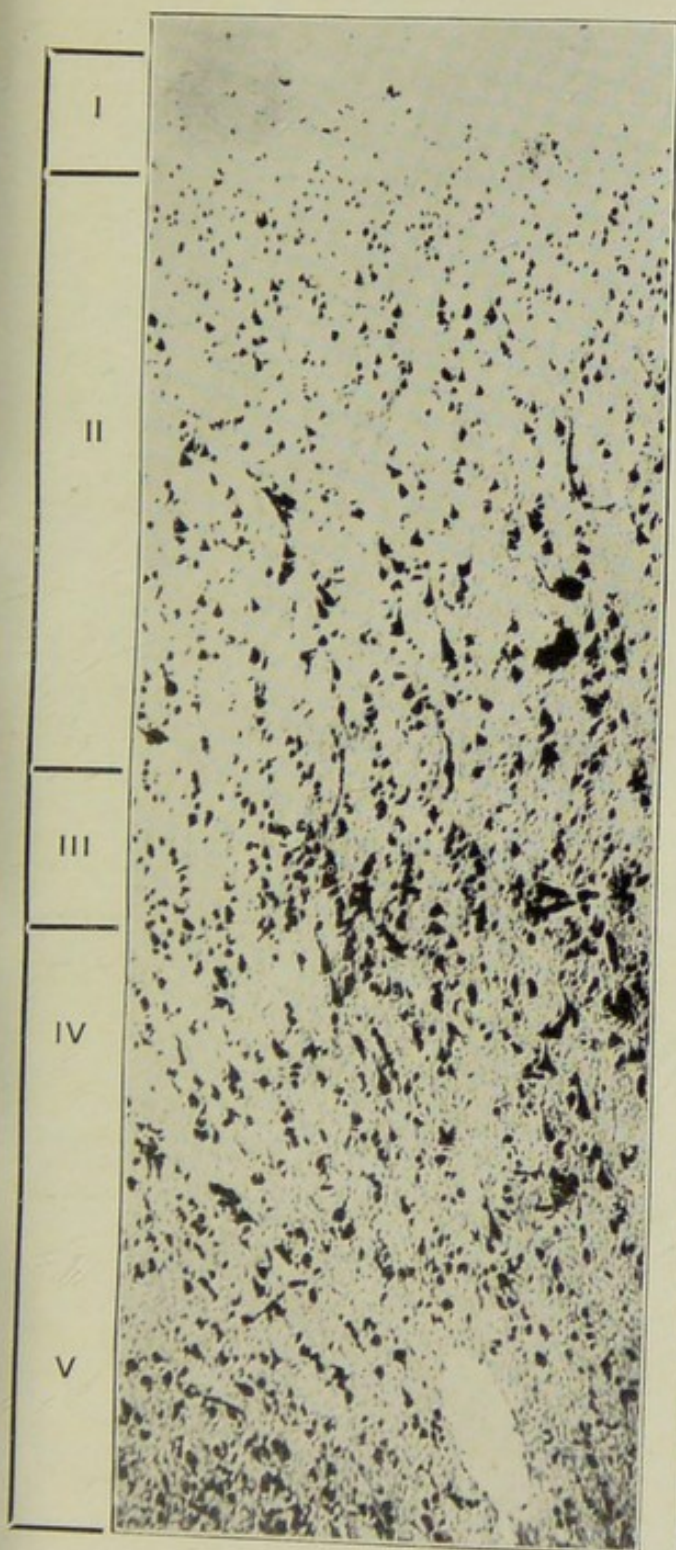


FIG. 58A.

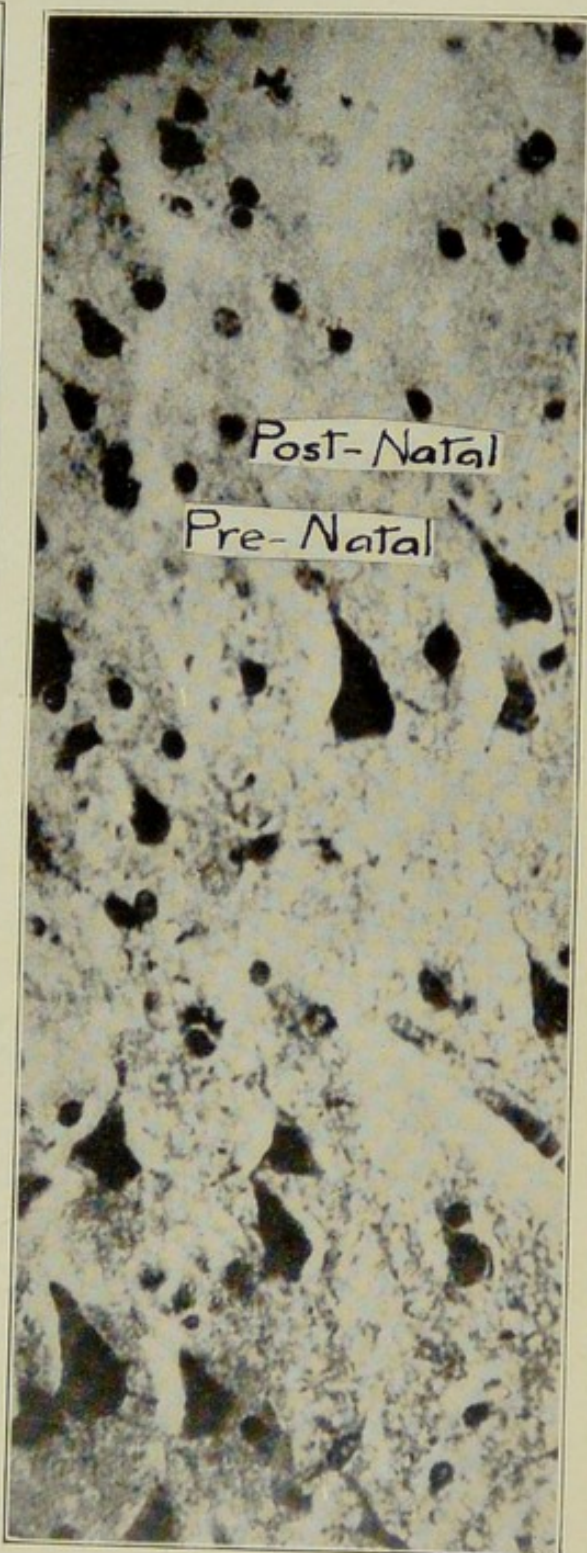
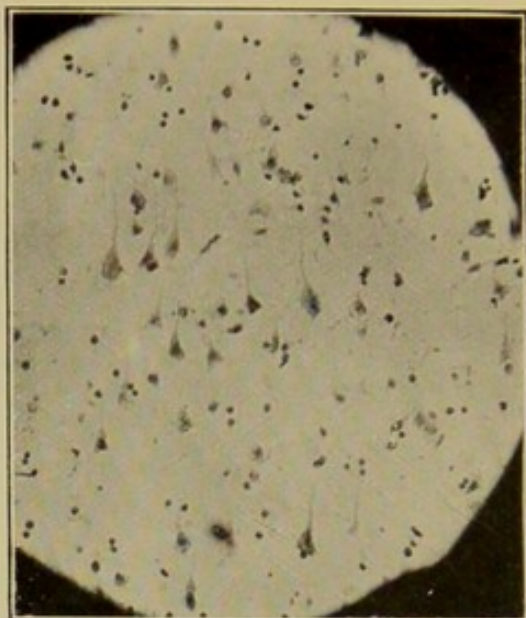


FIG. 58B.

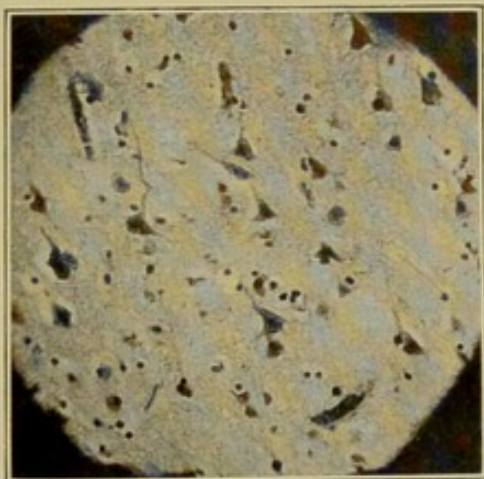
This is from the marginal gyrus in the degenerate's brain. Here again the prenatal part is good and everything in proportion, though the cortex as a whole is shallow. The postnatal layer has been very scantily laid down, in fact almost left out.



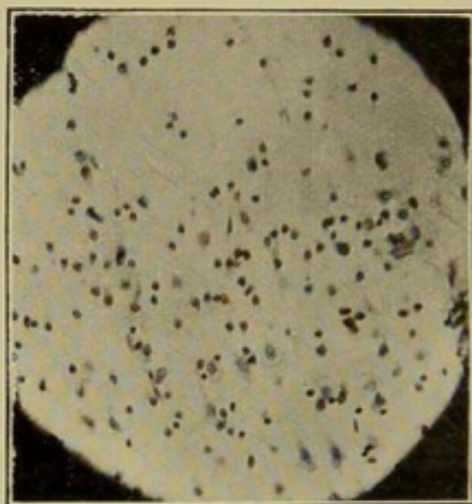
A.



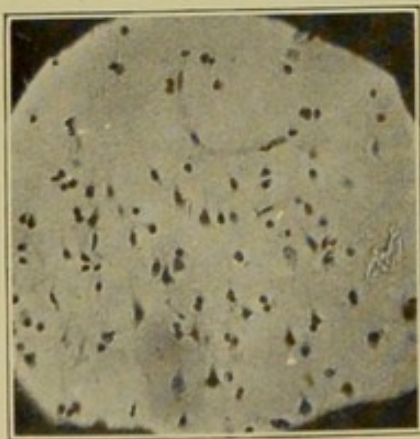
B.



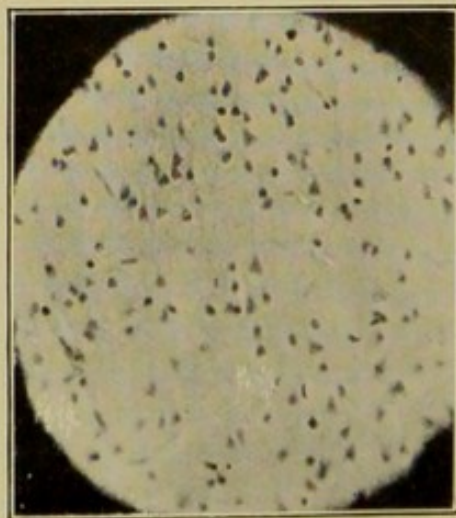
C.



D.



E.



F.

FIG. 59.

These show the postnatal and pyramidal portions of the degenerate's brain, and are fully explained in the text. The post-natal development is very poor.

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and the intelligent child. That I have not got corresponding positions is evident from the different characters of the cells. Fig. 60, the degenerate's cortex, is laid down well prenatally, but it is very defective post-natally. In Fig. 61, which is near the edge of the convolution (at the right side of the lower magnification), we see a very good post-natal development.

To sum up, this degenerate's cortex is not so good as that of the child of 5. He has been "hit" in the occipital cortex. His psychic vision, if we may coin a new term, is probably defective almost to the point of zero. We require to examine many more degenerates, but no case will be of any value at present, unless it has a "clinical history"—that is, a history of the man's life, his moral faculties as much as his intellectual powers.

If this modest research be confirmed, then the condition of the post-natal pyramidal layer will in time have a certain pathological value. If richly developed, with a wealth of sharply outlined cells, we have a normal individual, but if shallow and containing many neuroblasts then the condition or development of that man as an individual is *unfinished*. It may lead us to a clearer perception of degeneracy *versus* imbecility. It is not entirely a question of degree or amount; as of kind, or quality.

But the whole study has a most important bearing on the race. We have first of all the stock or human stem from which individuals appear, just as buds or branches do from the main stem. We can surely divide the cortex into the racial stem and the individual offshoot (Fig. 32).¹

All that appears at birth in a developed condition obviously belongs to the race, to the *genus Homo*. What develops after birth belongs to the individual. It may be that the prenatal portion also represents family differences. This is a most important subject and rather apart from the problem I have tried to solve. Nevertheless it has a bearing on the quality of mind and personality. Thus a shallow cortex in a large brain might be a character of one family; while a large, or even a small brain with a deeper, thicker cortex might belong to another family type.

We might determine what constitutes the stock or stem in

¹ Chap. xi, p. 236.

the higher anthropoids and trace the advance in man. It involves much labour, for the anthropoids must first be examined in the foetal condition, so that we can find out how much of the cortex represents the genus in them, and how much in post-natal.

We must finally compare many human brains microscopically ; the brains of people living in different social conditions ; of people who come from a family conspicuous for dullness and stupidity, in contrast with families conspicuous for intelligence.

No one man could collect enough material, but at present every one works according to his own ideas, often without much plan, we therefore accumulate rather than formulate knowledge. We want a definite line of research, in which many and any observers and investigators can participate. Only some co-operative scheme can deal with the vast problem, and even then it will be the work of years. The most important item is to know what a normal cortex is like—not the cortex of a “normal” insane person, but of *Homo sapiens*. If that be once decided we have a standard, but at present we have none.

I am prepared for criticism from many quarters, and I am aware that the evidence must be multiplied, although that is not a sufficient argument whereby this small accumulation can be refuted. These matters are, however, worth settling :—

- (1) That there is at birth, in the upper part of the pyramidal layer, a stratum of neuroblasts or nuclei ; below this stratum the cortex has reached almost as much growth, thickness and development, as in adult life.
- (2) That this stratum of neuroblasts develops into what we call the layers of small pyramids.
- (3) That this process is not rapid, as in the building up of the cortex in utero ; but gradual, perhaps occupying the years of infancy, and corresponding to growing intelligence.
- (4) That as these small pyramidal cell layers are considered to perform the higher associational processes—in other words, the higher intellectual functions—we are entitled to say that they represent the educatability

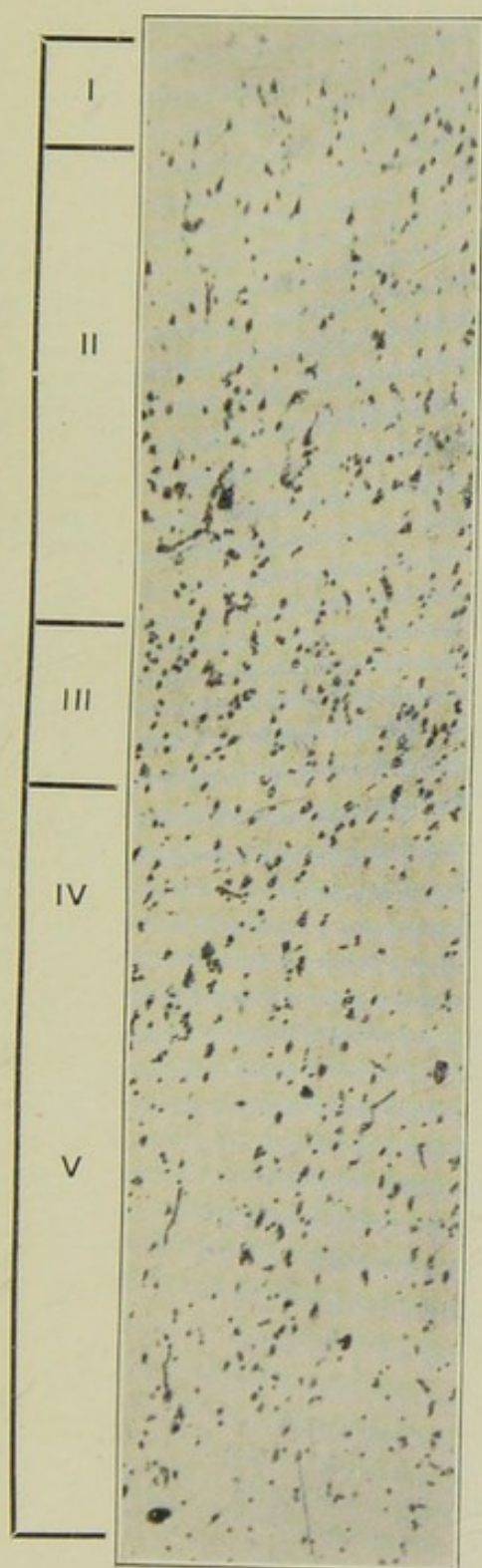


FIG. 60A.

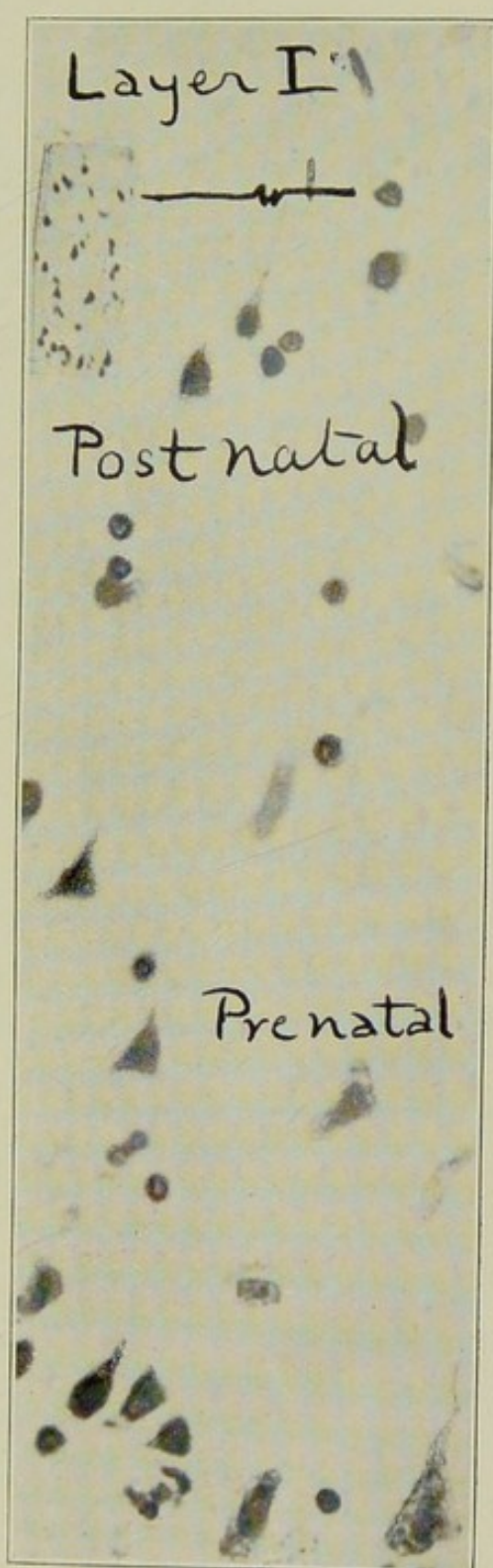
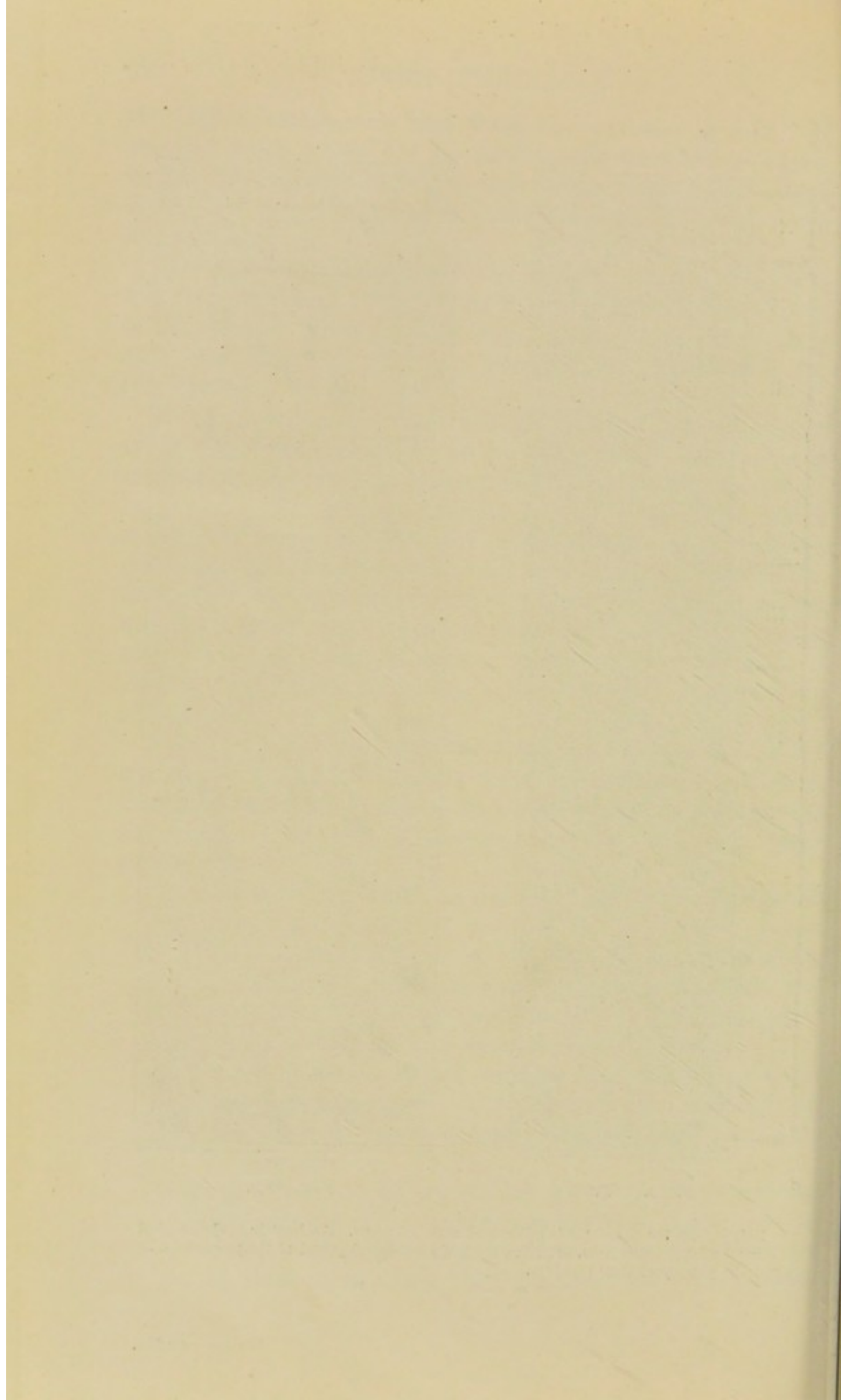
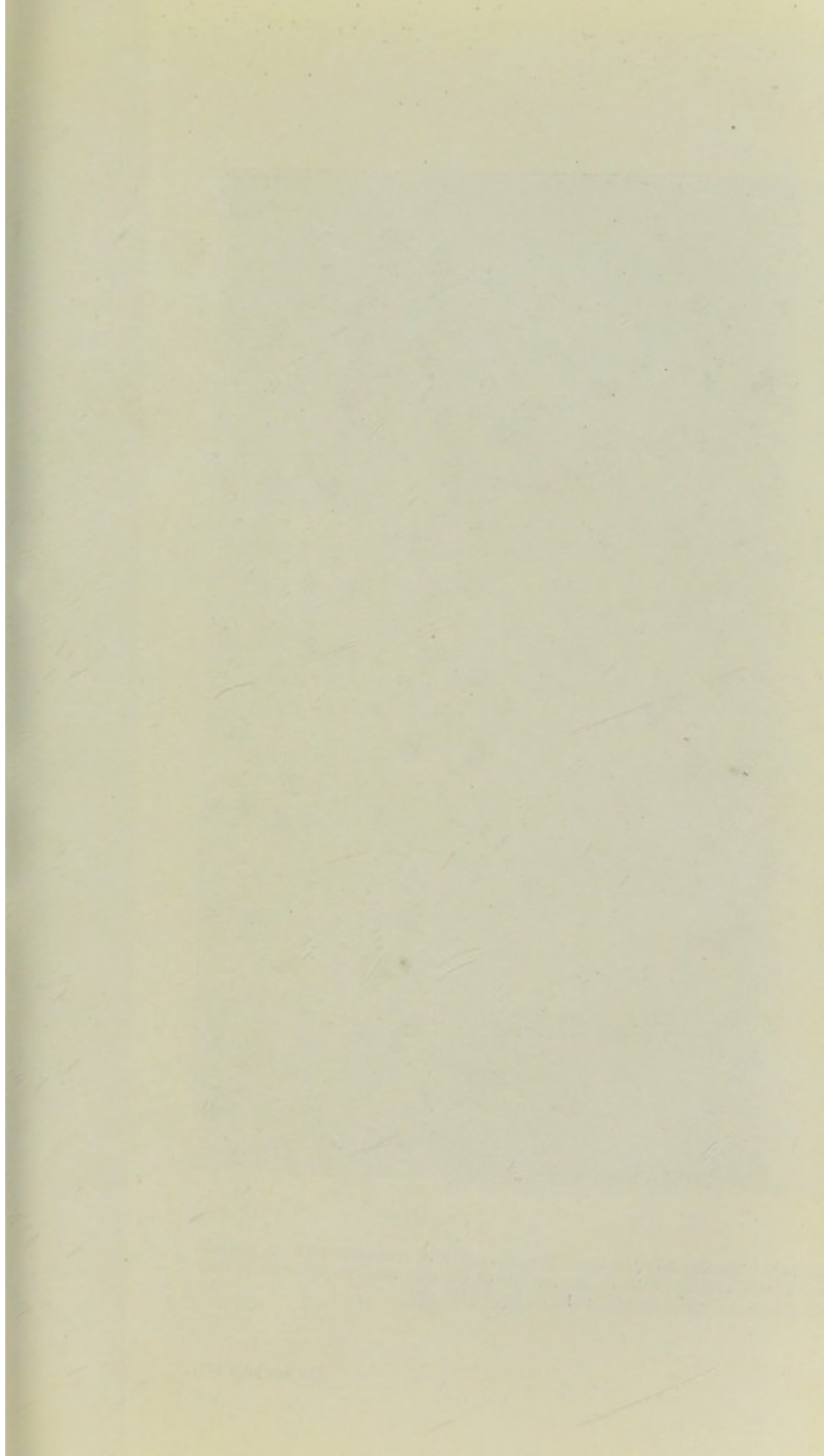


FIG. 60B.

This is from the degenerate's left second occipital gyrus. An inset in B shows what B has been magnified from. The feature is the non-development of the postnatal cells and the paucity of their numbers.





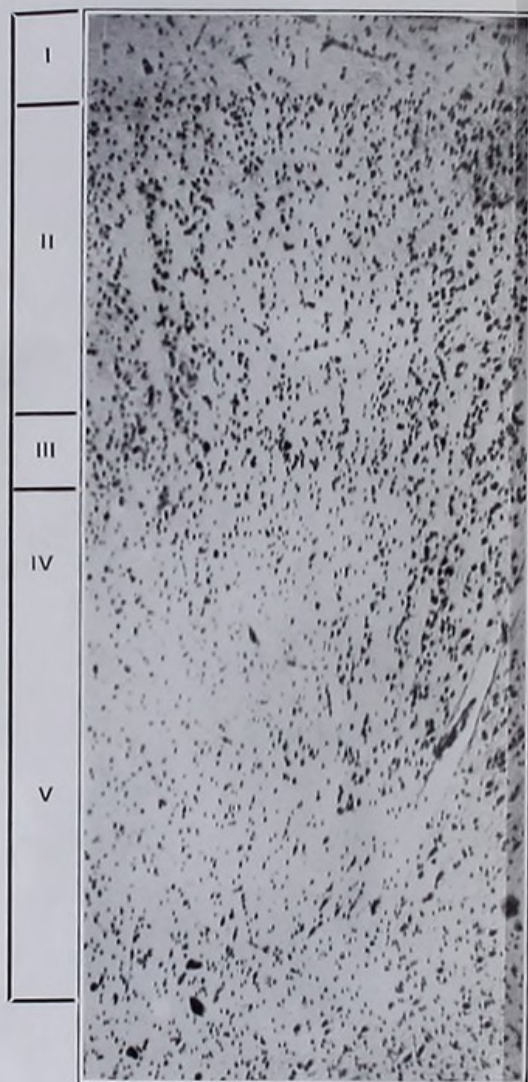


FIG. 61A.

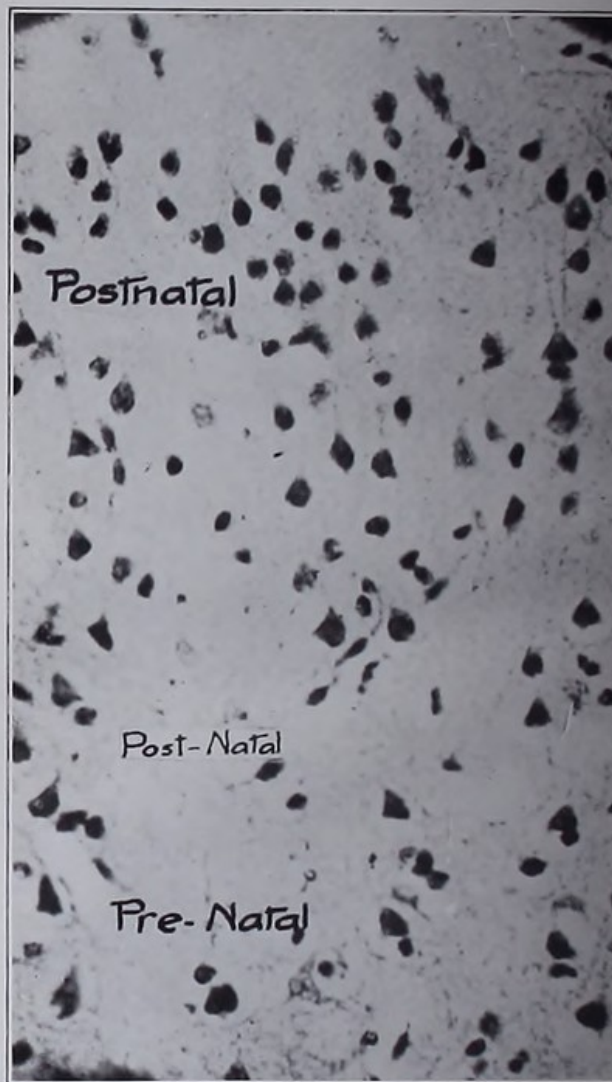


FIG. 61B.

This is from the second occipital gyrus of the child, aged five. The depth of the layers is very marked in comparing with the occipital photographs of the degenerate. The postnatal development is very striking, both in the number of the cells and the perfection of their shapes, although many neuroblasts still remain undeveloped. The degenerate is architecturally far behind the child.

of the individual, and that herein lies the seat of the personality—the ego.

- (5) That knowing conversely that a congenital destruction of this post-natal layer is associated with imbecility, is it not quite reasonable to infer that a poverty of the small pyramidal cells, and an undue continuance of these neuroblasts, is compatible with feeble-mindedness, and what we sum up under the title of mental degeneracy ?

CHAPTER XIV

SOCIAL HYGIENE IN HOLLAND

SECTION A. DUTCH PRISONS : Prison treatment in Holland.—SECTION B. CARE OF THE YOUTH : Too much red tape in England—Nature study for morals—The schools for correction in Holland, "Tucht school"—Classes I, II, III, IV—School number limited to 60—A dual personality—Period of detention—Physical stamina of the boys—Juvenile adults—Orphanages—Children of the Staat, How and Why—Infants.—SECTION C. TREATMENT OF DERELICTS AND VAGABONDS : Special wastage in every country—A study of Dutch methods—The Dutch punish drunkenness—A visit to the colony for vagabonds at Assen—No cellular confinement—The psychic force of moral control—Rewards *versus* penalties—The development of the colony—Do they get cured?—The prison at Hoorn—Comparison of degeneracy in Holland.

SECTION A.—DUTCH PRISONS

Prison treatment in Holland.

I HAVE clearly indicated what criminal treatment is under the British flag, with its sporting instincts and disastrous results. When on a visit to Holland I was greatly interested in the way the Dutch treat their criminals. We may take a lesson from them as they are a bold, chivalrous race, not unlike ourselves, while, at the same time, they are a deeply religious people. It is, therefore, useful to see what earnest religion will do in the management of criminals.

The punishment of crime in Holland is on somewhat different lines to that in our country. The dress is not so abominably ugly and degrading as in our prisons. They wear something like the peasant costume; no broad arrows; but every prisoner has a linen mask over his face so that he cannot be recognised. I was anxious for these to be raised as I wished to see their faces. Prisoners are not known by names but by numbers, so their records are kept more secret. Captain Serlé, the Inspector of the prisons, told me that they hide the identity of the criminal in the hope that the chronic will have an equal chance of reform. They have troublesome men, but everything works towards reformation.

The Director of the prison at Hoorn informed me that the

Dutch Government are endeavouring to secure employment for discharged prisoners and workhouse inmates, so that they will not be so likely to return to crime, or be driven into it.

The Dutch have a religious objection to capital punishment, and the thought of hanging an innocent person by accident is very repulsive to them. Therefore they have a prison, near Leuwarden, for murderers and desperate criminals, who must be segregated for life, or for long periods, like 15 or 20 years. These men are not kept as ours in silent cellular incarceration, but are allowed to talk and have employment with suitable recreation. There is an elastic system by which, if a murderer, with a sentence of 10 or 15 years, is adjudged dangerous to the community, his term can be extended another 5 or 10 years.

There is at the same time a much more valuable work going on, by way of prevention of crime, which we can profitably study. In England we have a principle, a very erroneous one, the liberty of the subject. This to a large extent thwarts progress. Some are fit and able to enjoy liberty, but there is a large number who cannot use it and only abuse it. As regards juvenile criminals the Dutch State assumes control, parental control, till they are 21.

In our country we merely punish or put on a system of probation, without retribution. As soon however as a certain penalty has been cleared off, the young offender is thrown back to his old miserable surroundings. Hence we never get any further, although by the plasticity of statistics there is an apparent success in official records.

SECTION B.—CARE OF THE YOUTH

I propose now to give a little sketch of some of the valuable work going on in Holland. The Dutch are a strenuous folk and a vigorous nation. Their virility is largely due to their geographical position, having to contend against wind and sea for their very existence.

Thrift seems written over every brow in Holland; dirt is unknown; poverty is not apparent; happiness and content rule. They have alcoholism to contend with as we have, and they have degenerates, but they meet the enemy at the

gate. They attack the criminal instinct as soon as it appears in childhood and thus obtain more success than we do.

It is far from my purpose to insinuate that we do nothing for the young criminal, but I do insist that we are not so thorough or disinterested. There is more care in Holland in the choice of good officials.

Too much
red tape
in
England.

Our reformatories are too much on prison lines. Some convicts have said to me that there is "more birch than Bible." Many convicts have passed through these reformatories, which is very suggestive of failure.

In our penal system, a young offender, usually a thief, goes to prison ¹ for the first month of his Borstal treatment, and is then passed on to a Borstal prison, or "institution." The boy arrives, perhaps handcuffed, in custody, wearing a convict's dress. Why the term "institution" has been adopted I cannot understand, because the whole Borstal treatment is still that of a prison. As a rule talking is not allowed, they are confined in cells and though the warders are not armed, the whole routine is prison like. The lads are taught trades; but in all our prisons we shall have to revise this question, as they are usually taught in a useless manner. In Holland, they try to teach their prisoners in such a way, that on leaving prison they are in no way behind other workmen of the same craft.

Our system does not permit of sufficient moral training and refinement amongst the young. Instead of old soldiers and sailors, we want a high standard of men, more like the teachers in our Council or even public schools. What grand opportunities for young University graduates!

By contrast the Dutch method will impress us. The Directors all seem to speak with one voice. "Our whole object is to make these boys better, so that when they go back to society, they can lead proper lives." This principle has very little chance of success with us, because our system is penal, the Dutch system is parental.

Nature
study for
morals.

The Directors hope to improve these boys by associating in their minds the beauties of Art and Nature. Whatever invokes higher mentation is stimulated. They learn about flowers and plants. They are taught to use their hands,

¹ Since writing (1909) this has been modified.

the Dutch doctors considering that it leads to brain development. They only get about three hours schooling a day, for the chief part of the treatment is to employ them in the open air.

The boys are clean, having a good bath once a week, and washing their faces and hands several times a day. I wonder how many English prisons are so hygienic as to have a single place where the prisoners can wash. It may be remarked that since the suffragettes wrote about Holloway prison, there has been a great improvement throughout. Of course if the medical officers had been allowed a free hand these matters would have received proper attention years ago.

The "Tucht school," or schools for correction, are a great feature in Holland, for young offenders between the ages of 10 and 15. Children who are troublesome at home, or truants, can on application of the parents be similarly dealt with. Young thieves, wanderers, boys who are destructive—breaking windows, damaging fruit trees, and every variety of petty offence—are sent here instead of to prison.

The schools for correction in Holland, "Tucht school."

There are four classes in the school.

When a boy arrives he enters Class I, where he stays one month. He is domiciled in a small room about 16 feet square, in which is a stove, a bed, a table and two chairs. A door leads into a small garden for exercise, the corridor door is half glass, but curtained outside; so that the young culprit knows he is under constant observation. Take an example. In one room there was a very miserable boy of 13, who had only one month for breaking glass. He was a degenerate and the son of a peat-cutter. An instructor was sitting at the table teaching him to read and write. As the Director observed, we cannot expect a high order of intelligence from a peat-cutter's son. The Dutch give as much education as the individual can absorb and this is the secret of their success. If a child is only equal to our Standard III, he is not urged to attempt more. In Class I the boys have individual attention, but Classes II and III are like ordinary elementary classes. There is no effort at a fictitious statistical representation of merit. The Dutch do not aim at placing children too high up, off their balance. They like them to sit squat and firm in whatever calling they can reason-

Class I.

ably attain to, even if it be only to milk cows, or cut peat.

The Directors find out the capabilities of every boy. The boys have no fear of the officials. They look with affection to their teachers, as if they were foster parents. If the Director talks to them, they reply with ease and energy, their faces light up with smiles. It is most refreshing!

Class II. After a month of silent treatment in Class I, the boy goes into Class II. The boys may not talk in Class II, but they work and play together. When visiting the school at Haren, several were playing leap frog and there was much laughter and fun. The teacher was joining in the game.

Class III. Practically all the boys rise to Class III after the second month, where talking is allowed.

Class IV. Class IV represents punishment. If a boy is stubborn or wicked, he goes into this class instead of Class III. The treatment is very much the same as in Class I. There are no privileges. In not one of the four schools visited was there any boy in Class IV.

There is a confinement cell in each school. At one school it had been used about once in two or three years when a boy had been very refractory; in other schools it had not been used at all. Corporal punishment is unknown.

My experience of the poor shows me that English boys are as good as the Dutch, and I think if we were kinder to them we should get the same results.

School
number
limited to
60.

The inmates of a Tucht school never exceed 60 in number and there may be six, or even eight, teachers over them. In all respects it is like a boarding school, except for the locked doors. The doctor visits once a day, and aims at treating mind as well as body.

A dual
personal-
ity.

I saw one very interesting case in Class I; in fact, the boy could not be advanced as he was a pathological curiosity. He had the power of throwing himself into an epileptic fit, in which he was pallid and unconscious; even the conjunctiva was insensitive. It could not be distinguished from true epilepsy. It took some persuasion to get him to perform, for the effort appeared to exhaust him. He could also mimic infantile paralysis, and in winter could lie in the snow, half paralysed and blue, till rescued. All these were valuable assets to him as a humbugging beggar, but it was also inter-

esting as suggesting a dual personality. His influence would have been very bad, so he was kept apart.

Cases are sent to the schools for periods of not less than one month, and as a rule may not stay longer than two years; as it often happens that parents ask for three years' detention, the period may be extended if it is thought desirable. The authorities consider one month is too short, but do not think it good for either parents or culprits to regard it as a home.

Period of
detention.

I could not help contrasting it with our penal system, where boys are locked up in cells, often all day, sometimes from twelve o'clock on Saturday until about six on Monday morning, with, of course, intervals for church and exercise. The boys in Holland are never locked up like this, they live out of doors. When they do retire, instead of dingy brick cells, they have cubicles. The front of the cubicle is glass, so that there is free observation. They have books and writing materials; sometimes pictures on the walls. In England, if a boy is very very good, he may have a bit of looking-glass about 6 in. square. Under the new regulations, 1909, they may have photographs and some more privileges. We do go slowly!

At Velsen, the Director had previously been a parson. Sometimes the Director has been a schoolmaster, as at Nymegen, or he may have been an officer. But the State chooses the man for his capabilities, and not, as usually happens with us, to satisfy a claim for a billet.

I was much interested in their physical condition. They were mostly sturdy, rotund, little Dutchmen, but there were several degenerates, such as we find in our own towns. There were many stunted, ugly and mentally weak boys. One little boy of 12 had been 2 years in the school and was to stay there 3 more years. He only stood 4 ft. 4 in., but had grown 6 in. in 2 years. His mother was a prostitute and a drunkard, therefore she will not again be allowed any control. Some of the boys were very big-boned, tall and even handsome. Though nominally for boys under 16, there are some 18 and 19 years of age, because the Staat thinks it to their advantage to remain under care.

Physical
stamina
of the
boys.

For grown-up boys of 15 or 16, who break the laws, there

Juvenile
adults.]

is another kind of institution, which, though called a school, is more like a reformatory. These differ from the Tucht schools in taking boys who have committed more serious offences; or whose home surroundings are so bad, that a course at the Tucht school would be of little permanent use. They become the children of the Staat. I visited such a reformatory at Avereest near Zwolle. The Minister of Justice said he specially wished me to see this institution, as all their worst boys went there. Imagine then my surprise, I shall not say disappointment, when I repeated this to the Director and he replied in a pained voice, "I have no bad boys. They may have been bad before we got them, but they are not bad now." It shows what sympathetic control of a parental character can do. I found the assistant director in the playground joining in some fun with about 20 youngsters, all as happy as ordinary schoolboys.

One lad of 20 was ill in bed. He had been a thief and had been 3 years in the school. "Ah," said the Director playfully, "this is a bad boy." "No, no," cried the lad, "I was bad, I am not bad now." The Director continued, "We make them good in the head, the heart and the hand," touching each part with emphasis. As the boy had been a thief the Director said, "His hand is bad." "No, no," the lad said laughingly, "I will never steal again." "Oh," said the Director, pointing to his chest, "his heart is still bad." Again the boy laughingly negatived the idea. The whole scene was playful, but full of ripe suggestion. It showed exactly what those in control aimed at—to obtain the affection and confidence of the boys, and then to lead them to higher ideals and truer lives. It was one of the best sermons I ever listened to.

In this home there were about 230 boys, but as it was a *fest tag*, Whit-Monday, only about a third of them were at home. Now just imagine what a shock it would be to Whitehall, if one of the masters of Borstal, or of a reformatory, went out for a ramble with 40 boys! But here are 230 criminal lads in process of cure and convalescence, and 160 of them are rambling through the country, in parties of 40, each with one and only one master. I passed one batch, fine hearty, lusty youths, in peasant suits, larking all the

way and the master entering into the spirit of it. When they reached the little village, blocked with merry-go-rounds and all the noisy and senseless accompaniments of a village fair, they scrambled through the crowd like other people and got home safely.

There are always more male than female criminals, and, while there are 7 of these schools and reformatories for boys, there are only 3 required for girls. The girls' schools work on the same principles, but are modified in detail. The results in both cases are very encouraging. Cure is the rule ; relapse is quite the exception.

Those who visit Amsterdam should call at the municipal orphanage in Kalverstraat, as a type of Dutch methods. This orphanage was founded in 1530, for orphans between the ages of 1 year and 16. They may stay until they are 20, or until they get properly settled in situations. It is for children whose parents have lived at least 5 years in Amsterdam. The parents, mostly poor people, enter their names on a register for a sum of about 2s. by way of a small insurance. If they live, well and good ; but if they die the committee take in the children. The children, both boys and girls, mix together. Their costume is peculiar ; one half, right or left, is black, the other half is red.

Orphan-
ages.

The upbringing of the children is so good that there is always a demand for their services. Many go out daily to service, returning to the orphanage as their proper home. In this way they are taken care of till they are 21.

There is another system for dealing with neglected young children who are living in bad surroundings, by taking them away from their parents.

Children
of the
Staat.
How and
Why.
Infants.

There are three or four special Societies for this purpose.

One Society has the happy name "Pro Juventute" (for youth). It has offices at the Hague, Amsterdam, Utrecht and Zwolle.

Another Society at Haarlem is called "Onze Tuin."

A third, with offices at Groningen, in Friesland, and at Amsterdam, is called by the short title, "Vereeniging tot opvoeding van half-verweesde, verwaarloosde of verlatz kinderen in het huis gezin." It means an association for the education of half-orphans, wandering and lost children in

private families. These societies are non-sectarian ; all parties join in the work, but, in sorting the children, they collect Catholics in one place and Protestants in another.

When a child is badly neglected at home, and it is thought by any of these voluntary workers that there is a danger of his growing up dishonest, they seek the assistance of a judge. The child is brought up, and if the case against the parents be proved, there is an order made that they shall never again have control. In certain cases the parents are fined or imprisoned. The child, boy or girl, is placed in an observation centre for a period of at least a month. The child is then sent to an institution, or boarded out in a family, if possible in the country, and always in another district. This child is now "a child of the Staat." The Staat pays 5 and in some cases 6 or 7 guilders a week for its maintenance. The child attends school in the regular way and later on is apprenticed to a trade. It is safeguarded till the age of 21, not thrown on the world at 16 as in England.

SECTION C.—TREATMENT OF DERELICTS AND VAGABONDS

Special
wastage
in every
country.

There is in every civilised country a semi-criminal population—people not actually bad and corrupt, but living on the border line. They are lazy and intemperate. They would sooner steal than work, but get over the difficulty usually by begging. We call them vagabonds, tramps, paupers and chronic drunkards. They feed the criminal ranks. When a criminal gets old, and his cunning and art begin to fail then he too must fall back into this hopeless crowd. In such a motley group we meet all sorts and conditions of men. There is the Doctor of Music ; here is a physician or surgeon ; there is a school teacher, a diamond merchant, a bank manager : no one class can feel aggrieved that it is not represented. They are not all social derelicts ; they include a vast army of weak-minded, degraded, dissolute, criminal and degenerate folk, otherwise termed by me "unfinished" or psychopaths.

What is the percentage of these undesirables in England or in London ? It is computed that of the supposed 36 millions

of population 12 millions are struggling in poverty. How many are poor because they are "unfinished" no one can say, but the proportion must be very large. In England, alcohol and the universal low rate of wages, add considerably to this growing evil. The problem is so difficult that we are still in the talking stage. We talk of colonies, but the undertaking is too vast. We have inebriate homes, but they are as a drop in the bucket. Let us see what Holland is doing.

In Holland there are between 6 and 7 million souls, a population equal to that of London.

A study
of Dutch
methods.

The Dutch told me that there is a great deal of spirit-drinking in Holland; but they likewise say, that they have not women such as we have—the rusty brown swollen-faced creatures, who hang about outside public houses, and are literally soaked in drink. The Dutch punish people who appear in the streets intoxicated. First they fine them, occasionally they imprison them; but there comes a time when they may be called chronics. It is then that the Staat steps in, and sends them to a colony for a period, varying from 3 months to 3 years. To the same colony are sent tramps and beggars, or vagabonds.

The
Dutch
punish
drunken-
ness.

For this purpose they have a large colony at Veenhuizen, near Assen. If any one wishes to study the colonisation scheme or hypothesis as applied to England, it is well to visit this Dutch colony. The route is through Utrecht and Zwolle, on the line to Groningen, in Friesland. Zwolle is a peaceful little town, where everything goes like clockwork. In its market-place rises an old church dating from 1400 A.D., and many of the houses and buildings are nearly as old. This very antiquity has a moral side. It produces veneration and respect for the memory of ancestors. The Dutch have an interesting history to look back upon, and time-honoured institutions to cast a shadow of awe over their surroundings.

A visit
to the
colony
for
vaga-
bonds at
Assen.

The Dutch peasants come into Zwolle, to sell their milk and eggs, and they cannot be flattered as having anything above the average intelligence of the country swain, but they certainly are diligent, sober and of good habits.

Travelling N.E. the country is very low, barely above sea-level, but interesting in showing what may be accomplished by steady labour. As we approached our destination, we passed through a peat country with sandy wastes and pine

woods. It is very like Aldershot, and as we traverse plains 10 miles across, we think of them as battlefields in former years.

The first sight of the colony, which is a 6-mile drive from Assen, came as a surprise. Beautiful plantations and canals made us feel in a sort of paradise; but with a turn of the road we were faced with a long two-story building, like an asylum or prison, and about 100 men strolling toward us. These were the drunks and tramps. They were dressed in the brown cloth typical of the farm labourer, but without any guard. They viewed us with the same interest and surprise as we viewed them. They were rather wild-looking creatures, scarred with years of misery, drink and crime. Many of them were well developed and of fine physique, standing 6 ft. high, for it is a mistake to think of the Dutch as short and stout; a type which the old artists loved to paint. The Dutch, especially the Frieslanders, are tall, well made, fair and handsome.

We alighted at the prison gates and inquired for the Director. A convict who spoke good English accompanied us to the Director's house in the woods, where we found a most courteous gentleman, Mr. Hondius, who spoke very good English and gave us all the information we desired.

No
cellular
confinement.

At Assen there are three colonies. This was the first; the other two are on similar lines. Each prison or building accommodates about 1,000 men. We first went over the building, which is in the form of a large square. All means of escape are prevented by barred windows, and the portal is guarded by warders in uniform. There is no such thing as cellular confinement, but at night each man is locked up in a cubicle about 6 ft. long by 5 ft. wide. In case of fire, the withdrawal of one bolt releases all the locks.

On arrival the man is cleansed, and his clothes disinfected by heat. The clothes that are very bad are destroyed, but what is mendable is mended. An inventory is made, which the man signs, and his clothes are tied up in a clean neat bundle ready for him on discharge. There is a large *magazin* where these are stored and constantly aired, as Holland is very damp. The kitchens are large and well equipped. There are big cauldrons for making soup. One day vegetable soup;

next day animal soup. The meat is by weight, 10 per cent. of the whole. They eat plenty of potatoes (and beautiful potatoes they are). The diet is vegetarian as far as possible. Tea, coffee, cocoa and milk are supplied. The men have meals together, and have rooms for games and reading. It is a genuine colony. The rules are strict but not unreasonable. Domestic work occupies a large number of men, while office work is done by convicts who have been lawyers, preachers or even doctors.

After inspecting the building we were confronted by the remark from Mr. Hondius, "What should I do if they mutinied? I have only 11 warders, and 6 of them are on the gates. That is 5 warders for 900 men."

This remark was quite *à propos*, for we had been mingling freely with the men, some of whom were very rough-looking, and many were obviously irresponsible degenerates. But having seen a good deal of Salvation Army work amongst the lowest and most depraved members of English society, I was not at all disconcerted. It was a situation in which two young ladies, my daughters, might otherwise have felt some hesitation and doubt.

It is the moral control; the personality of the Director. This quality does not exist in all of us. General Booth is such a man. His gift is not in any technical art, or science, but in himself, his personality. He is a leader and controller of men, in the same manner as Napoleon was. So with our Director. When he was appointed they had more stringent rules and severe punishments. If a man escaped he got 3 months in prison; if violent, the dark cell. If he destroyed clothes or struck an officer, more prison, and so on. The prison, capable of holding 30 men, which stands about a mile off, was always full, and there were always 60 or 70 waiting to go in.

The
psychic
force of
moral
control.

But Mr. Hondius has changed all that. He lowered all the punishments, and crime decreased. Now about 50 men run away each year—formerly there were three times that number. When they are brought back they get a week, or at most a month, in prison.

Instead of punishing their faults or exaggerating them, he offers rewards for good conduct and greater efficiency at

Rewards
versus
penalties.

work. The effect is satisfactory. I wish young mothers, and fathers too, would grasp this principle. "Where there is no law there is no sin" is a text I am always rubbing into tired or fractious parents, who are too tired to behave properly to their children. So with these convicts. They begin to alter their whole tone. The prison is never half full now. The men salute the Director respectfully, but regard him affectionately. He is their friend as well as ruler. When a man arrives, say for 2 or 3 years, he is either too alcoholised to care, or very much annoyed with everybody. The Director explains that his office is to help him to be better, and to restore him to society, and the convict "tumbles" to it. Once a week Mr. Hondius sits to interview any who have complaints. As a rule he adjusts things, but there are always some whom nothing will satisfy. In the ordinary way they would foment discontent; in this instance they are silenced by the others.

The men seem fairly content, if men with such histories and characters can be content. A few are happy, because they are protected from themselves. They know that the officials, one and all, help them and in fact live for them. They have instructors in every shop and are taught to work exactly as if they were in ordinary shops. In our prisons this rule is not followed, and so when convicts are discharged, they cannot take up the threads outside.

It was altogether a marvellous sight. Here a group of 20 men were going to hoe vegetables, there is no warder among them; but they each take up their allotted task. I may parenthesise that these are the laziest workers. It is a lazy occupation at any time, so the born treads are put on it.

The colony is so large that walking was out of the question. We therefore had a wagonette and drove round the district. As far as we could see, all was "Colonie." It covered 3,000 hectares. (A hectare is 1,000 square metres, and a metre is 39·3 in.)

It might be well here to speak of the development of the colonies. About 60 or 70 years ago, philanthropic people united for this effort at reform. The barren land was granted them in this out-of-the-way place. They could only use moral suasion, and though this answered for some, it could not be of great use, so the Staat took over the whole concern.

The original "philanthropic" building is in the form of a large square, after the style of almshouses. Inside the square are trees and gardens, all the doors opening into it. The Staat has made laws empowering detention for any period, varying from 3 months to 3 years; and has built two other "free and easy" prisons, each to hold 1,000 men.

It was not all done at once, as by a contract, but everything was done by the men. Canals were made, intersecting this large territory. Land was fertilised, after being reclaimed; although they keep a lot of peatland now, for the winter's needs. Some land was laid down in pasture for cattle, some in corn, some in vegetables and some in woods. In this colony everything is complete. There is the corn growing—here is the mill. There are the beautiful cows, some in the fields, some in the large cow-shed—here is the dairy equipped with the most modern butter-making machinery, driven by oil engine. What butter! it almost encourages us to become tramps. As to the cows, in a large airy shed, 30 pleasant, clean, cow faces stare at us on each side, and at the end is Mr. Bull, quite a gentle personality. Now we go to the noisy sheds, where all the apparatus is made for the post office, including the carts, the wheels and even the tyres; not only that but the harness for the horses. Everything that Government requires can be made here.

I was rather surprised to find a young man of 23, as most of those men were hardened old sinners. I inquired about him, and found the usual tale; mother died of consumption, both father and mother drank; father never worked, so the boy never worked and was taken up for begging. He was quite happy although work was new to him. He was in the fitter's shop.

It may well be asked, do they make cures? Well, can you straighten crooked old trees? They get encouraging results, for the system of rewards stimulates industry in lazy non-workers. Many of these recover and get into honest work again. Many of the drunkards recover. But as in all such discouraging, hopeless undertakings, there are many failures and some return two or three times.

Do they
get
cured?

Some look upon it as an investment. For instance, a soldier may go in for 3 years, during which time his pension accumu-

lates. If he is industrious he earns perhaps 300 guilders during the imprisonment. The ordinary pay consists of 7 cents ($1\frac{1}{2}d.$) a day and rations. A third of this is put by until his release, a third is sent to his family if he has one, and a third, namely, rather less than a halfpenny a day, may be spent on luxuries, such as butter or tobacco. But if a man works hard he makes $4d.$ to $6d.$ a day, or anything from 1 to 2 guilders ($1s. 8d.$) a week.

Is not this a lesson in moderation and thrift? The Dutch are always trying to do good to the fallen, and they feel that two things must be remedied. First there is need of an after-care association. At present it is philanthropic. They wish to make it a "Staat" concern, and will do so presently. Then there is also the care of the wife and children, if the convict has any. At present the Staat does nothing. If help is required, they apply to a philanthropic agency or to the local authorities.

Occasionally there are very unmanageable men, too bad to have liberty. These are sent from the colony to a special prison, which is at Hoorn on the Zuyder Zee. I shall now describe my visit there.

The
prison at
Hoorn.

Hoorn is a very pretty little seaport; perfectly clean, and with a strong smell of sweet cheeses. The hotel, "Te Doelen," is old, having been built in 1640. The prison is just outside the town, and is built on an island in the harbour. The surroundings are picturesque.

The secretary, Mr. Harment, took me over. He was at school in England and speaks beautiful English. He therefore understands the English mind.

Here again the same guiding principle applies. "When we get a man we don't want to punish him as you do. We want to reform him."

This institution is an old prison and accommodates 800 men, under about 70 warders. Everything is under surveillance. No convicts walk in the grounds outside. They are all locked inside the prison square, but may converse and promenade, when not at work, without any restraint. There is no solitary confinement except as punishment.

They look tolerably content, and are pleased to see the secretary. We did not have the protection of any guard,

and chatted with many of the prisoners. One, a man of 70, who was in for 3 years for tramping, knew London very well. He did not complain of the treatment. He said every one was kind to him, but he disliked the confinement. Generally speaking, the young men are here for drink, and the old men for tramping or vagabondage; many of them are old gaolbirds. The men are taught trades much as in the other colony, for they are the same type of men, only more stubborn, and with stronger criminal instincts. They cannot be trusted with their liberty, but once locked in and secure, every kindness is shown to them. Though they may grumble at their sentences, they are quite satisfied with their guardians. This seems to be the proper principle in any penal institution for chronics.

In the prison school, which is very interesting, the age limit is from 21 to 40. There were, however, several older men, who as a privilege were allowed to attend. There was no one in school under 21, but I was surprised at the backwardness of the younger men. They were typical degenerates, and when I went into their histories, I usually found alcoholism in the parentage. These were deficient in memory, few remembering anything before the school age 8. Their bodies are mostly in good order, due to the abundance of milk and cheese, and their teeth are good.

There is a considerably smaller percentage of degeneracy in Holland than in England. What there is, they put down to alcohol; the consumption of gin.

Comparison of degeneracy in Holland.

The Dutch have their share of syphilis, but it is not nearly so prevalent as in Germany, or the Latin countries. Their chief enemy is rheumatism, from the permanently damp condition of the country. This is largely overcome by the amount of fat they consume. Fat gives them resisting power against tubercle. Their food is excellent. Whoever wants to know the taste of milk should go to Holland; no doubt the beautiful pasture has much to do with this. It makes a loyal Briton sigh to think of Holland reaping the commercial advantages which belong as well to the Emerald Isle, if only it were not used as a pawn in politics.

CHAPTER XV

THE TREATMENT OF VAGABONDAGE AND CRIME IN BELGIUM

SECTION A. THE COLONY AT MERXPLAS : What vagabondage means—The problem of vagrancy—Belgian *versus* English methods—Merxplas—Merxplas as it is to-day—The financial side of the problem—Classification of inmates and other details—Punishments—Visits to the sections—The problem solved—Religious effort—SECTION B. THE HISTORY OF REPRESSIVE MEASURES : Assistance as rewards, not as alms—Foundation of Merxplas, 1823—Government support to Merxplas, 1830—House of refuge, voluntary—Imprisonment of beggars, 1866—The Government bought Merxplas, 1870—SECTION C. THE TREATMENT OF WOMEN : Prison—The House for mendicants at Bruges—The House of refuge at Bruges—SECTION D. THE TREATMENT OF YOUNG CRIMINALS IN PRISON : At Ghent—SECTION E. LES ECOLES DE BIENFAISANCE DE L'ETAT : The school at St. Hubert—The school at Ruyssselede—The girls' school at Beernem, and at Namur—The criminal asylum at Tournai—Paranoia—Murder cases ; a " Jack the Ripper."

SECTION A.—THE COLONY AT MERXPLAS

What
vaga-
bondage
means.

VAGABONDAGE is a term in common use on the Continent. We use the word vagrancy ; but the former is of greater extension, for it covers not only vagrancy, but petty crime, the degenerate, psychopath, or unfinished man to whose condition this treatise is directed. (Fig. 62.)

A vagrant is a tramp or wanderer. He may be bad or merely unfortunate.

A vagabond is a nuisance to Society, and it is very desirable to remove him. While the vagrant mostly haunts the workhouse, the vagabond chooses for residence either prison or workhouse, as circumstances arise, for comfort—prison. Our prisons have their full complement of vagabonds, and these unfortunates are out of place there. This fact is now recognised, but how to put things right is not only a puzzle, but an actual difficulty, on account of the cumbersome legislation and clumsy methods which have to be encountered in destroying old and rusty traditions.

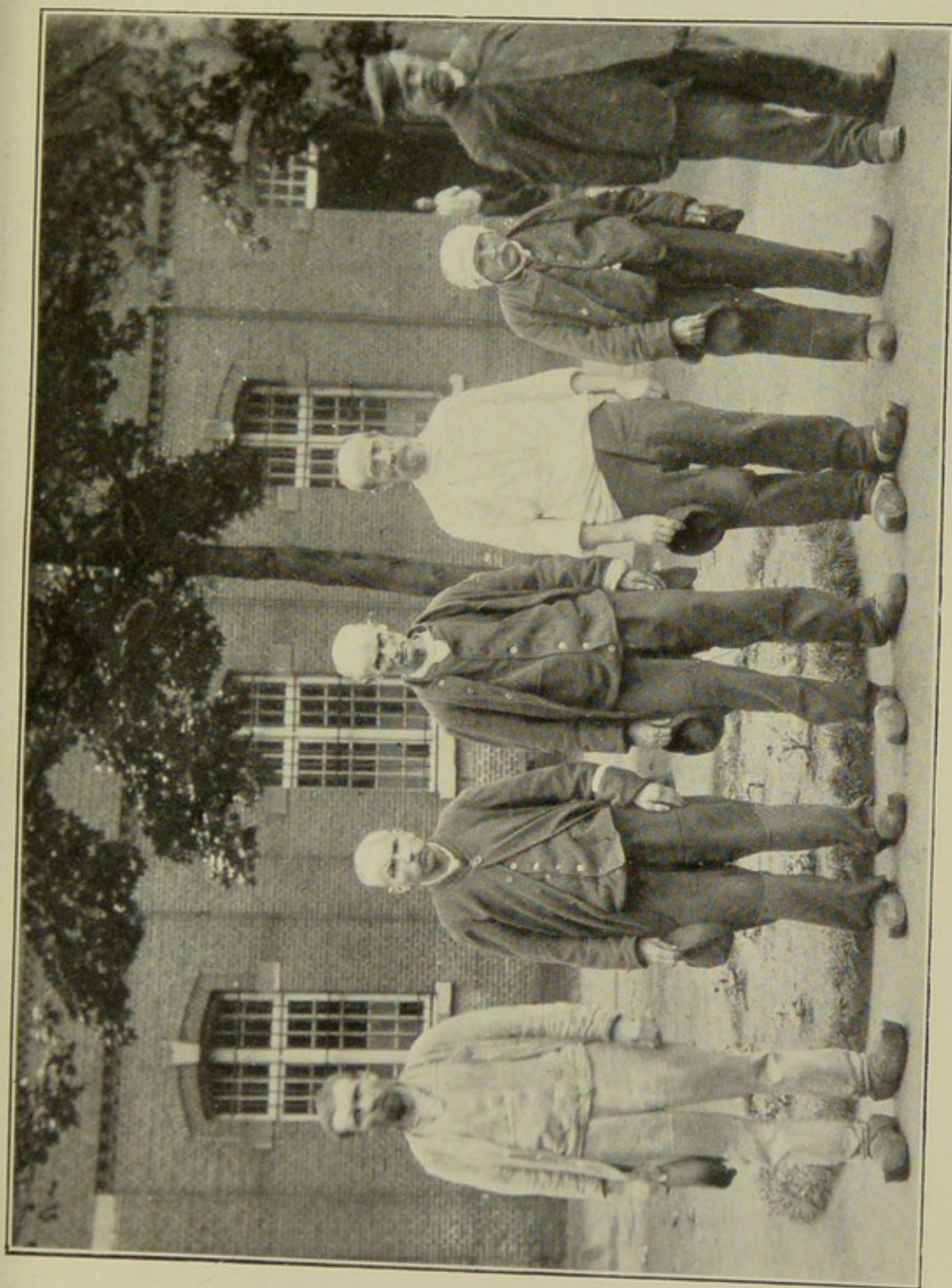
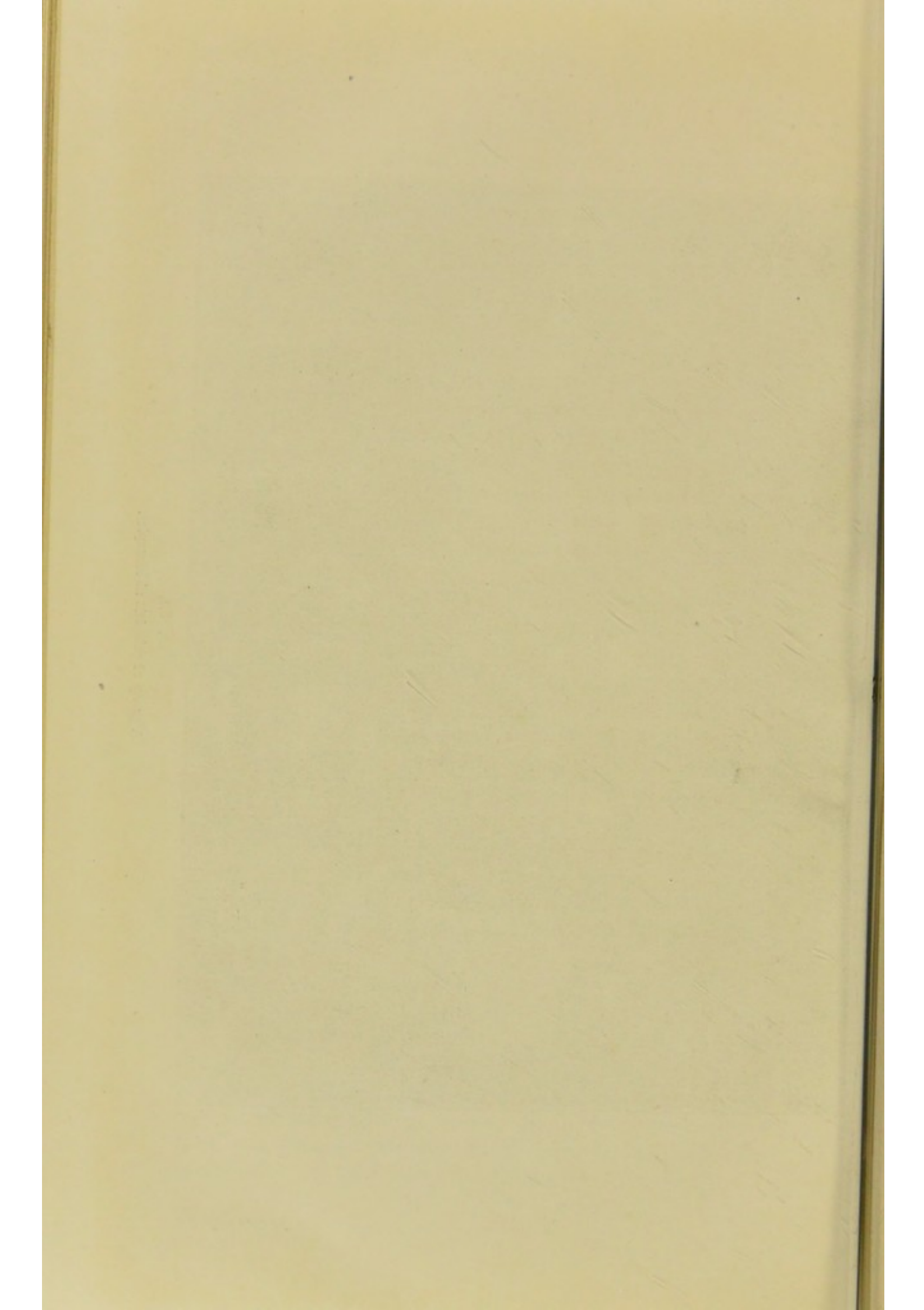


FIG. 62.
A group of colonists at Merxplas.



This problem, like all social problems, can only be decided when we act on physiological lines. In small countries like Holland and Belgium, the thrifty and more intelligent would perish, if they allowed the weedy degenerates to cumber the community. One and all, rich and poor, combine and have combined, to settle the problem on physiological lines. We, a rich country, can afford to support a large parasitic growth like degeneracy, but there comes a time when the strongest must fall before it; and it looks as if we were unconcerned till the social danger becomes unmanageable.

The problem of vagrancy.

Where we imprison five years for twopence (1909), or for 7 years in penal servitude for stealing three pairs of braces (1902), the Belgians deport these weaklings to a colony for a period varying from 2 to 7 years. The types of humanity are the same in both cases, but there is a vast difference in the methods and results. We dehumanise by the depressing effects of silent, cellular incarceration. The man leaves prison worse than when he entered it, and is soon back again. He is for ever a pest and a menace to Society.

Belgian
versus
English
methods.

In Belgium such an offender is placed far away from the din and distraction of the town. His surroundings in the country are not only placid, but beautiful. He may talk, whistle or shout. He is not locked up except for some specific fault, and then only for a very short time. If he likes to run away there is not a single fence to stop him. He may be very obstinate and require a little taming; but the culprit recognises all through that the treatment is just. If treatment is just, even though the consciousness rebel, yet the subconsciousness admits that it is right and proper. Thus in a case where a man refused to work, the Director told him to please himself, but he must go into a cell for a week to keep apart from the others. At the end of a week the man begged for work. He was allowed another week to think it over. That was physiological. There was no flogging, chaining or heaping up of punishments; no change in diet. The misguided one was taught the misery and unhealthiness of a stagnant life. A cure was effected.

The colony of mendicity is at Merxplas, under the care of M. Louis Strooband, Directeur. It is reached by steam tram from the Zurenberg station. Merxplas was in former years

Merxplas.

a free colony for the repression of pauperism, but about 30 years ago was turned into a penal colony. Evidently the voluntary system could not succeed. This is just exactly where we fail, because of our fetish—the liberty of the subject. At the same time, Merxplas must have benefited a few. Thus I saw a jolly, rotund, cretinoid degenerate working among the sheep. He told me he was 66 years of age, and had lived, off and on, in the colony since 1869. He would be about 25 when he first sought its shelter. The last few times of his admission had, of course, been for fixed periods of detention. This time it was for 3 years. When his term ends, and he has spent his little bonus, probably in drink, he will ask the judge to send him back again.

There are only two things required to make the system perfect, and the Director agreed with me—one is, the power of detention for life, or at all events an indeterminate sentence; the other is, to sterilise all who leave, so that when free they may have no chance of procreating.

Merxplas
as it is
to-day.

The approach to Merxplas is across low-lying flat country; here it is marshy, there it is sandy and wooded. Dotted about are small hamlets or farms. Everything is waste until industry comes into play and then prosperity appears. The tram-line and main road run through the colony, but a detachment of 150 soldiers are quartered, to act as sentries and make a show of force, which has not yet been called upon.

The colony covers 600 hectares,¹ and has a stock of 700 animals. In the centre is a large building, like an asylum, while around are the residences of the Director, doctor and other officials, besides four large blocks, in each of which 600 men sleep. All the buildings have been put up by the colonists. They are red brick and of good appearance. (Figs. 63 and 64.)

Merxplas is not the only *Depôt de Mendicité*, though it is the chief one. At Hoogestraten and Wortel, a few miles off, there are two minor colonies called the *maisons de refuge*. These are not penal but voluntary. They are either for men out of employment, or for the sick. As these colonies have so many chronic invalids, they are necessarily a burden financially.

¹ A hectare is 10,000 square metres.

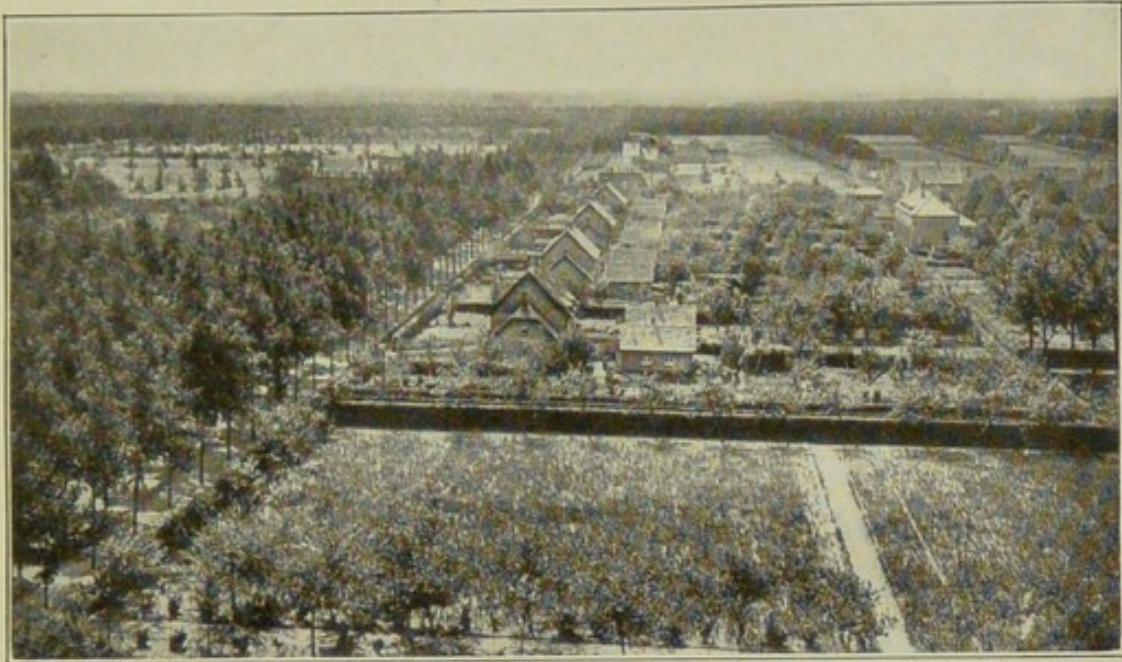


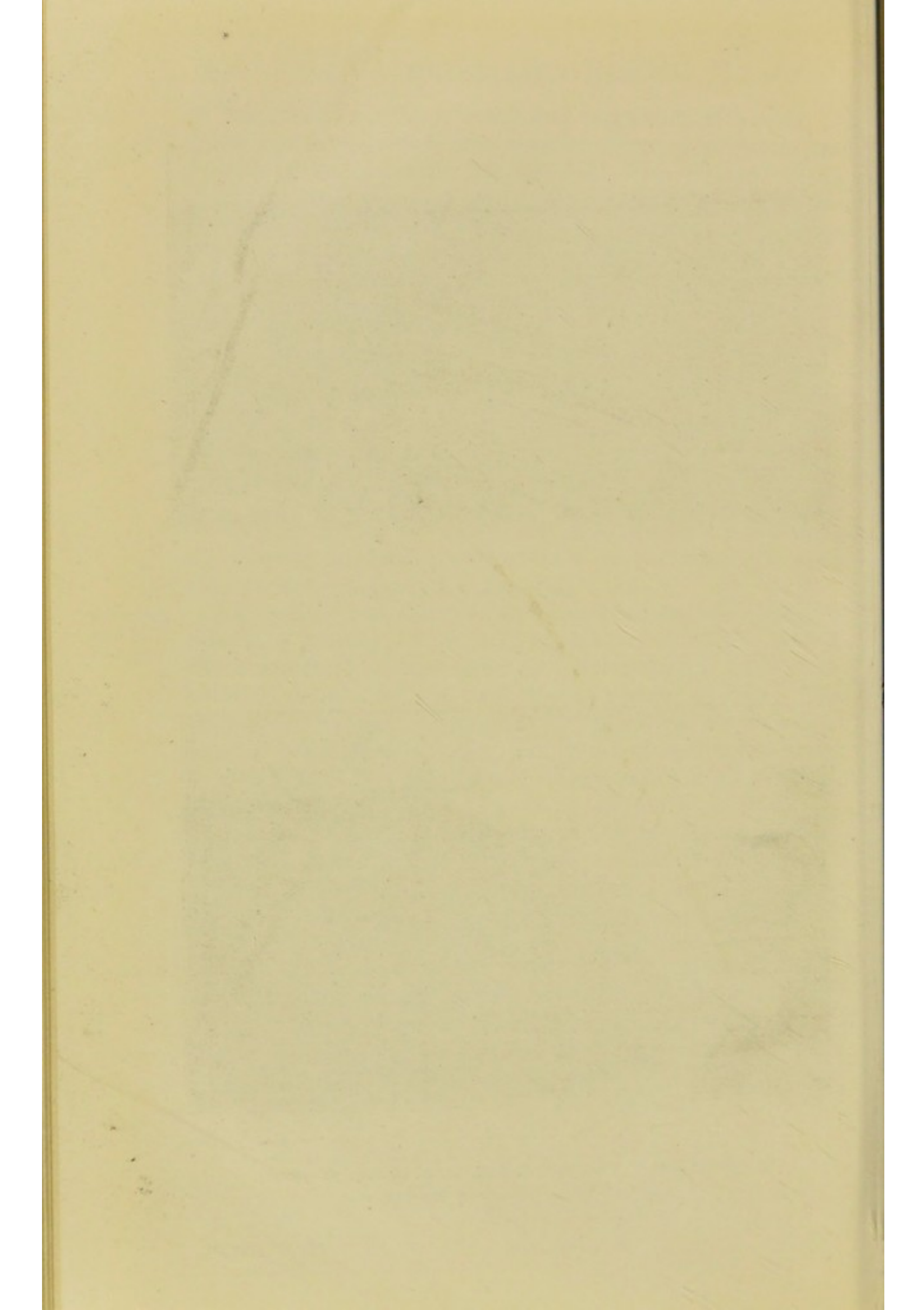
FIG. 63.

A view of part of the colony at Merxplas.



FIG. 64.

The main buildings. I am indebted to M. Evrard for these photographs.



Finance has always to be seriously considered in any large social undertaking. Does it pay its way or does it entail a heavy loss on the community? is the first question. The Belgians divide the men up into—

The financial side of the problem.

(a) *Valides*, or healthy workers, and these cost '66 of a franc, or 6½d. a day;

(b) *Invalides*, or those incapable of work, but criminal or weak-minded;

(c) *Infirmes*, the sick and incapable.

The two latter cost 1.50 fr., 1s. 3d. a day.

The State gives no subsidy, but pays one-third of the keep per man. Another third is paid by the Province, and the remainder by the *commune domicile*; that is, the commune where he had lived for the previous 3 years.

The workers receive 10 to 30 centimes (1d. to 3d.) a day as wages—one-third of which they may spend on luxuries and one-third is kept as a bonus for their liberty. Any man who earns £16, whatever his sentence, may demand his liberty.

The total expenses of administration at Merxplas amount to 51,000 fr. (£2,040) per annum, 1909.

	Fr.
The total receipts are	1,100,000
The total expenses are	783,328
Profit balance (1909)	316,672

The *maison de refuge*, which consists of 90 *valides* and 250 *infirmes*, cost in boarding the above 393,105 fr.

	Fr.
Their total receipts are	505,682
Their total expenses are	658,875
Balance on loss (1909)	153,193

The profits made at Merxplas have to make up this deficiency.

The total wages earned = 181,519 fr.

The extra for special work = 23,791 fr.

The bonuses on leaving = 363,000 fr.

The cost of board at Merxplas is as follows:—

	Fr.
3,675 <i>valides</i> at '66 fr. a day	885,307
1,745 <i>infirm</i> at 1.50 fr. a day	955,387
Total (1909)	1,840,694

	Fr.
The total receipts from all the colonies are	2,466,170
The total expenses are	1,950,207
	<hr/>
Balance, profit (1909)	515,963

Classifi-
cation of
inmates
and other
details.

On April 1, 1910, there were in the morning 5,564, and in the evening 5,566, residents; the reason being that on that day 15 came in and 13 went out.

During the whole year (1909) there were :

4,505 entries and
4,437 departures.

There are always a good many escapes. The most on any one day was 17, but on an average 3 to 4; a total of 1,237 in the year. Most of these are caught and brought back, receiving slight punishment. We all know what a serious offence it is to escape from prison. The Director does not trouble about it, for they do not wish to compress such explosive energy, lest it turns into another form, namely, revenge against those in control.

The average residence is $22\frac{1}{3}$ months per man.

There are nine classes, as follows (April 1, 1910) :—

(1) Juveniles (18 to 21) (See Fig. 65)	39
(2) <i>Invalides</i> , able to work a little	1,336
(3) <i>Invalides</i> , incurable	153
(4) <i>Internés primaires</i> , confined but not in cells	58
(5) <i>Récidivists</i> , degenerates, weak-minded, etc.	301
(6) Incendiaries	79
(7) Pederasts, immoral, <i>souteneurs</i>	89
(8) Dangerous	190
(9) The better ones, <i>La Grand Cour</i>	3,521
	<hr/>
	5,766

Most of these are Roman Catholics; there are 64 Protestants and 2 Jews.

In 1909 there were 158 deaths; of which, heart disease was the chief cause—36; while tubercle accounted for 28.

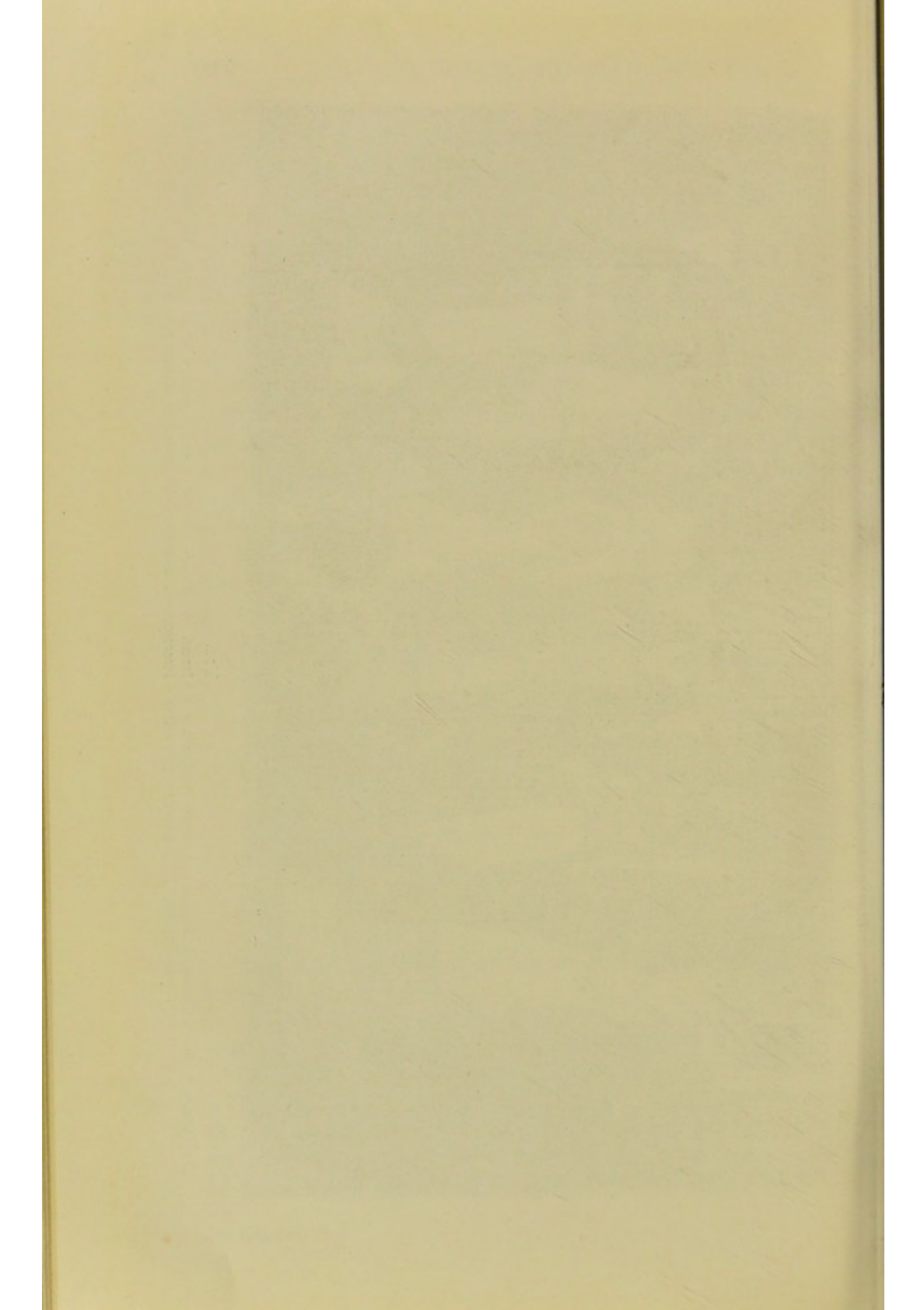
Punish-
ments.

There are on the average 2 punishments a day. There is a block containing 50 ordinary prison cells. In extreme cases the diet is bread and water for 9 days, but then only on alternate days. In our country we continue this punishment for 15 days, with a dinner or perhaps only low diet every fourth



FIG. 65.

The Juvenile Adults or Gamins at Merxplas. They are employed on the farms. A surveillant or two unarmed soldiers act as guard. The boys are very well behaved. In England we give cellular incarceration, sometimes for years, to similar youths.



day. Bread and water is an absolutely non-physiological diet for want of fat; very often the doctors stop it.

The first section I visited was the *Grand Cour*, where there were about 3,000 of the more orderly men. I saw 1,500 in a large refectory, consuming their nourishing vegetable soup. The walls were adorned with improving mottoes in French and Flemish. They find by experience that vegetable diet is best, and only give meat twice a week; 20 kilos to 100 men.

Visits to
the
sections.

I walked among the 3,000 human wrecks, selecting cases for examination which seemed interesting. There were 3 or 4 unarmed men in uniform to take charge of the gates, and several *hommes de confiance*, or men selected from the mass for responsible positions. There was no disorder, at the same time it was a seething mass of misery and degeneracy. "All children," said the Director frequently; and so they are—unfinished.

In the bath house I met a man aged 66, who had worked 20 years in Soho as a jeweller. He had lost his sight, and being reduced to absolute destitution, applied to be sent here. He is in for 2 years. If he cannot succeed selling newspapers in Antwerp, he will come back. He is a confidential man, and says that the food is good, sympathy is shown, there are no irritating rules, no harshness, and nothing to complain of.

I was agreeably surprised looking over the previous histories of the medicants to see that neither Law, Divinity, nor Medicine had representatives here.

The incendiaries and immorals are kept in a section quite apart from the others. Some incendiaries are monomaniacs. One nice old man, who was in for 7 years, said he could not resist setting things on fire. He was of good family, but himself a drunkard. Another incendiary received 10 years in prison for firing a rick. This was revenge. After his imprisonment he could get no work, so he was sent here for 7 years.

The pederasts cannot be discussed here, but they represent every variety of depravity, even to violating the dead. When is that lethal chamber coming into use?

Souteneurs are those who live on the earnings of immoral women. In Belgium they live in pairs. In London, through the mistaken philanthropy of some politicians in helping the

scum of Europe to settle among us, this has become an industry as lucrative as it is cruel. One *souteneur* I saw was only 20, and had been kept for 5 years by a woman 10 years his senior. Abnormal! Out of 4,505 entries in 1909 there were only 8 *souteneurs*.

The other sections were of great interest. There was the hospital for ordinary cases; here was another for absolutely helpless and paralysed patients. Another was for epileptics.

The section given up to recidivists was by no means unpleasant. The men in uniform, only 3 or 4 to 300, had perfect moral control. They certainly were full and overflowing with every form and type of degeneracy; but all manageable, pleased to see their Director, and interested in their visitor. Among them was an American, weak-minded and stranded. The father was placed in an asylum 14 months after this young man was born!

A special feature is the Ateliers and Metiers; trades and workshops, smithies. Everything seems to be made here, portmanteaus, pearl buttons, sofas, harness, bookbinding, whatever you choose to mention; all done here. The profits come to 400,000 francs—£16,000.

Lastly I had a walk round the farm; pigs, sheep, poultry, butter and everything else; large, humped *steers* being employed instead of horses. (Figs. 66 and 67.)

The
problem
solved.

My six hours were up, and the last steam tram was starting for Antwerp.

To sum all up, it seems as if Belgium has solved the problem of mendicity; poverty, weak-mindedness, petty crime, and moral depravity. Those opposed to this system, say "once a colonist always a colonist"; which is no fault of the system, but consequent on the material they have to work with. This is an argument in favour of the indeterminate sentence, because as soon as the men return to their former environment, they return to vice.

Religious
effort.

Though they are very industrious in religious effort, they cannot make many conversions dealing with such masses; nevertheless, the Roman Catholic faith does get a very firm grip on the poor and deals with them wisely.

The other matter needed is sterilisation. If all this be

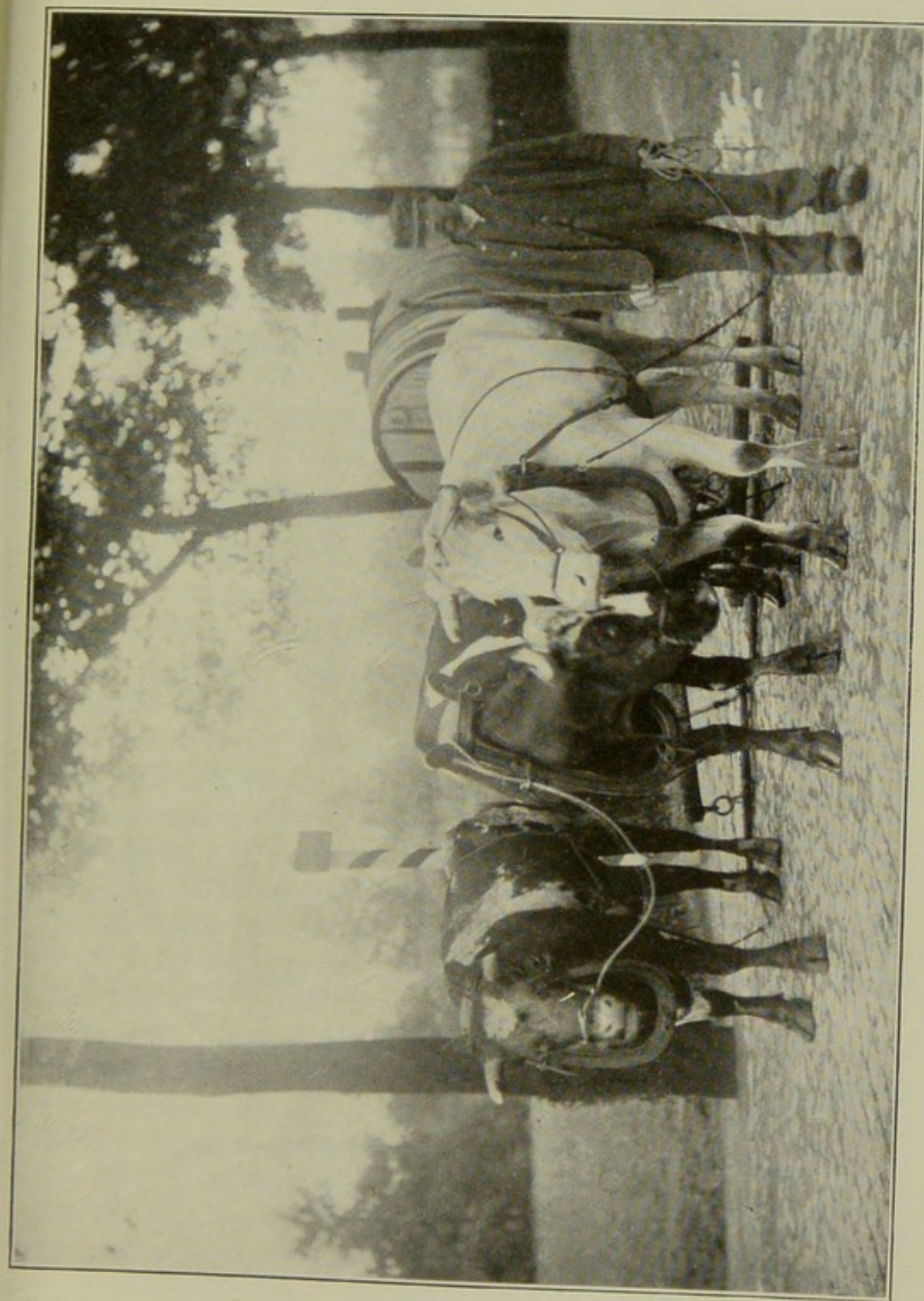
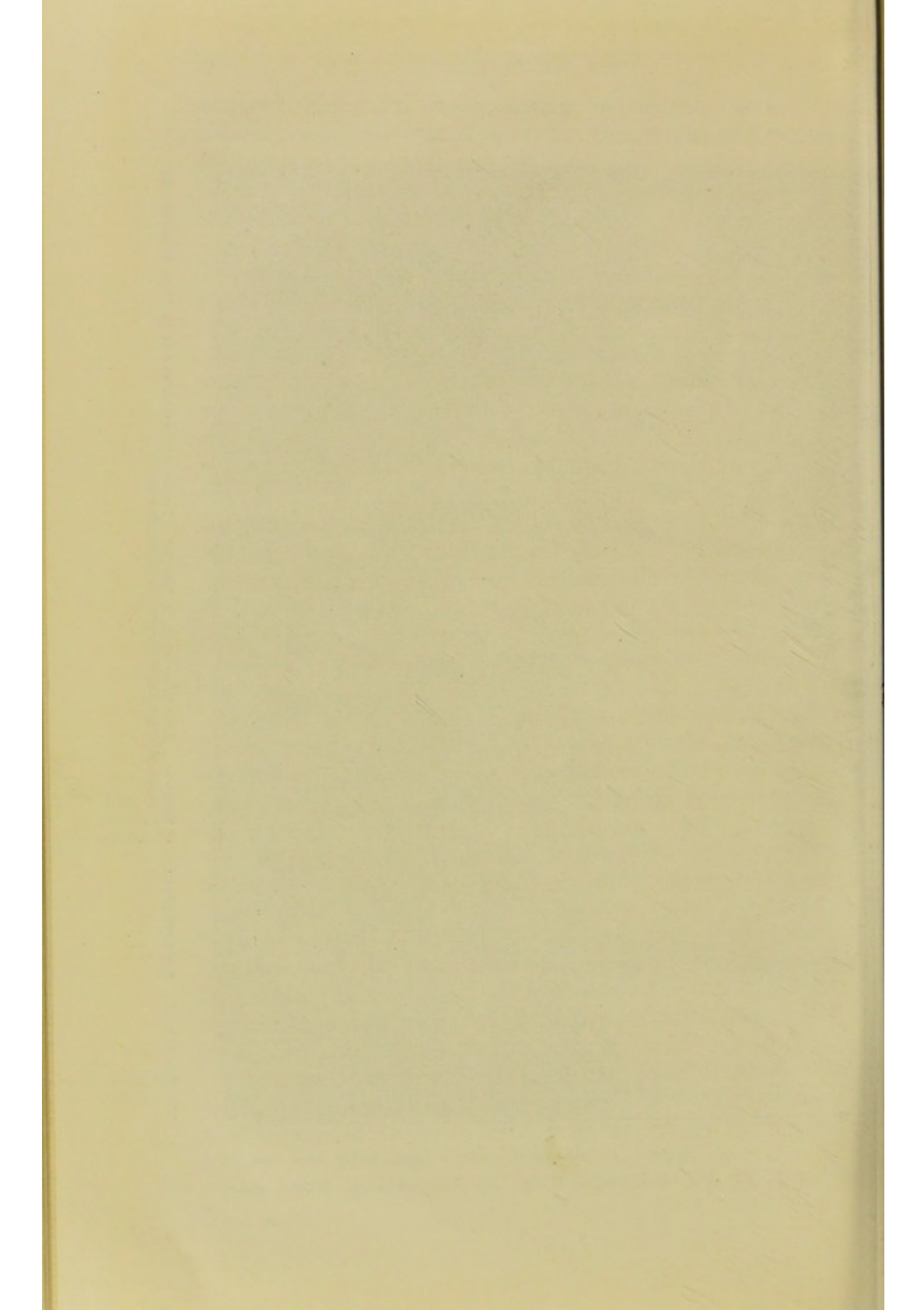


FIG. 66.

Colonists at work. A picturesque scene at Merxplas. I am indebted to the Minister of Justice at Brussels and to M. Louis Stroobant for these photographs, numbered 3, 62, 65, 66 and 77.



sad and depressing, why pass it on to another generation, when we can stem the current now ?

The men are happy and content. Their mental range is very limited. It takes but little to make them happy and still less to turn them into savage beasts. They are but children, easily moulded for good or for evil, but as a stock to breed from hopelessly bad.

SECTION B.—THE HISTORY OF REPRESSIVE MEASURES

Here is a short historical sketch of the efforts made in Belgium for the suppression of vagabondage.

So far back as 1563 the Counsel of Trente recommended special asylums called *hospitaliers*. Previously to this, vagabondage was treated with corporal punishment in every country in Europe. In the same year, Francis I ordered workshops to be opened for healthy beggars.

In 1547 Henri II placed the sick poor in charge of the parishes, and built almshouses (*Maisons de Dieu*).

In 1550 the first House of Correction was opened in London, and later they were established all through the provinces. France followed suit in 1561, under the Chancellor Michel.

Towards the close of the sixteenth century, houses of detention (*Rasphuysen*), and houses of correction (*Spinhuyzen*), were commenced all over Europe for professional vagabonds.

In Belgium foreigners were whipped and expelled from the country. France was dilatory in these matters and only began official depôts of detention in 1749. At Ghent and Villevorde, the present prisons were built in 1772, as houses of correction.

In 1789 there were 33 houses of correction in France, containing 6,000 beggars. There were also 2,185 workshops for assisting the workless poor. The French charged the whole expense to the State, considering that the relief of poverty is a debt which the nation should pay. But this was revoked in 1808, and the code of Napoleon ordered that all prisoners on release should be shut up in depôts.

About this time, Belgium opened depôts in connexion with forestry and agriculture, and other industrial institutions, so arranged that they did not interfere with private enter-

prise, having so far back as 1664 met with opposition from the trade guilds of Brussels. This opposition from free industries caused Joseph II to close the labour colonies at Ghent. As a result, the Dutch government, which appeared to work in harmony with Belgium, substituted agriculture for other industries.

In 1818, the Dutch General, Vanden Bosch, under the patronage of Prince Frederick, founded the Dutch Society of Benevolence (*bienfaisance*). It acquired the colonies of Fredericksoord—Willemsoord, Ommeschans and Veenhuysen. In 1822 the society bought 503 hectares of uncultivated land at Wortel, and placed poor families to cultivate the land. They had a contract with the Government to take 1,000 healthy beggars at a subsidy of 35 florins per head.

Assistance as rewards, not as alms.

A rule dated January 28, 1823, states that assistance given to the poor should be in the way of rewards and never as alms. A commune, or a military company, or a labour union, might send an indigent family to Wortel by subscribing 1,600 florins. The family would get land, a house, two cows, sheep and farm implements. They were rewarded with copper, silver or gold medals according to their success. Undeserving colonists were expelled.

Foundation of Merxplas, 1823.

On January 18, 1823, a Royal decree ordered all vagabonds to be confined in depôts. In the same year, the Dutch society bought 516 hectares of land at Merxplas, for 6,650 florins, in order to establish a repressive colony for beggars who had been previously convicted. On October 12, 1825, a Royal decree ordered that paupers, whether aged or infirm, might enter the depôts; those, who were able, were compelled to work on the farms, with a view to reclamation of character. Schools were established for pauper children. Unfortunately the vagabonds, who were often sent with their families, showed little desire to work, and being town-bred had no knowledge of country life. They often let their cattle die from neglect and starvation. These results were very disappointing and subscriptions fell off, until the financial position of the colonies in 1830 was very grave.

Government support to Merxplas, 1830.

The question of mendicity became prominent in the young kingdom of Belgium. Therefore the Government subscribed 6,000 florins per month from December 31, 1830. At this

time there was a population of 2,285 at the chief dépôts ; but there was much opposition to this law of 1833, which enforced detention and called upon the communes to supply financial support. In 1844 there were 3,915 colonists. To show the cost of these institutions, the dépôt of Cambre cost the city of Brussels 250,000 francs in 1846. The report of a commission in 1848 was very adverse to the Government. There were great complaints of the competition of colony labour with outside labour, and many other abuses. Provincial dépôts were in reality almshouses. It is satisfactory to know that there were efforts towards prevention, for there were reformatory schools.

An important change was made on April 3, 1848, whereby the colonies were only to be for adults ; and the Government erected special establishments for vagabonds under 18 years of age.

In addition there were houses of refuge, with voluntary admission restricted to 30 days, but if they returned during the year, they were detained for 6 months, and were compelled to work to defray the cost of their maintenance.

House of
refuge ;
voluntary

A royal commission of April 5, 1853, considered that it was most important for the sexes to be separated, and that it was demoralising to have these dépôts in the towns. Previously sexes were not separated, and no regard was paid to keeping the young apart from the old. They evidently corresponded to our workhouses and combined all the evils involved in them.

No change was made until March 6, 1866, when it was decreed that all beggars over 14 years of age should be condemned to imprisonment from 1 to 8 days for the first offence, and afterwards 8 to 15 days, till, in the case of recidivists, it might be extended up to 6 months.

Imprison-
ment of
beggars,
1866.

The same law separated the strong and healthy from the infirm. It suppressed some of the dépôts in the towns and changed them into almshouses for the aged.

On March 28, 1870, the Government acquired the colonies of Merxplas, Ryckevorsel and Wortel, at a cost of 800,000 francs. Merxplas could, at this time, only accommodate 683 inmates and was a perfect desert.

The
Govern-
ment
bought
Merxplas,
1870.

Hoogstraeten was set aside for vagabonds over 18, and the colony of Bruges for the infirm.

The population of Merxplas grew from 2,924 in 1890, to 5,110 in 1905, and now in 1910 it amounts to over 5,600.

SECTION C.—THE TREATMENT OF WOMEN

I have largely dealt with this problem as if degeneracy were more conspicuous amongst the male population. This is so. Among women degeneracy is not so apparent. They are not driven to the same condition of idleness or worklessness. The women of this type are either cared for at home, or drift into prostitution. In Belgium they have three ways of dealing with female delinquents, in a manner which is uncommon if, indeed, it exists in any other country.

Prison.

There is, of course, the prison. In the common gaols of the second class, as at Bruges, men and women are kept in different blocks. They all wear large linen caps, or masks, which pull right over the head with only two eyeholes. Thus their faces are never seen, and the solitary cellular confinement is considerably aggravated. In Belgium the sentences are severe, and the punishments are rigorously carried out. The actual *régime* is, however, milder than with us. The women are looked after by nuns, and the system is run on religious lines. Bruges prison is extremely dingy, and convicts are detained there for 5 or 10 years, or even *en perpétuité*. Several women are here for murder, infanticide and murderous assaults. If a prisoner, man or woman, after 10 years wishes to give up the cellular system, they may be sent to other prisons, where masks are laid aside and they work together with a certain amount of liberty. The men go to Ghent and the women to Mons. In the women's ordinary prisons they even do their laundry work in separate cells.

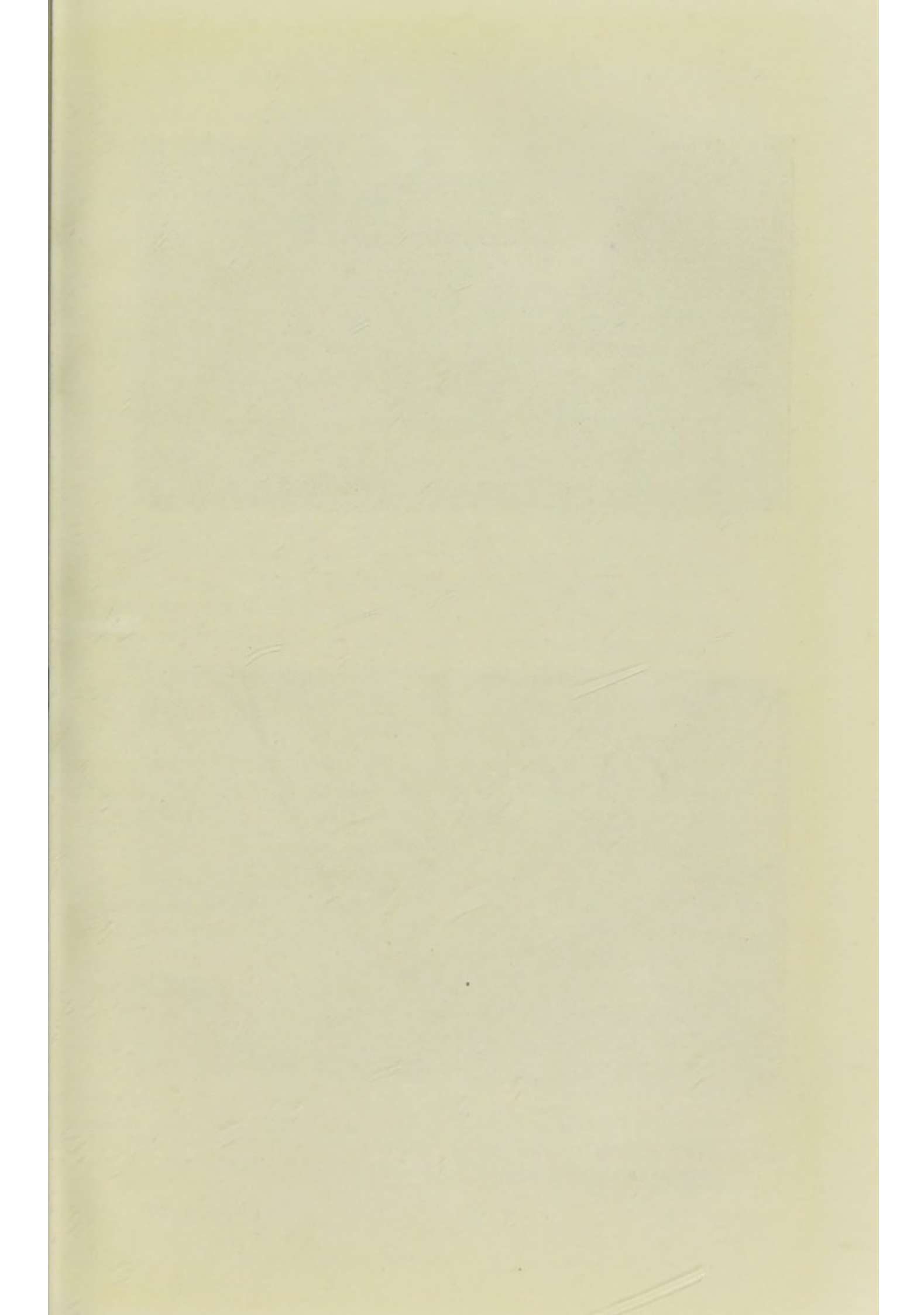
The prisoners are exercised in little courts separately, so that they have not even the cheer of seeing each other.

In Bruges prison there were only 26 women, and 173 men, on the day of my visit. The prison population of Belgium is not large.

House for mendi- cants at Bruges.

The only corrective penal institution for women is at Bruges. It is called the *Maison de Bienfaisance et de la Mendicité*.

It is a large building in squares with intervening courtyards. It is not a place of repression but of assistance, and everything



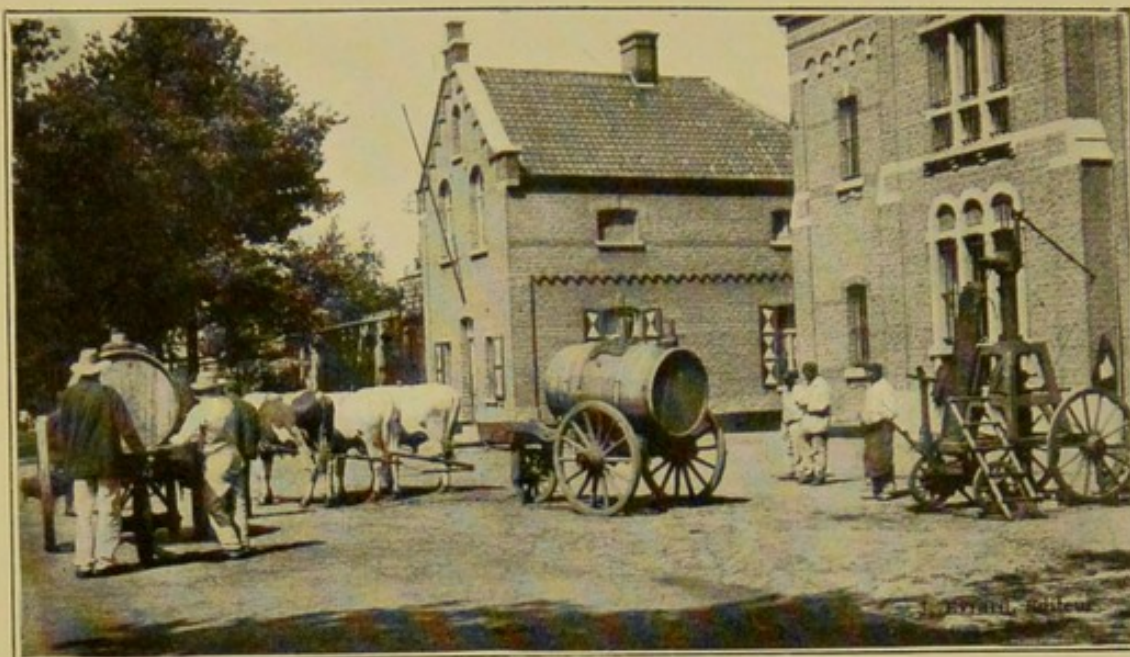


FIG. 67.

The farm at Merxplas. Mendicants at work.

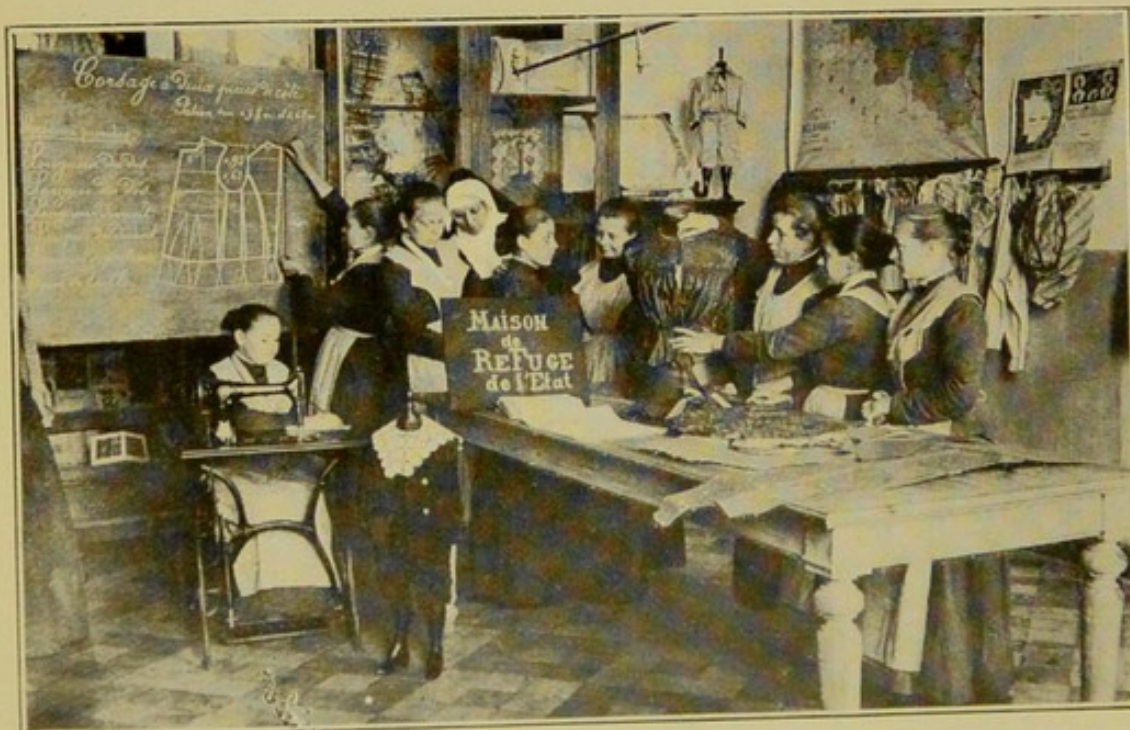


FIG. 68.

Girls over 18 in the Refuge at Bruges. They are receiving instruction from the Sister in dress-making. I am indebted to the Director, M. Heusschen, for this photograph.

[To face page 305.]

is made as beautiful as possible, especially with flowers and trees.

It is on the same lines as the colony at Merxplas. Women are sent there for three things—

Mendicité, or begging ;

Prostitution, and

Vagabondage,

which usually means in our legal language “without visible means of existence.”

It is divided into two sections, which are kept apart :—

One for girls from the age of 18 to 21 ; and the other for adults. Of the young girls there were only 32, the adults made up a total of about 400. The women are sent here by a *juge de paix*, the sentences varying from 2 to 7 years as at Merxplas.

Many women come here with babies. Some of these are unmarried, others have been deserted by their husbands—*abandonnées*. The babies are beautifully kept and well fed. In one court, beautiful with flowers, there were 14 and the mothers were quite jealous as to which baby I admired the most.¹

The management is under an official committee of 8, while a voluntary committee, numbering about the same number, *un comité de patronage*, have access whenever they wish and render assistance when the women are discharged. Many of the poor women get situations, but the majority being of the degenerate type return to their evil ways ; as the nuns said—“Who will have them ? What else can they do ?”

All kinds of useful work are taught ; in fact, I never saw more beautiful Turkey carpets than they were weaving by hand looms.

Of course, many of the mendicity cases are invalids and epileptics. Naturally such cases are detained for longer periods.

The third institution for women is the *Maison de Refuge*, and corresponds to Wortel. (Fig. 68.)

The house of Refuge at Bruges.

This is an old building, dating from 1430, and here again the nuns or sisters, 16 in number, are in charge. I never felt more admiration for womenkind than for these holy women.

¹ By contrast read the account of our workhouse babies. Chap. vi, p. 107.

Girls over 18 are sent to this house for cure, not for punishment. They are not *condamnées*.

There are in addition a good many old people and several babies.

In both of these establishments the babies are kept until they are two years old. Then the *Comité de patronage* places them with friends or in voluntary orphanages.

The inmates of these two institutions get meat 4 times a week—14 kilos to 100 persons; and twice a week lard in the same proportion.

The women are kept here for 1 year; but if they get a situation may leave with the permission of the Minister of Justice after 3 months. If they wish to remain longer than a year the permission is obtained at the same source. As the Minister can give his whole time to the work, and has not to run about the country vote-catching as in the case of our Cabinet Ministers, the work is much more efficiently done. I wonder when we shall attend to the good of the people, instead of "the will of the people," which is a fictitious quantity.

SECTION D.—THE TREATMENT OF YOUNG CRIMINALS IN PRISON

The Central Prison at Ghent is a prison of the first class. It is very large, built in the form of a huge octagon, so that there are 8 distinct sections. It is interesting to know the careful manner in which the Belgians treat the penal question; I shall therefore detail the different sections, each of which is entirely shut off the other.

Section 1 is for detention up to 6 months, and is correctional.

Section 2 is for prisoners confined up to 10 years, but who are physically or mentally unfit to stand solitary confinement. Hence these men work together in shops, and a little freedom is winked at.

Section 3 is for convicts who have done 10 years in other prisons in cellular confinement and wish now to work together. It is not correctional, but *criminel*.

Section 4 is correctional.

Section 5 is the hospital.

Sections 6 and 7 are for juvenile adults, who are divided into two categories :—

- (a) Responsible boys, aged from 16 to 18, who remain until they are 21, but not after.
- (b) Boys of bad character, some of whom are sent from the schools, which for the time being we will consider as reformatories. These boys are low and immoral, and cannot therefore be retained in the schools. Other boys are here for long periods ; 10, 20 years, or even for life, for murder and other serious crimes.

The former boys join in workshops and classes of instruction, whereas the bad boys are kept in cellular confinement like ordinary convicts. We visited some of the bad boys, of whom I am glad to say there were only 38, and of these only 15 were undergoing punishment. There were about 200 of the good boys, and I saw them in their class-rooms. They were fairly content, and a healthy better developed type than our "juvenile adults." This is, of course, because they have as a rule a better start in childhood.

I was pleased to find them all blessed with good teeth and broad palates. Memory was good, most remembering to 4, and I am inclined to attribute this to the very small amount of parental alcoholism. Thus in a class of 36, only 3 had alcoholic fathers and none had alcoholic mothers. There is but very little chronic alcoholism in Belgium.

The Director, M. A. Lebourg, is on very good terms with the boys, and as they are in such long residence, until the age of 21, he knows them very thoroughly.

This is clearly the pattern which was copied by our prison commissioners in establishing Borstal. It is, however, difficult to be reconciled to so many of these lads, whom the Director says are really good at heart, being treated on prison lines.

All boys over 18 in Belgium who break the law are sent to prison, not to this educational institution. I confess I don't like prison for any lads under 21.

Unfortunately some of these lads are in for grave crimes. Two are here for killing their mothers. They were only 16 years old at the time and are in for what is termed perpetuity. They now receive education till they are 21 and then pass to

ordinary prisons. But those who are in for perpetuity may be released in 10 years if the Minister of Justice consents.

SECTION E.—LES ECOLES DE BIENFAISANCE DE L'ETAT

There are State schools in Belgium for both boys and girls, who have committed some trifling crime, such as stealing apples or small sums of money ; for children whose surroundings are apt to drive them into crime ; or who are *abandonné*—in our country we term it deserted by their parents.

The word *bienfaisance* means something different to charity ; it means literally, doing good. The children who enter these schools are not then convicted but rescued as they are living in the danger zone. The Belgians draw a strong line between the youths who are *condamné* and go to prison, and those who are *acquit* but sent to the school.

The girls' schools are under the care of nuns or sisters, while the boys' schools have Directors specially adapted to the work, but depending always on the religious assistance of the priests or brothers. It is only in this way that the many difficulties can be overcome.

There are 2 schools for girls and 3 or 4 for boys. There are 9 cantons in Belgium, and it is felt that there ought to be a school for each canton ; for this reason, that a boy may be sent from a canton devoted to textiles into a canton which is purely agricultural. It is found by experience, whatever biologists tell us, that he is like a fish out of water ; that he has a marked tendency towards the craft of his parentage.

Another peculiarity about all these schools is that there have to be reduplicated classes—one set for the Flemish, who occupy the north of Belgium, and another for the Wallon, who occupy the southern half of Belgium. The Flamandes can speak French as well as their own dialect. The Wallon can only speak French.

The classes vary in number, never exceeding 40 in a class. They go slow. There is no forcing the pace. Why should they indeed ? They follow the golden principle that the speed of the fleet is that of the slowest ship. There is no rivalry in matters of statistics or awards. There is only one

object in view—individual care—the desire to send out each boy as thoroughly equipped for the battle of life as if he had a good home. When the State adopts the child, as in Holland, it looks after him till he is 21. I do wish we could introduce that parental system into England. It is the key of the problem. We keep young people in reformatories till 16, and then cast them loose on the world, often without a home or even a friend. What can a youth of courage and independence do except he become a sportsman—a criminal, in fact? My friend XH511, the notorious ex-burglar, owes much of his fall to our faulty reformatory system. If he had been at one of these Belgian schools he would not only have fulfilled his mission as Cabinet Minister, but been a second Gladstone or Pitt.

The school at St. Hubert admits boys between the ages of 16 and 18. The school at Ruysselede takes children under the age of 13; while that at Ypres takes children between the ages of 13 and 16. These ages are the ages of arrest, if I may use that term; but all schools keep them till they are 21; or if they leave earlier it is because satisfactory situations are obtained, or their homes are such that they may return with safety. Thus a youth, aged 19, who drove me across country to the railway station, was returning home to his father to learn a profession. He was in the school on account of desertion.

THE SCHOOL AT ST. HUBERT

St. Hubert is the tutelary saint of sportsmen and was in his early days a profligate prince, who actually hunted on Sundays and fast days. One Good Friday when hunting he was confronted by a stag with a cross growing between its antlers. He was at once converted, and abandoning his worldly position, giving his wealth to the Church, he became a monk. He founded the church and abbey, which is now so profitably directed to the assistance of youths who have gone astray. The abbey is a beautiful building and with a little adding to is well adapted for the school.

The Directeur, M. A. van Waesberghe, is an engineer by profession, and has his whole heart in the work. There is

perfect freedom. At any hour he is willing to receive the boys; they regard him as parent, not as governor. There are about 300 in the school and he knows every one individually. His aim is family life. He does not at all adopt the view of small parties for family life, for it means more *personel*, with the chance of not always securing the best *personel*.

There are two divisions in their system of education—

Agricultural, in which about 80 are engaged; and

Trades in which 210 boys are occupied.

The trades work well, especially the electric engineering. For instance, last year 5 boys went up to Brussels for examination and passed. All were placed in situations. If private employers do not come forward, the Government gives them employment.

I noticed that they wisely aim at a high degree of skill in the workshops. Thus in tailoring they train the boys to be cutters. An expert comes from Brussels and they have classes for the theory as well as practical work. One lad was leaving, and his wages will be high as he is clever. A cutter gets 10 to 12 francs a day, whereas a journeyman will only get about 3 francs. Among the trades, there were—

Twenty-six tailors;

Twenty shoemakers, and these were likewise employed on high-class work;

Fifty-one smiths;

Seven tinsmiths;

Seven carpenters;

Eight cabinet makers and so on.

The boys have good teeth and broad palates. They are a shorter race than ourselves. For instance, the infantry enter at 1.56 metre, which is 5 ft. 1½ in. while, the height for cavalry is 1.70 metre or 5 ft. 7 in. They are, however, very sturdily built lads.

The Director and the Doctor are of opinion that cigarette smoking causes decay of the teeth. It poisons the stomach and alimentary system, and by lowering the nutrition generally breaks down the normal defences, consequently the teeth go early. My own opinion is that our boys have such bad teeth because of the deficiency of milk in infancy and the use

of the many pernicious artificial foods so freely advertised. It is largely laziness on the part of our mothers that induces the use of them. It would be unnatural to young foreigners not to smoke, and these boys are allowed a cigar on Sundays when they walk out. To stop a cigar is one of the punishments.

It is not only interesting but important to compare these, the worst children of Belgium, with our average children in Council schools, as concerns the teeth. See what one of our most distinguished medical officers reports, 1910—

“The actual result of the inspection conducted during the year is shown in tables. One of these relates to seventy schools, with an aggregate of 71,762 children on the registers. Out of that number no less than 5,635 were found to have defective teeth, and 2,231 to have defective vision or eye disease. The examination in these seventy schools was only made of children commencing, leaving, and presented by the teachers. Another table relates to twenty-eight schools, in which all the children in attendance were examined, and it was found that, while 10,346 were normal, 2,581 had defective vision, 575 disease of the eye, and 19,350 had defective teeth.

“It is noteworthy that out of 240 children examined in the open-air schools only fourteen possessed perfectly healthy sets of teeth.”

This has now become a national question. I fear it is not due merely to smoking nor preventible by the early use of tooth brushes. It is a matter of enfeeblement of stock—the tiredness and physical decay of the children of England. The remedy lies in good milk, more nursing, and the stopping of artificial foods by stringent legal measures.

The Director Monsieur van Waesberghe, divides the boys into three categories—

- (a) The very intelligent, of whom there are many.
- (b) Those of average intelligence—medium.
- (c) The less intelligent and the weak-minded.

Probably the latter predominate, but any who are at all imbecilic are sent to asylums.

I learnt to appreciate the fact, that a large number of the latter class may learn to read and write, and then quite forget both arts. It was a new way of looking at education. In our country a boy reaches the Vth, VIth, or VIIth Standard, and when he is in prison at 16 or 17 it is found he is only at Standard II or III. M. van Waesberghe considers that the early education may be as it were forced in, but on account of lowered intelligence cannot be retained. Of course he

adopts the view of not forcing education or technical instruction. At once he stops the brain work and trains them to manual tasks. I saw for instance a tiny boy of 18, who was rickety and probably had meningitis as an infant, and is now without memory. He had been a child of the State since the age of 12. His brother likewise, who was a year older, was stunted, and had no memory of home, parents, or how many brothers or sisters there were. By way of test in these cases the Director would draw a square, take away the picture and ask the boys to draw it. The weaker boy could not do so, and at first neither of them could draw the pattern of an envelope. As education proceeded the elder boy could remember to draw the envelope pattern on the next day. The younger boy never could carry his memory so far. Yet neither of these boys are imbeciles. They will never rise above the simplest manual labour. At 21 they must go, but if unable to make a living they will be sent to Wortel or Merxplas. They will not be allowed to drift into crime as in our country.

There is no difficulty with the boys in their conduct or behaviour. They may once have been bad, but when they go free at 21 they will nearly all be good.

Only about 5 per cent. of the prison population have previously been in the schools, or in the prison at Ghent, which compares very favourably with our reformatories and Borstal treatment. The sole reason of this is that the Belgians take the problem seriously, and keep the boys till they pass over to manhood. At present we play with the problem. For instance, the Directors at Ghent and St. Hubert were shocked at our method of searching the boys in prison before they go to their cells. They never search any unless something has been stolen. They say that our British way must destroy all self-respect and confidence. The Belgians try to bring out their best qualities, and trust the lads. The Director leaves things about, so that the lads could steal, but all the time he is fortifying their resisting powers. His method proves successful. Boys who have been petty thieves obtain control of these impulses. I suppose it would never do for British officials to work on these lines. It would destroy the sporting instincts. Such methods must be left entirely to religious agencies ;

but the Salvation Army, and others, have shown that their way is the only way to cure crime.

Punishments are few. There are cells. They were all empty and are but seldom required.

The Agricultural school is situated about 2 miles further in the country, on high ground, with the beautiful surroundings of the Ardennes. There are 80 boys here, engaged in ordinary farm work and horticulture, as well as having scientific classes. They spend 1 year on the farm and 1 in the fields. There are 3 teachers—*surveillants*—and 4 skilled workmen in charge. They have 52 cows, 13 horses, 31 pigs.

There they are in perfect freedom working in the fields! Liberty and confidence!

THE SCHOOL AT RUYSSSELEDE

is for boys under 13 years of age. They have some as young as 4. There is accommodation for 625 lads, and at present there are 615 inmates. The school is about 5 or 6 miles from the nearest station. Bruges is the nearest centre. Approaching it from Ghent, I had a 10-mile drive from the dorf of Ruysselede, which had a special interest, for in view of a socialistic work which finds fault with the system of land tenure in Belgium, I was anxious to find the opinion of the people. Here there are rich land-owning farmers and poor peasant farmers, who rent their farms. There is no poverty or misery among the latter class. They must work to live, but not so hard as many of us do. They always have enough and at present are content. If the socialists lead them to quarrel with their environment it will be no kindness. They are adapted to the easy-going, tranquil country life and would suffer in many ways if decoyed into the turmoil of the city.

But to return to the school. In 1909, 133 left and 213 arrived. There is a constant stream—in and out. They are divided up into sections. What may be called the infants, those under 11, of whom there are now about 120, live in a large airy building half a mile off. These are attended to by nuns.

In the main building there is a division between the old and the young. The boys from 11 to about 14 or 15 are quite

The
School at
Ruysselede.

separate from the older boys. They are occupied with school ; while the older boys are learning crafts in well fitted up workshops, or else agriculture, gardening and farm work. Everything is up to date, so that the skilled gardeners who go out are perfect in their art. Strange to relate these are very difficult to place in Belgium. I wish we could induce some of our fruit-growing colonies to send for them. I never went over better equipped gardens.

There are in the farm 175 cows, 25 horses, pigs and poultry innumerable, while the farm covers 250 hectares (Fig. 69).

Monsieur N. Coucke, the Director, *Ex-Capitaine adjoint d'Etat-Major*, is a great personality, and has brought up the family system to perfection. There is complete liberty. The boys go 5 miles to the station to meet their friends or see them off. There are only 2 or 3 runaways per annum ; none for the last 10 months. If the homes are good the boys are allowed periodic visits. They play football (in sabots) ; they have drill and gymnasium, and lead the life of public school boys (Fig. 70). The results are very encouraging.

Punishments are very few and are of three kinds :—

- (1) The cell, which is very seldom used and then only for sleeping in, instead of in the dormitory. As a matter of fact, it has not been resorted to for some weeks.
- (2) Dry bread diet, which is never used.
- (3) *La marche forcée*, walking round and round for 2 or 3 hours. This is never done, being considered brutalising.

There is a rage for smoking. The boys will smoke anything, but this is discouraged. We passed a little fellow with a cigarette, which was quickly slipped into his pocket. The Director appeared not to observe it, but will employ gentle means to wean him from the habit. They are allowed one cigar a week. The children have good teeth, in spite of the rage for smoking. The rule is to have broad palates natural to their sturdy build.

About 40 children were sent away to asylums last year as being abnormal.

Tubercle is unknown ; in fact, the hospital is nearly always empty.



FIG. 69.

The farm at the State School at Ruysselede. The extreme figure on the right is the Director, M. Coucke.

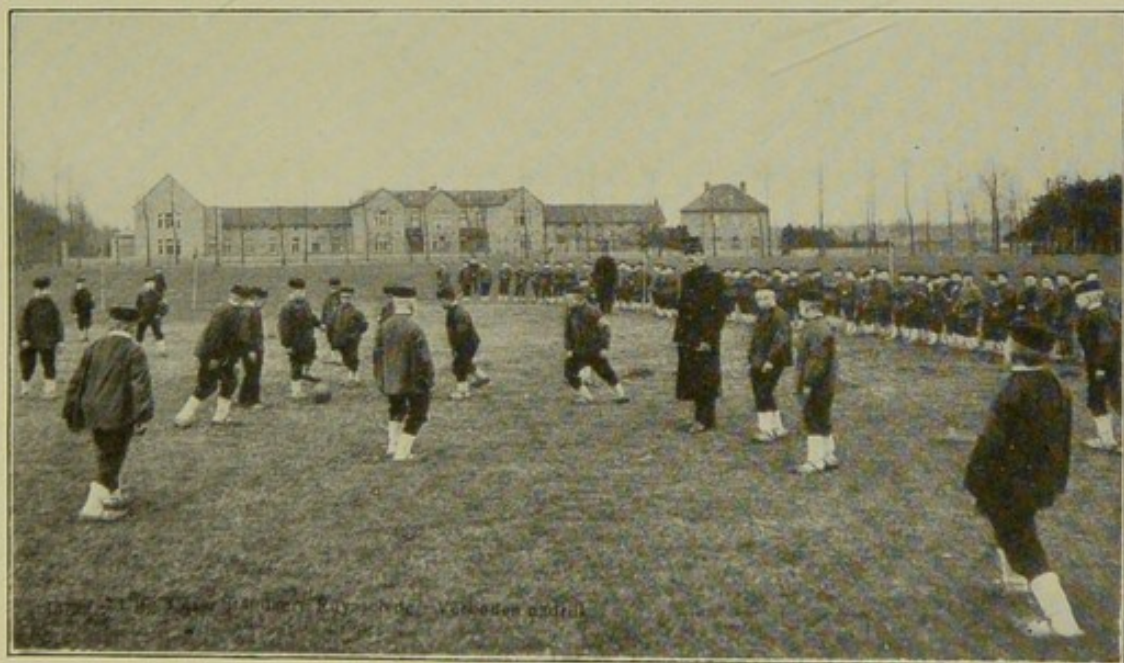
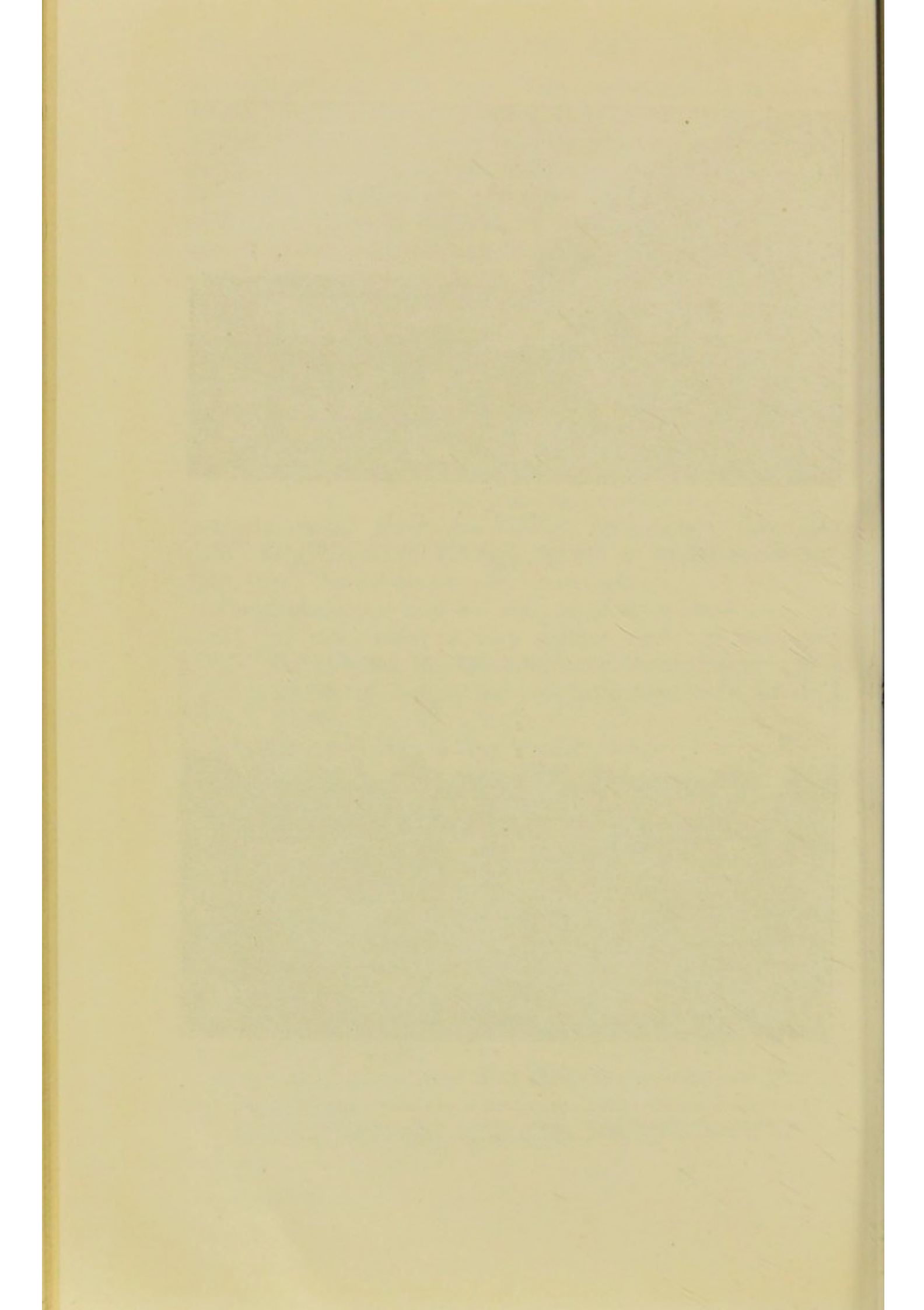


FIG. 70.

The boys playing football in sabots. The building in the distance is where the children under twelve are cared for by the Sisters. I am indebted to M. Coesar Standaert for all these photographs of the schools.



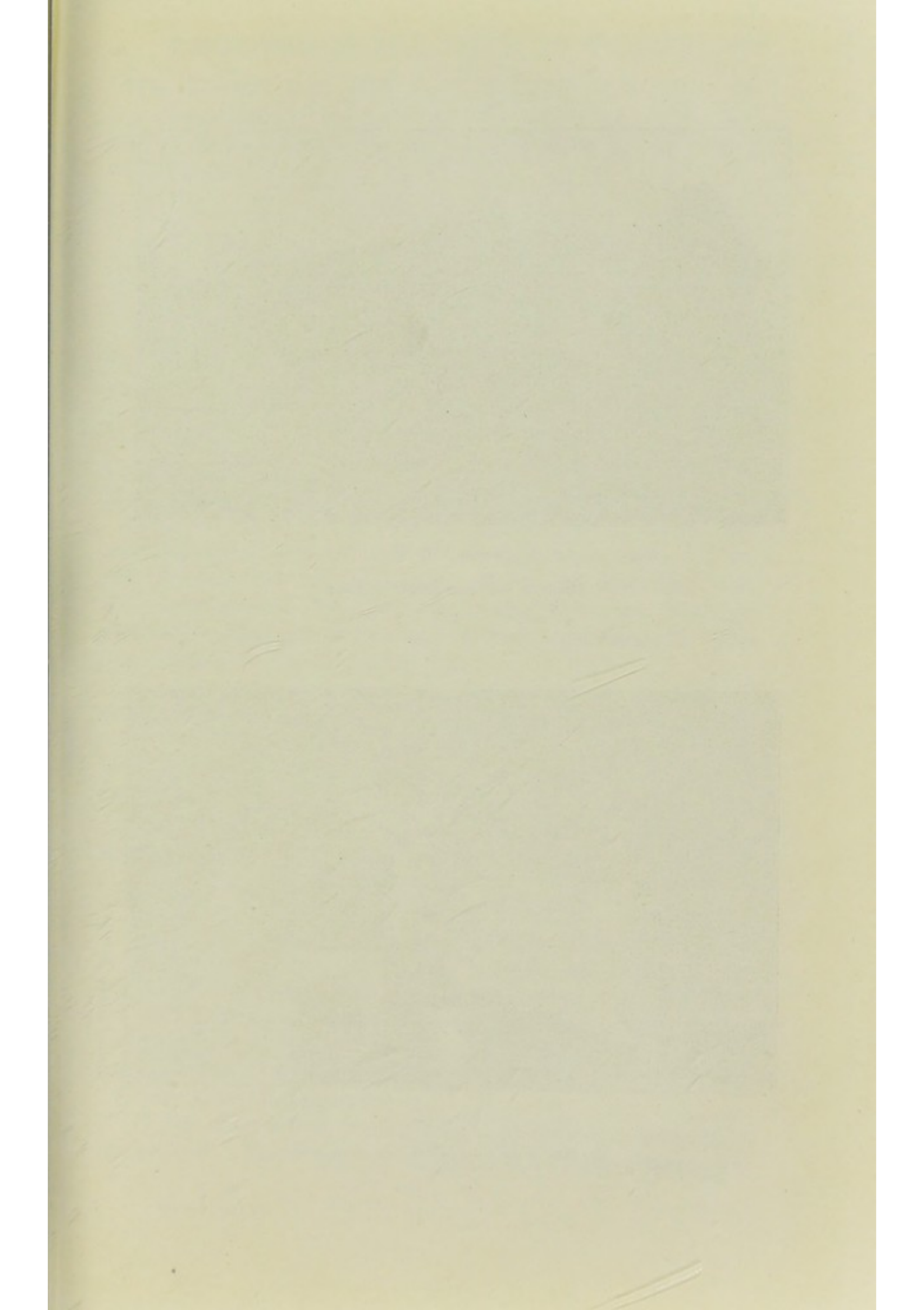




FIG. 71.

The State School for girls at Beernem.



FIG. 72.

The girls of the State School busy in the dairy.

[To face page 315.]

The Director says that the punishment is negative. It is a discouragement to do wrong. The treatment is positive—always an incentive to do right and keep in the front rank with the good boys.

THE GIRLS' SCHOOL AT BEERNEM

This is some 5 kilometres from the last school. It is a fine large building where 264 are under the care of about 20 nuns or sisters. There is actually room for 600 girls (Fig. 71).

Girls under the age of 14 are sent here for small thefts or crimes, or if deserted by their parents. They remain until they are 20, but if they do well and suitable positions are found may leave when 18. The sisters belong to the order of "Notre Dame," an order whose first duty is towards the poor. Thus they differ from the sisters of the "Sacred Heart," who work for rich and poor alike.

Some of the girls are very intelligent, but of course the majority would not be here unless they were badly hit on the physical and mental planes. Many are extremely dull when they arrive. They are taught domestic work, washing, knitting, cutting out clothes and all kinds of farmwork. The farm covers 80 hectares (Fig. 72).

The dormitories are light and airy; windows along both sides; about 60 sleep in each.

The older children, those over 14, are kept in quite a different building from the younger. When I visited the refectory I saw about 20 infants, ranging from 5 to 10 years of age.

Nothing too good can be said of the sisters, and the work they do.

THE GIRLS' SCHOOL AT NAMUR

is in an old prison close to the station. The school was commenced in 1835. There are 443 girls under the care of 35 sisters of the same order. These holy women have beautiful faces and speak most kindly to the children. The children have no fear; on the contrary, they have great affection for their foster mothers.

There are 4 sections:—

(1) For observation of new cases till they are thoroughly understood. There were 48 of these in 2 classes—Flamande

girls and Wallon. They had a rough appearance. Many of them are the children of criminals. I saw one fresh arrival. She and I in fact arrived together. She was quite of the lowest class with a horribly depraved face. The Sister Superior told me I should not recognise her in 3 months.

The second section contains the youngest children, under 13.

The third section, the section of *merite*, or reward, is for good girls. This is of course the largest section. They wear blue frocks with white pinafores—beautiful healthy girls. I watched them in the playground and never knew before how rompish and noisy girls could be at play.

The fourth section which contained 112 of quite a different type, rude and coarse in manner, is for the *moins bonnes*. Observe the phraseology of the Sister Superior—less good. I remarked on the term. "Well," she replied, "we don't call any one bad. We have hope of all"—and that is the key of success. The cure is through religious influences.

THE CRIMINAL ASYLUM AT TOURNAI.

I cannot leave the subject of the penal system in Belgium without some allusion to the Criminal Lunatic Asylum at Tournai, where 800 unfortunates are confined. Of these 300 are delinquents; 500 are insane paupers. There are many sections, but in all cases the priests or brothers are in charge, having attendants to assist them. This is a great improvement on our system, where we employ old sailors and soldiers as keepers. There is no question that there is great want of humanity in the care of the insane. The only two ways for dealing with human wreckage is either to destroy life painlessly, or make it the object of religious devotees as in Belgium. Our method of keeping them as cheaply as possible in extravagantly built palaces is actuated entirely by the commercial spirit, devoid of humanity, sincerity, or of the scientific spirit.

Dr. De Somer, who was in charge, showed me several interesting cases from which we might profit. Thus they regard tobacco as a serious toxin, often inducing mania. I saw one case of mania in which nicotine was considered a factor. Smoking was stopped and the excitement passed off.

Violent patients wear a simple arrangement of straps, which



FIG. 73.

Boys in technical class in the State School.

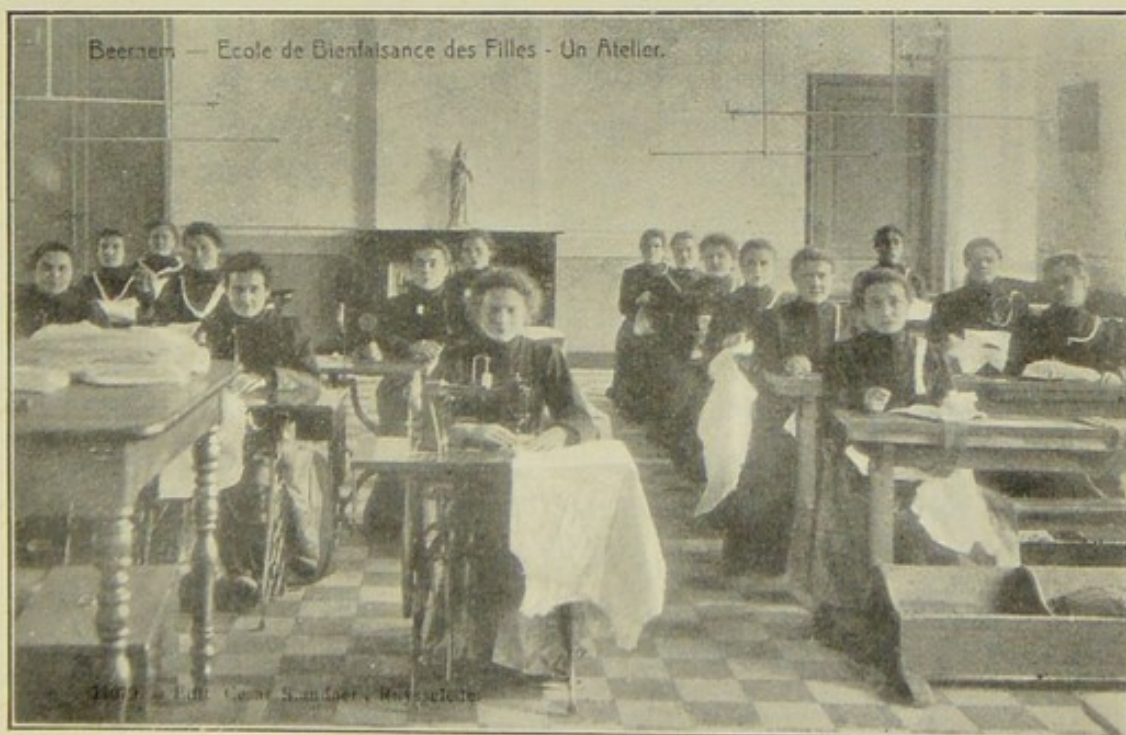
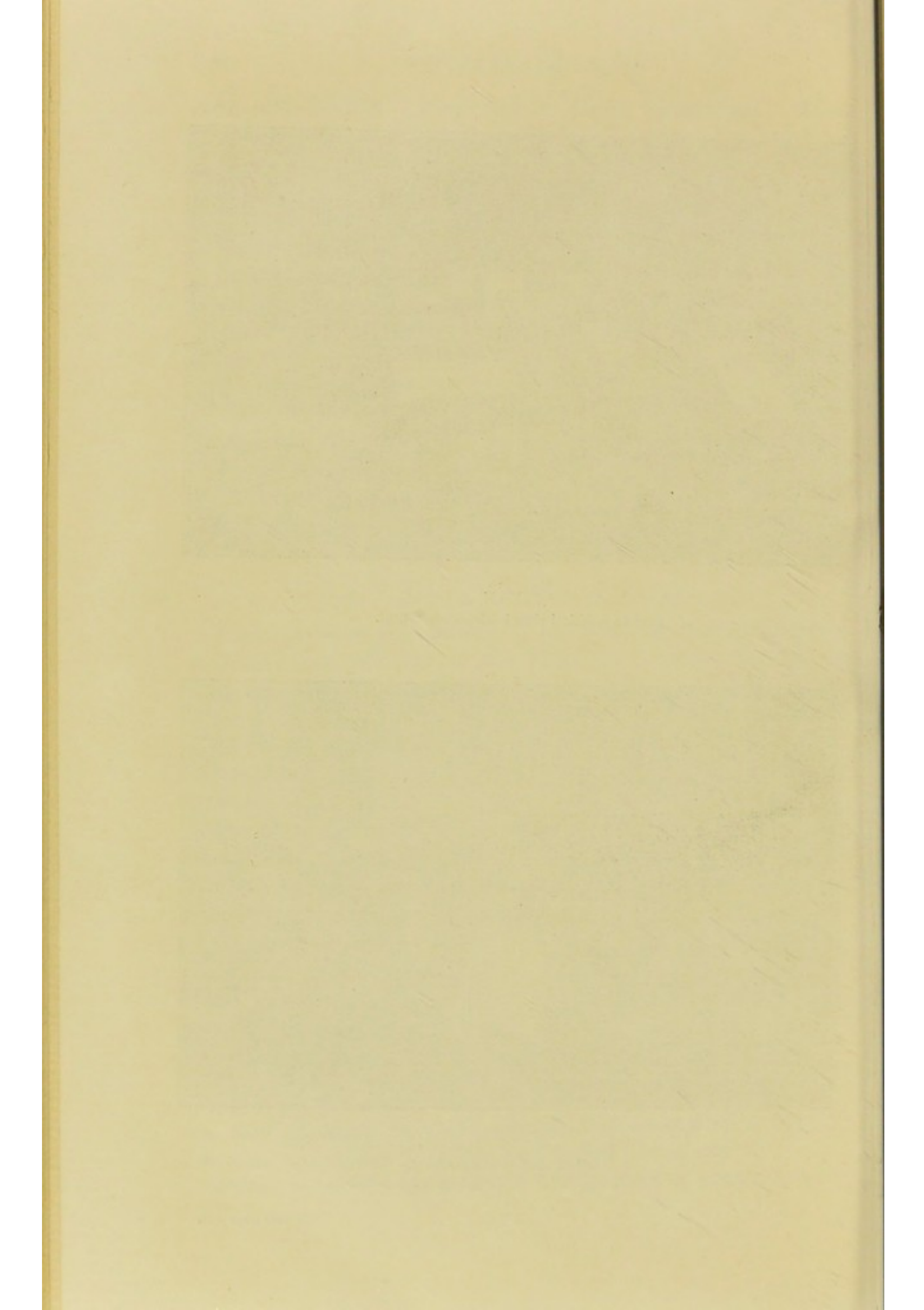


FIG. 74.

Girls in class in State School.



permits liberty, while acting as a protection to others. There is a belt round the waist to which the wrists or arms are strapped, so as to allow freedom for feeding themselves, but prevents them from striking out. A somewhat similar method is employed with violent cases which have to be kept in bed.

Some of the wards were given up to dangerous and violent patients. Many of these were in for robbery, assaults and even murder. In one court there were 8 or 10 murderers; some were quite jolly and unconcerned; 2 were very violent when spoken to. There was a most interesting but gruesome youth of 22, who three years previously had murdered his mother and cut her up into "sections." He was very unstable; one moment very violent towards us, at another joking and laughing about his awful crime. He was microcephalic. He had two brothers and one sister who were normal. His father, deceased, had been a shoemaker. The boy was subject to dreams and apparently to night terrors and had fed his imagination on bad literature. He was one of the few cases of bad teeth and high palate. He never had any kind of headache. I observed that the Brothers in charge of these dangerous men were of decidedly muscular build, which was an absolute necessity. On the whole would it not be better to deal with these men by painless extinction, for they are dead to this world already? All these groups well exemplified what I shall describe in the next chapter as Class B—bloodthirsty criminals. Some of the Brothers were very doubtful as to their irresponsibility.

I think before our Government takes further steps in penal problems, it would be wise to closely study the methods of Belgium and Holland; first, the genuine curative treatment in youth, and finally the palliative measures for the "unfinished" towards the end of their weary journeying through life.

Murder cases.

A "Jack the Ripper."

CHAPTER XVI

TREATMENT

SECTION A. CLASSIFICATION WITH A VIEW TO TREATMENT : A Dutch Judge on English criminal procedure—Hypothetical cases to test the validity of the principle of fitting the sentence to the crime—Classification of criminals essential—Judge to rich criminal—Three types of criminals—Group A : normals—Group B : bloodthirsty degenerates—A murderer at 16—Captain of a gang of hooligan highwaymen—Group C : indolent weak-minded degenerate—Rich criminal degenerates.—SECTION B. TREATMENT : Treatment of Group A—Treatment of Group B—Treatment of Group C—Even where our laws are good administration is often bad—As pointed out by the Royal Commission on feeble-minded—Royal Commission's definition of the feeble-minded or degenerate—Church Army work among young criminals.—SECTION C. REFORM : Juvenile criminals and the Borstal system—Reforms which are necessary—Religious reform required—The Borstal association—Personal examination of " J. A.'s "—A double alcoholic heredity—Heights and weights—Infant mortality—Teeth and palates and skulls—School standard and memory—Offences and repeated sentences—Lost opportunities—A message to the good women of England—My own suggestions.—SECTION D. THE CRIMINAL AN INVALID : Treatment by a committee of scientific and philanthropic men—Moral reform—Treatment in colonies—The labour of religious agencies—Uses of religions—The value of emotional religion to the criminal—Judicial institutions are out of date for criminal procedure.

SECTION A.—CLASSIFICATION WITH A VIEW TO TREATMENT

HAVING dealt at some length with the tendencies and results of the present treatment of crime and criminals, I am bold enough to enunciate certain guiding principles, by the aid of which we may hope to improve those whom we forcibly detain, while trying to change the conditions which force mankind into the avenues of crime. I am not asserting myself as an original thinker ; I am only correlating the observations of those more competent to speak than myself. I am not the musical instrument itself, but merely the bellows trying hard to make audible the music of others.

A Dutch
Judge on
English
criminal
procedure.

I was much struck with the description of our judicial system given by a judge in Holland. He said that when his people had a criminal, they tried to improve him and get

at the better part of his nature. In matters of judicial procedure he also added, "We try to find out the truth and give each party complete justice. But you make a 'sport' of it. You arrange two sides with clever lawyers, each trying to baffle the other, and perhaps hide the truth, and watching over the game is an umpire, whom you call a judge. But this is not justice according to our idea. You may hang innocent men, and consider it part of the game, or you may knowingly let off the greatest scoundrel."

This coming from a well educated, level-headed judge struck me as a very remarkable statement; and it shows that the Dutch are actuated by a strong healthy impetus towards social reform, or more correctly social hygiene. They pay more attention to the conditions which lead up to crime, and this must, indeed, form the basis of any scientific classification.

I do not wish to whip a dead horse—if it can be called dead—for although we are improving we still cling to the unscientific method of fitting the sentence to the crime. For each offence there is a certain dosage. If two offences—two doses. If five offences, five doses, and so on.

Let us test this principle of the law, taking as illustration the imaginary instances of three men, or boys, who each steal to the value of £5. Are they each to receive 6 months or a year in prison, or even 7 years as in the case ¹ quoted in a previous chapter? Are we not to consider that one boy has a good record, but being out of work fell among bad companions? Are we going to so discourage him as to destroy all chance of his reform? Another boy or man, who has always been dangerous, should not be let off so lightly. His crime should be taken as a warning, or symptom, a danger signal in fact, of some great social catastrophe in years to come. He requires an indeterminate seclusion, with a view to study his character and probably to reform him. Or we may have the harmless, lazy man or boy, who is most irritating because, though he will not work, he always contrives to jog along either by begging or stealing. Are we going to tolerate him in our midst, or shall we send him where he must work?

Hypothetical cases to test the validity of the principle of fitting the sentence to the crime.

¹ In this case it was 7 years for a youth, who bought 3 hives of honey not knowing they were stolen.

Our present judicial method of punishing a man several times for the same offence is not only unscientific, but brutal. The system of gradually increasing the sentences for old offenders never cures and only hardens. For such the remedy lies in prolonged residence in a colony, not in a cellular prison. Many of these men are actually driven into crime by poverty. They are provided for in Belgium by the colony at Merxplas.

If we give a man 5 or 10 years for stealing twopence, merely because it is his twentieth conviction, we are not punishing him for the actual theft, but for the previous nineteen crimes. Obviously this is not justice. The man is not a debtor to the community. The community owes him compensation somewhere and somehow for allowing a weaker brother to fall so low.

Classifica-
tion of
criminals
essential.

It must be evident that we require a certain amount of grouping or classification of criminals, irrespective of the actual deed. We must distinguish between criminals made by accident or surroundings, and those with the wickedness inborn as an instinct; also between those of a high order of intelligence, who turn crime into a profession—in fact, a fine art—and those who are stupid and uninteresting; and we must also divide the rich and educated from the poor and simple-minded.

In such a complex undertaking it is better to make at first as few divisions as possible, and to subdivide later. I shall not however in classification separate the poor from the rich; nor yet the juveniles from the adults, although primarily the same remarks apply to them as to the adult, both as to classification and treatment. One might enlarge the classification by dealing specially with the rich, for in practice, sad to acknowledge, wealth frequently appears to the layman as a factor for evading the law, or ameliorating the punishment. How often do we read words like these when a judge is passing sentence on a man of wealth or position:—

Judge
to rich
criminal.

“Your position is a very sad one. Every one who has followed the trial and observed the exceptional cunning you have employed; the subtle cruelties you have resorted to; and the ruin you have brought to the homes of the widow and orphan, must deeply sympathise with your own poor wife and children. As the disgrace is exceptional and quite inexcusable and must cause you very acute pain, I will accept

that in part payment for your punishment. I shall not treat you as an ordinary felon, as I would poorer ignorant men committing smaller crimes, but shall send you to the second-class division ; and where I should award another some years in prison, I shall only give you a few months."

The law may be right—in fact, it is a recognised principle that it can never be wrong—and the punishment of publicity may be quite sufficient for refined people who go wrong ; but it does not accord with the blindfold emblem of Justice ; nor do the poor understand or appreciate the distinction.

In whatever manner we try to arrange the criminal groups, old or young, rich or poor, I think we can bring them down to three primary groups. These are :—

Three
types of
criminals.

Group A. Normals.

Group B. Bloodthirsty or aggressive degenerates.

Group C. Weak-minded or passive degenerates.

In considering Group A, I can illustrate the position from the following case which came under my own observation 10 years ago. A normal boy of 16 was brought up for stealing a gold watch and chain from an old gentleman. He was handed over by a wise magistrate to the Court missionary and restored later as a useful member to Society. This boy had been working at skilled employment, but was dismissed through slackness of trade. His father was delicate and had a very hard struggle to maintain the family ; so the boy, with proper spirit, left home and tramped into the provinces in search of work. He was too proud to beg, and as we have no organisation for properly assisting the honest poor, he had on one occasion to go three days without food. Reduced to despair, he snatched the watch from a helpless old man in a secluded place. The ordinary judicial mind would administer by tradition some fearful sentence for highway robbery. The lad told me that the shame of such an act almost made him swoon and prevented him making good his escape. He wished not to sully his father's reputation, and decided to go to prison—"like a man"—never to return home. How many thousands have been turned into criminals in this manner ! The humane judge saw something good in the lad and remanded him. When I saw him he was in a home. The "father" of the home had obtained a situation for him

Group A.
Normals.

in his special trade ; and the employer, who knew all the circumstances, had no wish to part with him ; in fact, he described him as the best lad he ever had.

Here is another instance of a normal adult going wrong. Some 17 years ago, a man, aged 35, was thrown out of employment after many years' service, because that particular branch of work was given up. His means of existence became very precarious. He had a wife and a daughter, the latter in consumption. As the result of this poverty the daughter got much worse, and the poor man described how he often came in at night without a penny and could not bear to see his child, with her hectic cheeks, anxiously looking for her first meal, only to be disappointed. But the child never complained, nor did the wife offer any reproach, which made the sting of poverty still more difficult to bear. He was thus driven to theft, but before long was caught and hurried to prison for a long sentence. The agony of soul was great, for so little news ever reaches the prisoner. He now knows absolutely nothing about his child or wife. The child must be dead, but where is the wife ? However wrong the man was, the case wears a pathetic side to most of us. Surely the same treatment as for juveniles applies in such a case. The State should not have sent this man to prison, but treated him as a first offender and allowed him to be assisted back to honesty by the Salvation Army or other similar agency.

Group B.
Blood-
thirsty
degenerate-
rates.

The second Group B includes the bloodthirsty ¹ degenerates.

Here we have the dangerous hooligan who spares no one. I have examined some of these. They seem very tender of their own hides, whilst merciless towards others. In them there is often mental weakness. They have been very backward at school. Their memories are bad ; their ideation very depraved. Their minds run very strongly on sexual matters, in which the animal instincts are cruel and often perverse.

The awful sexual crimes that shock us every now and again are performed by this class. The sexualist degenerate must stab his victim, or cut her throat.² He is then intoxicated

¹ The word B, associated with the quality bloodthirsty, acts as a mnemonic ; while the class C may also be associated in sound, as the silly degenerate.

² As in one actual case, "He kissed me and then cut my throat."

with delight, and becomes a maniac longing for notoriety, and is possessed with an undue sense of his grandeur and importance. He is for the time a megalomaniac. There can be little doubt as to the harm newspapers effect by publishing details of these crimes. It is not that the newspapers make crime or criminals, but there are a vast number of potential criminals, longing to burst forth into lust, murder and notoriety; and this publicity is like the spark to the inflammable tinder. All these crimes should be tried *in camerâ*, and a press censor should control the publication of any details.

Here is an instance of a boy murderer. The assassin was only in his sixteenth year. Instead of hanging him for a very cold-blooded crime, he was sent to prison. He could only explain the crime on the grounds that he had a very vile temper from childhood. If annoyed he always retaliated with as much violence as he was capable of. What a lost opportunity for cure when he was a child! In this case he deliberately got a gun and shot the man who annoyed him. But strange to relate he loaded up again and again, till he had put five or six charges into the prostrate form. Is not this an evidence of the thirst for blood? Twenty years in prison, his sentence, will not change the architecture of his brain, nor the form of his mind.

A murderer at 16.

If he is released when he is 30 or 35, he may be crushed, but he won't be cured. He thinks he will obtain control of his temper, but this is probably an impossibility. The kindest thing for such a deformity would be painless extinction, but hanging of an invalid is too old-fashioned and brutal to be entertained seriously. The most humane method would be to place him in the care of the Salvation Army after a short period of very severe physical punishment.

I will briefly narrate the history of a man who was the captain of a band of London highwaymen, or as they are now called hooligans; in Paris, they are called "Apaches."

Captain of a gang of hooligan highwaymen.

This gang enjoyed the special attention of the police and were proud of the distinction. We are so careful of the liberty of the subject that the police were not allowed to clear them off the streets. This man was about the roughest villain you could meet in London. He was also about the ugliest. His parents were of drunken habits and never worked, so that

his education was very limited and indeed he went to work at 9. But he was not fond of work and would walk round with other lads "picking up things." Later he became a professional thief, stealing purses and watches, chiefly from ladies or helpless old people. He had however to give up stealing watches some years ago, as "his" receiver was sent to prison and so he could not dispose of them. The gang carried on their robberies in broad daylight, "working" districts with which they were well acquainted. He gave me an account of their methods, how they watch any old gentleman, whom they describe as "rusty," till they know his daily habits and then pounce on him as opportunity occurs. The other youths are employed to block the pursuit, or as it is called in the profession "hold in" or "double." One of the gang, "Smasher," watches at the next street corner and, if the pursuer gains any advantage, deals him a blow on the jaw, "over the jugler," to render him senseless.

These are just the cases in which the psychologist could render valuable services to Society and act as an expert, advising the authorities as to treatment. When caught these dangerous men or youths receive trivial sentences; whereas they should be isolated for long periods, perhaps permanently, in labour colonies. As these violent hooligans are a different type to the ordinary "juvenile adults," much stronger repressive means should be adopted. At present they are all mixed.

Whatever pertains to physical force or violence appeals to them. If they combine, they make little opposing groups and fight each other in the streets for the mere pleasure of seeing blood flow; for it is etiquette that in matters of dispute, blood must flow before these contests can be settled. In robbery, burglary, or opposition to the police, the same brute force obtains.

Moreau, so far back as 1834, records many cases of young persons who were bloodthirsty and killed children. One, a girl of 11, at Bellesme, killed a boy and a girl, both about the age of 3, and then threw their mutilated bodies in a pond.

In another case, a boy 13 years of age murdered a younger boy with a knife on account of some simple debt. He thirsted for blood.

The thirst for blood may seem rather far-fetched according to present conditions, but it exists more abundantly than is imagined. One murderer, whom I interviewed and who murdered his four-year-old daughter, had, as a shepherd boy of 10 or 12, such a desire or thirst that he used to kill lambs to see their blood.

It is from the next Group C that the vast army of criminals is recruited. They are weak-minded, or born tired, "won't workers," or unemployables. They are in some way defective. It is easier to beg or steal than to work and they are too lazy to be honest. In this large group we have a vast number of the population who are living on the borderland of crime, and cross the border according to opportunity or necessity.

Group C.
Indolent,
weak-
minded,
degene-
rate.

When you get them young they are fairly manageable, but the boy of 16 has only the mentation of a normal child of 8. Their rough town lives give them a smartness and acuteness which is only a fictitious intelligence, and must not be mistaken for it. The principal crime that these boys commit is a violation of the eighth commandment.¹ They pilfer food, money, or any little material which they can convert into money. When they become more adventurous they fall under the patronage of skilled burglars, coiners, forgers, pickpockets and others. Here is just such a case picked at random from the newspaper as I write. A "youth of 17 was sentenced to 3 years' penal servitude for theft. He had served 2 years under the Borstal system, and the Judge said he seemed determined to be an enemy to society. For the protection of the public he must be sentenced to a long period."

Such a difficulty indicates culpable negligence on the part of the State. In Holland a boy of this kind is not sent to prison, but to a reformatory school. The intelligent Dutch State claims the boy till he is 21, by which time he is probably cured of his criminal tendencies. If the Dutch State can put him in a situation sooner, it does so; but if he relapses, the State takes him back to the reformatory under its parental control, which is quite a different thing to our vindictive method of punishment. If it were not discourteous I would

¹ "Thou shalt not steal."

Rich
criminal
degenerates.

say that our method is actually stupid, and I shall go more fully into this part of the subject in the last chapter.

If we now turn from the poor to the rich, we find in them the same desires and uncontrollable impulses. Wealth and position count for nothing as against these mal-equipped neurones. Yonder is the rich merchant's son, who following unconsciously in his father's footsteps—for history often repeats itself—has a gamble and a loss. He has perhaps robbed his employer's safe, but being a "gentleman's" son the matter is squared. This is the worst case of all and difficult to treat. If confinement or imprisonment be not resorted to, at all events a compulsory supervision for a period of years should be pursued, by way of restitution.

SECTION B.—TREATMENT

We have in these three groups, that somewhat seriously present themselves to us, a workable hypothesis for dealing with the criminal masses.

A very good system of general treatment may be seen at the present time, as practised by the different Court missionaries. Take for example the St. Giles' Mission, with which I am well acquainted. You find every variety of crime being cured, on really psychological principles. How? By suggestion or moral control. Mr. Wheatley is responsible for some 600 boys, but actually sleeping in his homes there are about 200. The boys sort themselves out into social groups. There are clever, refined, good boys, Class A, who have had a side slip. These group together for healthy recreation, as chess, draughts, cricket, or football. They are industrious, rapidly improving, and finally get very good situations.

At the opposite pole you have the stupid deficient lads, and the mischievous boys, who take a good deal of tact and require much patience to cure, or even improve. They never fill very good situations; in fact, many of them belong to the vast class of the "unfinished," of which I will speak more fully under Class C. In between you have other groups. But they all agree in this, that they prefer their new environment and their foster-parents. They seldom run away, nor do they often return to crime. Why should they? No

normal boy wants to become a criminal or go to prison. It is our unsympathetic attitude that makes them criminals and prevents their recovery after they fall.

If my very simple classification be accepted, there is the normal boy or man, in Group A, who is healthy-minded, virile, and independent. He is driven to crime by adverse circumstances, against which he cannot stand. By the older, and I hope soon disappearing, system, he is made a criminal, and so despairing is he in consequence that he may develop into a skilled and troublesome criminal. Such was my friend Joe Smith,¹ with the brain of a Cabinet Minister. If he could have been protected in early years, we should now bow to him as a great benefactor. Here then is the origin of one set of skilled criminals, with the opportunity of cure and that cure is by religious, non-sectarian effort. The cure is by true socialism; not the cheap robbery as preached from political platforms, but the socialism of the New Testament, of the great Lover of all mankind, especially of the fallen.

Treat-
ment of
Group A.

B and C represent the hopeless degenerate criminals. A need not be criminal; B and C must be. Neither of these are intellectual or normal like A.

Treat-
ment of
Group B.

In the brute B animalism prevails. He is a powerful build, large limbs, big skull, massive brain, but his brain, as shown by the shape of the skull, is developed chiefly at the base in the emotional and instinctive centres, not so much on the cortex or intellectual part. He is more beast than human.

B represents the lowest and most dangerous type, who commence with violence and end with violence. They know no pity and have no shame. There is no cure for Class B, the bloodthirsty degenerate. It resolves itself into a question of his control for the safety of society. This class are too dangerous and too unimpressionable to be tolerated; and yet they swarm in our midst, not in cities only but also in the countryside. Society is too sentimental as yet to permit sterilisation as a palliative; although there is no question that once this hopeless type of criminal is diagnosed, he should be removed off the face of the earth, painlessly of course as by the lethal chamber. Much needless suffering would thereby be saved to many an innocent person. It is these monsters

¹ See *Education, Personality and Crime*, p. 212.

who beat and mutilate women. Until they have exercised unmentionable brutalities they are not gratified. At the same time it is an interesting phenomenon, that amongst that class, the female degenerate not only accepts the beating but almost seems to reciprocate the attention. It is all a question of brutish animalism. In ancient days the Jews stoned them to death. Not a hundred years ago the "topsmen" turned them off at Tyburn or Newgate.

If the community were very rich they might be isolated permanently in colonies, but such a menagerie is hardly justifiable on the ground of expense, as long as so many honest poor remain neglected and children die of starvation.

Borstal can do nothing for Class B. The Salvation Army alone can assist us with B, and then as a rule only temporarily. B will have his run of brutality and bestiality. B will show remorse only after and in consequence of failure. At such a time the softening influence of emotional religion may hold him captive, for months or for years, but in time the beast asserts itself again.

Treat-
ment of
Group C.

On the other hand, the Salvation Army does a great national work in rescuing and holding up Class C. Class C has no great resisting power and is easily controlled. Religion and sympathy are both attractive and effective. They are like "rest cures" to the "born tireds."

This third group, C, is incapable of cure, but amenable to some improvement. C differs from B in being under-developed both in the intellectual and in the moral parts of his nature. C becomes the criminal because he can only go the way of least resistance. He has not the vital energy either to resist evil or to do good. He is the "unfinished" or psychopath. He spends his hours drinking and in dissolute habits. He is the tool and companion of the skilled criminal.

I remember a sturdy boy aged 19, who answered me with smiling pride and a pull of what used to be his forelock, that he was a burglar and that it was his fifth sentence. He was a favourite in prison; and this last time when he came in with a cold on his chest he was so well fed up that I remarked he was getting too fat to climb through the windows. "Well, sir," he replied, briskly appreciating the joke, "then I can watch outside for the coppers" (police). That is just what

he is doing now. Is not this a case for treatment by permanent control? A weak-minded degenerate such as this pliable youth is allowed to return time after time to the avenues of crime. While we would like to exterminate B, we could not have the heart to extinguish the less dangerous C. C is a lovable animal; B is a horror, a nightmare. C should at once become a child of the State. C must not have his full liberty; he must always be under supervision, to keep him away from crime. C must be kept in a colony, or if admitted into towns, must be housed carefully and kindly, but marked by a peculiar dress so that all will know him, unless he improves and thus earns his freedom.

C is a splendid fellow in the Army. In the days of fighting at close quarters, it was entirely a question of pluck and often reckless daring, qualities conspicuous in this class if properly handled. Wellington complained bitterly of these men in the Peninsular War as wayward and difficult to manage when not fighting; but they made his name. There is great national loss in not using this raw material of which C is the type. All they want is food and shelter with plenty of lazy time; they are equal to hard work if it comes in spurts.

The only other treatment of C is in colonies under some philanthropic State regulation, as in Belgium and Holland. I am assuming that the State will now love its subjects, not merely rule them. Prison in these cases makes no impression.

Public opinion is ripening in the direction of colonies for the feeble-minded, and even for criminals, who have not the mental energy to go straight. Though some of our recent laws are a great improvement on the past and are even good, yet it is evident that they are not administered properly on account of legal complications. The Royal Commission on the Feeble-minded realised this and were bold enough to express themselves, but only in gentle terms. In dealing with such an obtuse animal as the British Constitution, which is a sort of pachyderm covered with the scales and bristles of the law complex, one has to speak clearly and decidedly to obtain the slightest attention.

In chapter xliii, of volume viii, amongst the 200 pages of recommendations (none of which the authorities will probably attend to), the legal complications in cases of mental

Even where our laws are good administration is often bad;

as pointed out by the Royal Commission on Feeble-minded.

defect are pointed out. It appears impossible to decide who shall deal with such a case, whether it should be a lunatic asylum, a workhouse, a prison, a reformatory, a council school, a special school or a home, and if a home what sort of a home. Whilst the law makers and law expounders are quibbling, the unfortunate defective too often decides the question by a side slip, and finds himself in prison.

This Royal Commission recognised the gravity of the situation. They say ¹ that there are numbers of mentally defective persons whose training is neglected. I presume they mean whose training is entirely on wrong lines, for the State tries to force in dry, abstract instruction which they cannot possibly digest. As James Payne so clearly expressed it, they are "educated beyond their wits."

Royal
Commis-
sion's
definition
of the
feeble-
minded
or de-
generate.]

The Commissioners recognise that the uncontrolled, wayward and irresponsible lives of these degenerates is productive of much misery and crime, as well as injury and mischief to others, besides causing much wasteful expenditure to the community. The Commissioners define them as "persons who are capable of earning a living under favourable circumstances, but are incapable from mental defect, existing from birth or from an early age, (a) of competing on equal terms with their normal fellows, or (b) of managing themselves and their affairs with ordinary prudence."

General Booth says, "Give these men what they can do, that is the cure. Don't give them what they can't do." At present we give them what they cannot do, and then inflict all sorts of punishments, even to starvation and chains.

Church
Army
work
among
young
criminals.

The Church Army do a fine work among young people of the criminal class. Some are apt to draw distinctions between sectarian and non-sectarian work, but all such disputes may well be postponed until the human wreckage now so abundant becomes scarce. Unfortunately degeneracy and crime must and will increase until we pay attention to healthy propagation, especially among the poor.

I visited a home for boys who are on the borderline of crime. Some had actually crossed the border. What struck me most was that the matron said she really loved the boys. The response to this was that she said the boys would do any-

¹ Vol. viii, p. 3.

thing for her, and were so well behaved. When this can be said of young hooligans whom we hunt about the streets, it shows something is radically wrong somewhere.

Another matter which gratified my Quakerly instincts was that no formal religion was forced upon the lads, though as a matter of convenience they observe the Anglican type of religion. We must not overload the minds of the poor with detail but rather with religious principles. Where sectarianism flourishes, not the devil, but many devils congregate.

I examined 21 boys. They were a weedy lot. There were only 2 who attracted me, and 4 or 5 who could be called good boys. They were mostly sons of unskilled or low-skilled labourers. The best boy in the house was the son of a highly skilled artificer and therefore of good stock; but while he was called the best boy, he had actually been in prison for a somewhat serious theft. He was, however, sorry and bent on pulling himself together; this effort being some indication of breed.

The infant mortality in their families was not nearly so high as I anticipated, partly because they were country lads. Imagine a labourer with 10 children and only 1 dies in infancy; and there was one parent, a cowman, who only lost 1 out of 11. The biggest infant mortality occurred by contrast in a London family, where 7 died out of 13. In 7 families, that is $\frac{1}{3}$ of the whole, there was no infant mortality at all.

As regards teeth 4 boys were very bad and these had drunken parents. One boy had not a sound tooth; he inherited syphilis and his father was a dustman. Four boys had perfect teeth; their parents were teetotal or moderate. Most of the boys had lost 6 to 8 teeth, which is not so bad for that class.

In education they were mostly deficient; although 8 had reached the VIth Standard and one ex-VII. This last boy, both of whose parents drank moderately, could remember to the age of 3. The son of the most skilled workman had reached the VIth Standard and could remember to 3. But some of the boys could only remember to 7, 8 and even 10. One boy of 17, who only attained the IIInd Standard, could remember no event before the age of 12.

These boys were not so far out in measurements as many of the waifs, due probably to the fact that they were country lads.

The 21 boys' heights added up were 111 ft. 2½ in., but should have been 115 ft. 10 in., which is a deficiency of 3½ per cent.

But if we take isolated cases ; one boy, aged 17, a bad boy, afflicted with several stigmata and the son of a cabdriver, was 9 in. too short or about 14 per cent. He also weighed only 7 stone instead of 9½ stone, a deficiency of nearly 25 per cent.

The weights are more characteristic, and accord to my theory, that in youth weight and morals usually run concurrently.

The 21 boys actually weigh 174 stone, 12 lb., but should weigh 198 stone, or a deficiency of about 12 per cent.

This is a test open to many small errors, therefore it must not be taken too literally. As some of the boys have been several months in the Home and made up weight, it does not convey as bad an appearance as when boys are just taken off the streets.

Instead of chasing and imprisoning these boys, this underweight suggests that it would be more sensible to have a good soup kitchen or a large porridge bowl attached to every police station.

SECTION C.—REFORM

Juvenile
criminals
and the
Borstal
System.

Names are always curious in their origin and it is unfortunate that the term Borstal should have its present significance, for it conveys nothing to the ordinary mind, or to a foreigner studying our prison methods. Borstal is 2 miles outside Rochester and used to be a convict prison. Boys who have a sentence of at least 12 months are sent to Borstal, but if they live in the north are sent to Lincoln prison, where the same treatment is carried out. In many other prisons a "modified" Borstal treatment is attempted.

The System is a decided improvement on ordinary prison treatment.

"For the most part they (the prisoners) enter Borstal in an unpromising condition of mind and body, lumpy, slack, sometimes defiant, generally out of condition, and as a whole below the average of physique and intelligence of their class. They come out healthy, well set up, improved in manner, and in the great majority of cases anxious to show that they can work honestly and hard."¹

These "institutions," as they were named in 1909, are for convicted criminals between the ages of 16 and 21, and the terms must not be less than 1 or more than 3 years. A careful examination is made that the boy is not bad, or likely to poison the minds of his fellow convicts. The two Borstal institutions therefore receive the best of the boys. Their results for this reason cannot be taken as representative of reform work among the "juvenile adult" criminals.

Dartmoor, Pentonville, Wormwood Scrubbs and many other prisons have blocks of cells set apart for these lads. These prison authorities have no selection; they receive all and sundry, and must do their best for the boys.

Our Borstal system is evidently a copy of the Central Prison at Ghent, described in the previous chapter. We might with advantage treat our worst boys at Borstal, which is in reality a cellular prison, detaining them till manhood. But for the majority of juvenile criminals we require schools, run on Dutch and Belgian lines. Undoubtedly the spirit of advertisement exists subconsciously at the back of the official mind. We wish to satisfy the public, so we put really good boys in a modified prison and show how successful we can be. The directors of the other so-called "modified" Borstal institutions tell quite a different story about the whole system. They condemn it as too much of prison. They say the boys return time after time and many of them become recidivists. In fact I am always told that it is a failure. It could not indeed be otherwise. We require a system of family life, instead of the wide official gulf between the boys and those in charge of them.

I long to see certain reforms in our Borstal system. The broad arrow on the prison dress should disappear, likewise the gaol uniform of the officers. The system of cellular incarceration should be replaced by dormitories, while the repugnant process of "searching" the boys before they are

Reforms
which are
neces-
sary.

¹ *Annual Report* for 1909, 15, Buckingham Street, Strand.

put in their cells should be given up unless articles are missing. It is degrading to their sense of manly vigour and destroys all confidence and hope.

There is a great deal of honour and honesty among young criminals, if you only can switch on the normal personality as opposed to the criminal personality, which for the time is in control. These reforms I trust the Prison Commissioners will contemplate. Any reform is welcomed by those in charge, who are considerably hampered by our close official system.

Religious
reform
required.

It is too much ever to hope for an English Home Office which would allow suitably chosen religious people freely to visit these "juvenile" prisons. What a wonderful work there is here for educated sensible women! There are a number of Elizabeth Frys waiting outside the prison walls, only too anxious to assist. Much good could be done in the way of reform, as the Salvation Army have proved in the case of the juvenile prisoners in Australia. In the course of years they have so improved the juvenile criminals as to change them into respectable citizens. For this reason there are to-day only half the number of young offenders in prison. They checked the flow at its source.

We want earnest religious work inside the prison regardless of sect. Just as there are twelve gates into the New Jerusalem, so there are many different kinds of religious thought, even among convicts. It is not unreasonable to ask for different influences to be adapted to each. It is impossible and abnormal to keep people of all types of religion under one stereotyped system, as at present with Protestants. In Switzerland they use their own special Protestant or Catholic systems, but they admit others. Thus they apply to the Salvation Army for warders and wardresses in every prison, and allow them to talk with any prisoner who so desires. Are we using these poor gaol-birds, as State assets, in a commercial spirit?

Borstal
Associa-
tion.

There is, however, a valuable After-Care Association connected with Borstal, to help the lads on leaving prison and keep in touch with them. In 1909 they cared for 265 discharged boys. Of these 157 are doing well. This is on the whole satisfactory considering that the British criminal youth is sporty. It is therefore not to be wondered at that 29 have

proved unsatisfactory, 41 have been reconvicted, and 18 have disappeared. Sixty to seventy per cent. have turned out well. The work of reclaiming and keeping these lads on the straight course is peculiarly difficult, considering not only the temptations and the competition of life, but also the extreme selfishness of most respectable people who could each help a little.

It would be feeble to praise without criticising. The results are not to be compared with the Dutch methods¹; but the Dutch are religious and serious in life, whereas we are sporty. We tread down the poor; the Dutch lift them up. The Dutch and Belgians care for their orphans and illegitimates. We let them die, and by way of contradiction, hang for infanticide.

Those who have to do with the same class as at Borstal, only unselected, tell a very melancholy tale. They see them back time after time; and when they get old enough they come back as convicts. I am not wishing to rub any gilding off Borstal and its work, but I wish to give an unbiassed truthful view.

Since the First Offenders Act there has been a slump in "J.A.'s." The annual average of juvenile prisoners stood round about 16,000.² Now we may perhaps reduce it to 12,000 annually or even less. Is there, however, less crime? Are there fewer young criminals charged? Statistics are apt to mislead.

Are we on the right lines for improvement among this class of offenders? Let us examine the material. A few cases will show exactly what I mean. I shall compare 12 J.A.'s, the very worst to be found in any prison, with 12 of good average.

Personal
examina-
tion of
"J.A.'s."

I have adopted a system of questions for all such cases, which direct attention to fundamental causation, as opposed to transient appearances. After taking the ages, weights and heights, I proceed to inquire as to alcohol or tubercle in the parents. I find alcohol a common factor in the father, and about 1 in 6 or 7 on the mother's side. Some fathers are quite moderate and these I do not count as alcoholics; a few are teetotalers.

In my list of 12 good boys, there were 6 drunken fathers and only 2 drunken mothers. In these two cases of maternal

A double
alcoholic
heredity.

¹ See Chap. XIV. ² Many of these may be reconvictions.

alcoholism there were in addition drunken fathers. Both boys were 19 years of age; each weighed $2\frac{1}{2}$ st. too light, and measured 4 in. too short. So much for poisoned conditions in utero. Both of them had bad teeth; both were intellectually dull and were degenerates. One reached the IInd Standard and the other the IVth Standard at school.

Let us now study the weights and heights of the groups.

The 12 good prisoners, ranging in age from 17 to 21, and whose ages added together make in all 225 years, varied from normal to $4\frac{1}{2}$ in. too short, and from normal to $2\frac{1}{2}$ st. too light.

Heights. They should have measured 67 ft. 6 in. but actually measured 65 ft. 1 in. or about 3 per cent. on the wrong side.

The 12 bad convicts, varying in age from 16 to 21 and totalling $218\frac{1}{2}$ years, should measure 66 ft. 7 in., but actually measure 61 ft. 6 in., or a deficiency of $7\frac{1}{2}$ to 8 per cent.

One boy of 18 was 9 in. too short; one was 7 and 3 were 6 in. too short. They were more stunted than the good boys.

Weights. Turning our attention to weights—the 12 good boys should weigh 120 st. 12 lb., but actually weigh 107 st. 7 lb., a deficiency of 11 per cent.

The 12 bad boys should weigh 116 st. 9 lb., but actually weigh 101 st. 8 lb., a deficiency of nearly 13 per cent.

Thus we see how stunted development or malnutrition is related to decreased moral resistance.

Infant mortality. Another matter of interest is the size of the families; the number of brothers and sisters; especially the infantile mortality. If the infant mortality is great it shows a weakness in the stock. Taking a general view there is nothing exceptional in either of the two groups, except that in one case where “father drank” and “mother was very bad” there were 8 other children, all of whom died in childhood. What a pity that Nature did not take him! In another case where “father drank” and “mother died of consumption” there were 3 other children and all died in infancy.

These isolated cases teach us lessons. How could such survivors be anything else than criminal? The last boy was not a fool, for he reached the VIIth Standard; but at

the age of 18 he had been in prison for the sixth time. He was a nice-looking boy and clever—steering gear was wrong. How and why, require more investigation. The State certainly is on the wrong track and wants waking up.

A very important subject is the condition of the teeth. Teeth. It appears related to malnutrition in infancy. I had previously found from a number of cases, that the teeth were good or bad in proportion to the state of the home during infancy. The child of the drunken labourer had very bad teeth; the son of the industrious artisan had good teeth. But I was surprised, in comparing the 12 good with the 12 bad boys, to find that the bad boys had the better teeth. The reason may be that the bad children secured more food. Many of them spoke of good homes and plenty of food even though the parents drank.

A more remarkable feature was that the 12 bad boys had broad palates and broad heads. They were more phlegmatic in temperament. The 12 good boys had chiefly narrow palates and long heads; they were more neurotic. Palates and skulls.

Evidently the good criminals would have been good citizens if they had the chance. They were, however, "nervy," and liable to side slips. The brachycephalic or broad-headed lads were set on evil. They broke every prison rule. They defied the officers. They treated punishment with contempt. They were described as the 12 worst boys you could find in London. I must say, however, they were attractive, and looked a fairly nice group. One thing that struck me in conversing was that they had a strong sense of humour. I should never give up hope where this exists. A sense of humour is often the avenue to moral reform and even to religious conversion. It shows there is imagination.

The standard reached at school is a poor test, because the school examinations are so inaccurate. Among the 12 good boys, VIIth is the highest standard reached and IInd the lowest, while their memories carry them back to the ages of 4, 5 and 6. Memory is a better test of intelligence and intellect than any school standard. It shows the quality and stability of the brain. School standard and memory.

The 12 bad boys present a different picture. Their average school standards are higher, chiefly Vth and VIth, IIIrd being

the lowest. But their infantile memories are shocking : One, a half-negro, the best of the bunch, could remember to the age of 5 ; one to 6 ; one to 7 ; 4 could only remember to 8 ; one to 9 ; and 4 boys aged about 18 and 19 could not remember any event of their lives before the age of 10. Think what this means : One of the boys, not quite 18, was sent to a reformatory for 6 years, when he was 9 years old. He can go back to 10, but he actually cannot remember going to the reformatory. Surely such an event was a gala day not to be forgotten !

Offences. Nearly all the offences were stealing. Some stole bicycles ; others stole brass, or clothes outside shops. A *distingué* boy might rise to burglary or housebreaking. A shrewd business-headed lad would play the part of receiving. Very few were violent, thanks to the Board of Education ; perhaps the only thanks in their cases.

Repeated sentences. It is remarkable how frequently these lads return to prison.

Of the 12 good boys—

Only 3 were in for the first time ;

Two for the second ;

Two for the third ;

One for the fourth ;

One for the fifth ;

Two for the sixth time—both of these lads were clean, healthy and intelligent ; while one boy was in prison for the seventh time.

Let us by contrast see how often the bad boys get into prison.

Two were in for the first time ;

Five for the second time ;

One for the third ;

Three for the fourth ; and

One for the sixth time.

It would seem as if the good boys are neurotic or more correctly “nervey,” more liable to temptation, and probably more easily caught.

Lost opportunities.

It has always struck me in regard to juvenile criminals that a grand chance is lost. The State makes them, and then takes away their liberty. Not only so, but it withholds from them those who would willingly reform them. The Jewish

poor pass through similar social conditions, without going astray in the same alarming ratio. The reason of this is entirely in religion and the care of their overseers or guardians. It is remarkable how tight they hold to their religion; how it is rubbed in during childhood; how they are reminded of it in youth and manhood. Religion is the watchword of the Jew.

But have we, Christians, any sincere and practical religion? We permit groups of atheists to sit on our councils and even to hold schools on Sundays in buildings paid out of the rates, in order to pervert young minds to grow up as bad as themselves. Is this the liberty of the subject, the liberty of the children? Or is it licence?

I have given what I believe to be a very fair account of the State methods with juvenile criminals; but the State is too busy to look after morals or souls. The State is too much of an industry or a business, offering facilities for place-hunters and appointments for political supporters, hence we do not get the right men for such important and serious duties. If a man has served his party and is out of a job, he may look for a government appointment and yet be quite unsuited for the post. This is the sportiness of the Britisher and we must not destroy this spirit, for by it we have muddled through most of our difficulties. But it fails in this kind of work.

Here is a message to the good women of England—to the highest and to the lowest—to endeavour to stem the tide of juvenile crime. Let them inquire into causes and interest themselves in cases. Let them band together to form an Elizabeth Fry League.

A message
to the
good
women of
England.

If any good woman could freely visit our prisons and see the cases they would not, nay, they could not, rest idle. So many youths are in prison because they have lost their mothers in childhood. "Father drank and lives with stepmother. Mother was very good to me, but stepmother used me frightful." What could the boy do except drift into bad company and commence to steal? Ah! dear lady, it is your fault partly; you were on the jolly when you should have been walking round the outskirts of the slum.

There is a very nice lad. As we talk to him, his chin quivers and his eyes fill. Prison has broken his heart. True, he is a

bad boy. He says in manly style, it was all his own fault ; that he is the only black sheep in the family. But where were you, lady of the Elizabeth Fry League ? You should have been there with the washpot to purify his blackness. Could you not have called on his mother and won her confidence, to find out just where the family troubles lay ?

Here is a handsome boy of 18, a clerk, his father was a most respectable working-man. The boy agreed with me that the School Board are responsible for his fall. They educated, or more correctly filled him up to ex-VIIIth Standard by the time he was 13. He thought too much of himself to be a mechanic and so became a clerk. As he was such a nice lad he got "mixing with his superiors, and to keep up with them" had to rob his employers. He won't see liberty till he is 21. Where was the Elizabeth Fry League ?

There is the degenerate youth, bad ears, a squint, short stubby black hair, ugly as they make them. He wears a scowl and views us with suspicion, till I take some of his oakum and start picking to help him. He has a sense of humour and then he tells his whole story. "Mother was a bad un. Don't know which is father. Never had no chance." Only 18 and the fifth time in prison. It is 3 years now for housebreaking. Sometimes he went alone, but he was "broke in" by an old hand. Tried for the Army, but was thrown out on account of three bad teeth. Now he longs for the Navy.

And so we go on—sorrow—poverty—social distress, and what we call sin, because it is in some one else and not in ourselves.

We are on the wrong track. For ages we have made criminals. We are still making them. Nearly all these boys have been "in" more than once. Why not ? Why affect such holy horror ? What does this youngster say ? Two years for one shilling. It seems a lot ; it is meant as a preventive. But look at the facts and we shall want to know where the Elizabeth Fry League is. Mother was a widow and consumptive ; there were four younger children, and all starving. He could get no work, and with the shilling he bought food for the others—not for himself. Is he not really a little nobleman ? Now he is sobbing enough to make a

gaoler's throat swell, because he won't see mother for 2 years. How can mother get on without him and she may, probably will, be gone when he is free.

Our methods, though not so harsh outwardly, are still remarkably crude. Nothing is thought out sensibly. We want a cure for this parasitic disease. We want something to cleanse. We have tried prison, we have tried Borstal, and the stream is as broad and as full as ever. We want some one who can apply the remedy and we want our bureaucratic State to allow the cure to be applied—above all, we want the good women of England to help us.

It may be thought that while I condemn our present aimless methods of incarceration, that I go to the other extreme and would like people to ask pickpockets to supper or entreat burglars to stay to breakfast. Such is not quite my idea, but I want the State and the community to stop making criminals.

My own
sug-
ges-
tions.

To commence with: how many lusty youths, plunging into crime as a sport, could be checked by one good flogging followed up by a system of training in an institution, which would have to partake of the character of school? Such a boy must remain a child of the community till he has proved himself able to live up to the communal standard. At a very low estimate $\frac{3}{4}$ of the boys will recover, but at least $\frac{1}{4}$ will give further anxiety. Some will be silly and weak, never able properly to take care of themselves. Many of these will make good soldiers, but all must be carefully looked after by the community—not hunted or driven into crime as at present.

A small percentage will be found hopeless, with strong criminal and actually brutal instincts. These must be shut up, after the style of asylum treatment; indeed as we do with dangerous imbeciles.

If we, however, are dealing with adult criminals—the weak lazy men and women, whose normal defences have never been properly erected, must be segregated in colonies, as they do now in Holland and Belgium.

Where our prison system fails is in giving the same dose, that is the same kind of solitary, monotonous, nerve-shattering life to poor and rich alike, to the educated as to the uneducated.

To the "unfinished" pauper prison is a sort of palace. To the man of intellect it is a perfect hell. It ought not to be the aim of a Christian community to torture one criminal and really favour another. Each type of criminal should suffer such treatment as is disagreeable or deterrent.

In this way penal colonies might be opened for the educated criminal, who has no reasonable excuse. The fraudulent trustee or company promoter, instead of getting 6 months or 2 years in prison, should retire for 10, 15 or even 20 years to the colony. His conditions should be improved as he gained the confidence of the administration, but there should be no early freedom in case he repeats the offence.

The burglar or thief, who comes up 10 and 20 times for sentence and now spends 20 to 40 years in prison, should at the third sentence be drafted to an asylum or colony, as we do with dangerous lunatics. Life must be made not only bearable but pleasant, and always with useful employment, for he should not be allowed at any time to return to Society. It is not more drastic for him to be shut up permanently than for a poor man afflicted with chronic insanity.

It is on these humanitarian lines, firmness with kindness, that we must act, always allowing cure to be followed by liberty, when the effects of sympathy and religion have cast out the evil nature, which nature acts on the individual like a bad tenant or unwholesome lodger. The position can seldom be hopeless. It is always on curative lines, but with crime as with corporal disease there are some incurable cases.

SECTION D.—THE CRIMINAL AN INVALID

This is an age of dishonesty, the result of severe competition, in which the more successful men pile up huge fortunes. Nevertheless these are often as criminal as the common pickpocket.

Treat-
ment by
a com-
mittee of
scientific
and
philan-
thropic
men.

But in dealing with the dishonest poor the more correct procedure is to treat the criminal as an invalid. What are dangerous lunatics or homicidal maniacs but invalids? After the lawyers have finished with the criminals, they might with advantage be handed over to a medical committee. Such a committee would find many of these men to be suffering from

alcohol, tubercle or syphilis in some ancestor. They might discover a hopeless and discouraging environment in youth. Probably he was a thief at 10, a burglar at 15, and if he confessed the whole truth perhaps a murderer at 20. He may then appear hopeless. After sterilisation for the sake of the unborn innocents, he should be placed in an asylum for observation, to find out his best points, and from there he may be drafted to a penal colony. He must however be under observation for some time first. It may be that he is so violent and unreasonable as to require punishment in the way of physical pain. The abnormality of his mentation may be of such a kind as to demand even severe physical punishment. All such methods are included under treatment, the same as a drastic purge, or the cutting open of a carbuncle.

But it may just as easily happen and probably it will happen, that if an intelligent, scientific, and sympathetic committee deal with the criminal, they will find a soft place in his nature. They will find in his character a part that yields to pressure; an inlet to his real self. If such occur as it must do in most instances, then the treatment must be directed specially towards the moral reform of the culprit. This can only be done by means of religious agencies. For this purpose colonies, far away from towns might be formed and managed by different religious communities as in Holland and Belgium. For such work, the Salvation Army comes to mind first, as the largest and most experienced organisation at the present time. It refuses none and helps all. The Church Army does admirable work on similar though more limited lines; though the ordinary Church of England methods do not as a rule appeal to the lowest strata.

Moral
reform.

Treat-
ment in
colonies.

The
labour of
religious
agencies.

The Catholics are recognised, by all fair-minded people, to be most devoted to and careful of their own poor, and they do a good work among their co-religionists in prison. Their system of the confessional does not appear to lessen crime, as we should have expected.

The Society of Friends were the pioneers by way of prison reform, their labours dating from 1814. Wherever the English language is spoken the name of Elizabeth Fry is held sacred. Nevertheless, Quakerism is not the religion for the gaol-bird, nor yet for the uneducated.

Out of the annual prison population of about 100,000 there is only an average of 900 Jews—a very small percentage of the total Jewish population, which includes the many undesirables so freely admitted.

While religion is nowadays looked upon as a symptom of diminishing intelligence, its decadence is always regarded as one of the signs of national decay. When religion goes all goes, as we see in the case of France, Italy and perhaps Spain.

Uses of
religions.

Religion is the backbone of a country, for it leads to prosperity and greatness by supplying adequate motive. Some wish for ethics instead of religion, but the finest ethics are in the writings of St. Paul and in Proverbs. Religion abhors cant, but too often cant takes the place of religion. It matters little what form the religion takes, as long as it is present in quantity. I am not writing as a religious man; and I do not press religion on the scientific or educated classes, for these absorb true religion subconsciously in their work. It is however for the masses that I plead and prescribe it.

Certain diseases call for certain treatment. Here we have a psychic disease—crime, and it wants psychic treatment—religion. The poor wretches appeal for sympathy and they must have it. The ritual of religion will do nothing for them nor can the doctrines and learning of Calvinism assist. The religion for these poorlings must flow from the heart, and be conveyed in every touch, every look and every word—hence emotional.

The governor of one of the largest convict prisons once said to me, "I am the best governor in the service, because when a prisoner comes in great misery with a long tale of wickedness, I always tell him that I have done far worse things." Thus he raises the poor convict a little out of and above himself. The religion that divides us into good and bad is an unwholesome religion, because we are all bad. It is only a question of degree. The religion of the too holy person may be of no assistance. Such people regard the sins of the poor in a very severe and unforgiving spirit.

This question brings to my mind a true incident which will bear repetition. It could only happen in Scotland. A lady, the *grande dame* of the lochside, was very severe on a neighbour, a very benevolent farmer, for calling on Sunday

when she should be reading her Bible. In addition she rebuked him for not walking 14 miles to the Kirk. Driving was to her Sabbath-breaking. The farmer had his "doots" whether he even "cracked the Sabbath." At all events when he could stand no more the words came spontaneously from his lips, "Well, you need not be so disagreeable, though you are so holy."

And so well-meaning individuals and learned men are squabbling about details, and stirring up their passions and other people's passions; meanwhile souls and lives are perishing.

I specially urge emotional religion for hardened criminals who have to be softened. This view many of my friends think absolutely incorrect, because they, being of good intelligence, could not be appealed to by such means; but criminals, however cunning and slim, have not the same intelligence. They live only in the present and they are either hard as flint, or soft as butter. Moreover, they can change about from one state to the other, like dual personalities. Offend a criminal and he is a tiger, treat him sympathetically and figuratively he purrs like a domestic cat. They are ill-balanced creatures of impulse.

The value of emotional religion to the criminal.

Fowler, who was hung for the brutal murder of an old man in North London, was a burglar, and at Dartmoor prison a mild inoffensive man. Something upset him and he became violent, requiring the "cat." After his flogging he was morose, sour, and revengeful. A convict who knew him well said to me that he never saw a man so changed. On his release he was determined to lead a life more wicked than before, and it ended on the gallows. If we realise these conditions we see that we are not dealing with normal beings, but with a class who are anti-social and appear wicked, because they are abnormal or subnormal.

Judicial institutions must be remodelled as far as treatment goes. We might just as well ask a judge to direct the treatment of a lunatic as of a criminal. A criminal, however sane, is a study for the psychologist, and a difficult one too.

Judicial institutions are out of date for criminal procedure.

We are dealing with a complex subject about which we have a great deal of knowledge. The lawyers and the judges are legislating about matters of which they are absolutely ignorant. They know no more about the working of the

brain, its structure or its defects, than they know of typhoid, or the range of streptococcal infection. It will only be when the public realise the true aspect of this question and support us, that justice will be done to the poor; but the victory must come, and then, in the future history of England, the present administrative methods will be recorded as among the last relics of barbaric feudalism; as demonstrations of what is meant by the term British sport—might *versus* right—or the power of the strong over the weak.

CHAPTER XVII

THE WAY OUT

The object in treating crime—The three possibilities—The explanation and treatment of brutal crime—The treatment for degenerates—The community and the poor—General Booth's message to England—The Free and the Bond—Cases—Tramp and pickpocket—Derelicts—Physiological religion—Quakerism—The National Childrens' Home and Orphanage—Beer when three years old—The white slavery of commerce.

IN dealing with crime and social misery there must be one primary object, and one secondary.

The
object in
treating
crime.

The primary object must be the cure of the individual ; while the secondary aim must be the protection of the community. If the former succeeds the second follows ; whereas if the order be reversed, as now, there will always be failure in both objectives. To protect the community without reforming the culprit is impossible.

I propose, boldly, as it is essential to my thesis, to lay down certain propositions and suggestions which would fulfil the objects desired. These suggestions demand a revolution—both in thought and in practice. Is it not time for a revolution ? We have had ours in medicine. Medicine gave me birth on the morning of the revolution—the dawn of Listerism, and Lister was my first master. How was our profession before the revolution ? It is interesting to dwell on this ; to see the resemblance of the legal profession to-day to our profession before that period. In those days surgery meant pain, inflammation, suffering, pyæmia and death. Operative surgery had a brilliancy to the public, which might be compared to the rhetoric of the lawyer. After the revolution, science and intelligence replaced all that external grandeur attaching to our professional position. This is just what will happen when an intelligent recognition of the claims of science controls our system of judicial procedure.

In dealing scientifically with crime we have to go behind

both the act and the motive. The present system of fitting the sentence to the act or crime must be abandoned as blind and arrant quackery. When we deal with motive we must examine for any perversion of mind, obsessions, duality, lapse of consciousness, or fixed ideas. These latter may occur in any mind under varying conditions. It is only when they get control or possession that the affected one becomes dangerous.

The
three
possi-
bilities.

There are three possibilities in front of us—

1. To let things drift in their present unsatisfactory condition ;
2. To continue our usual customs of patching the judicial methods—new wine in old bottles ; or
3. To get down to bedrock and deal with primary causation.

Law is a system of retaliation ; sometimes too lenient, and at other times revengeful, perhaps spiteful. None of these qualities are to be found in justice.

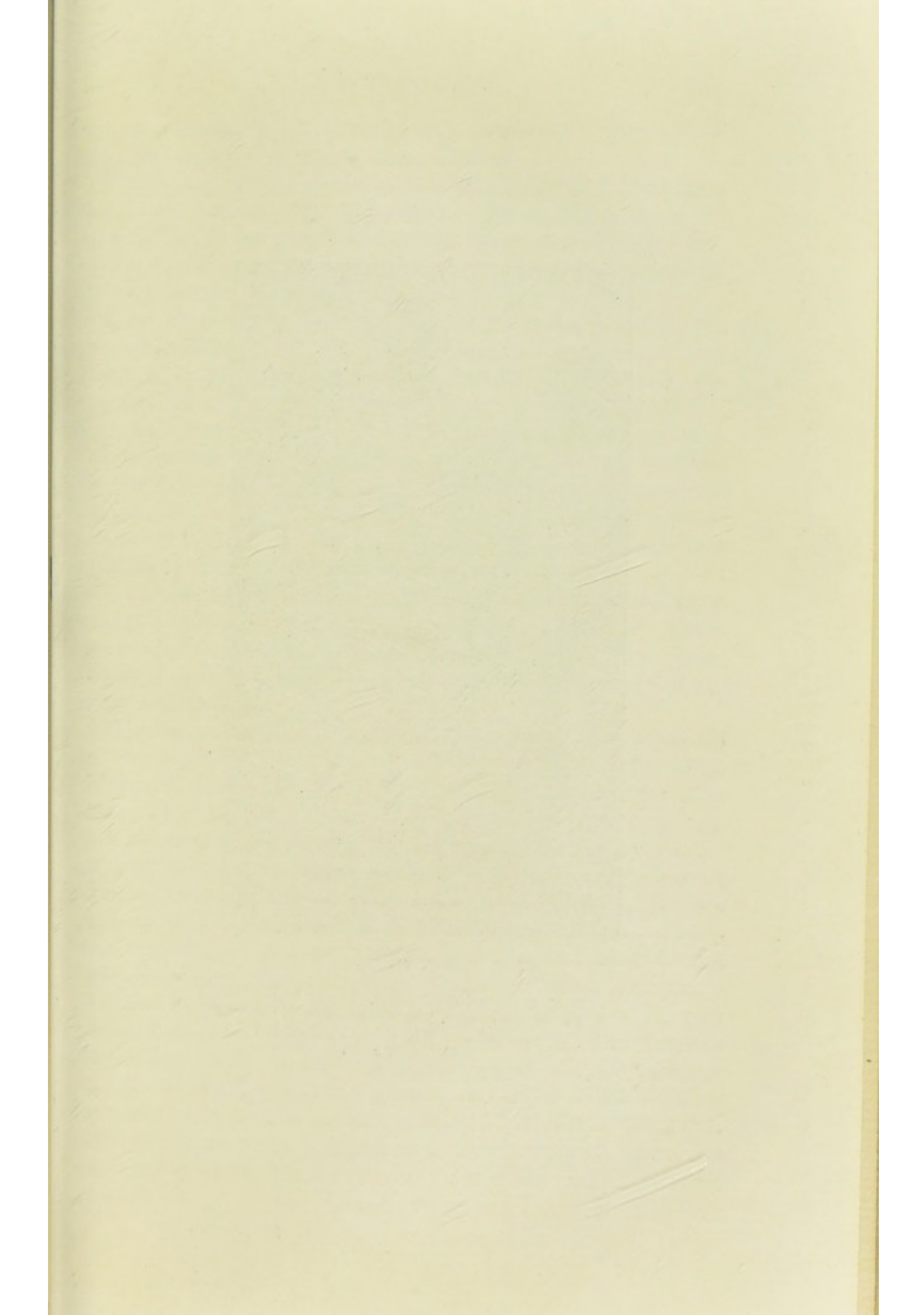
Consider this case, one of the worst that could possibly occur, in which exceptional leniency was shown.

The
explana-
tion and
treat-
ment of
brutal
crime.

“DEATH SENTENCE.—A man, 24, was found guilty of murdering his step-daughter, aged 4. It was stated that the prisoner on various occasions at his house, had beaten and kicked the child and thrown her violently to the floor, and that subsequently in a field he struck her with his fists, knocked her down, kicked her, and threw her over the fence on to the road, this causing her death. The jury recommended the prisoner to mercy. The judge sentenced him to death.”

Here we have a very brutal act. The jury are sympathetic, because the Scotch abhor capital punishment ; but they are obliged to fit the death sentence to the crime. As to motive, it is apparent that this low grade degenerate had a positive hatred of another person's child in his home.

There is gross perversion of normal human instincts ; in fact, there is more, there is a reversion of instinct to what is observed among lower animals. The murderer is not merely inhuman, but in a technical sense brutal. He has no place on the human plane, and as a matter of scientific justice should be wiped off. The law does not look at it in this way, nor make allowance for the principle of reversion or for congenital defects. The brute is not of his own making, but probably represents his father's sins. Let us wipe him out,



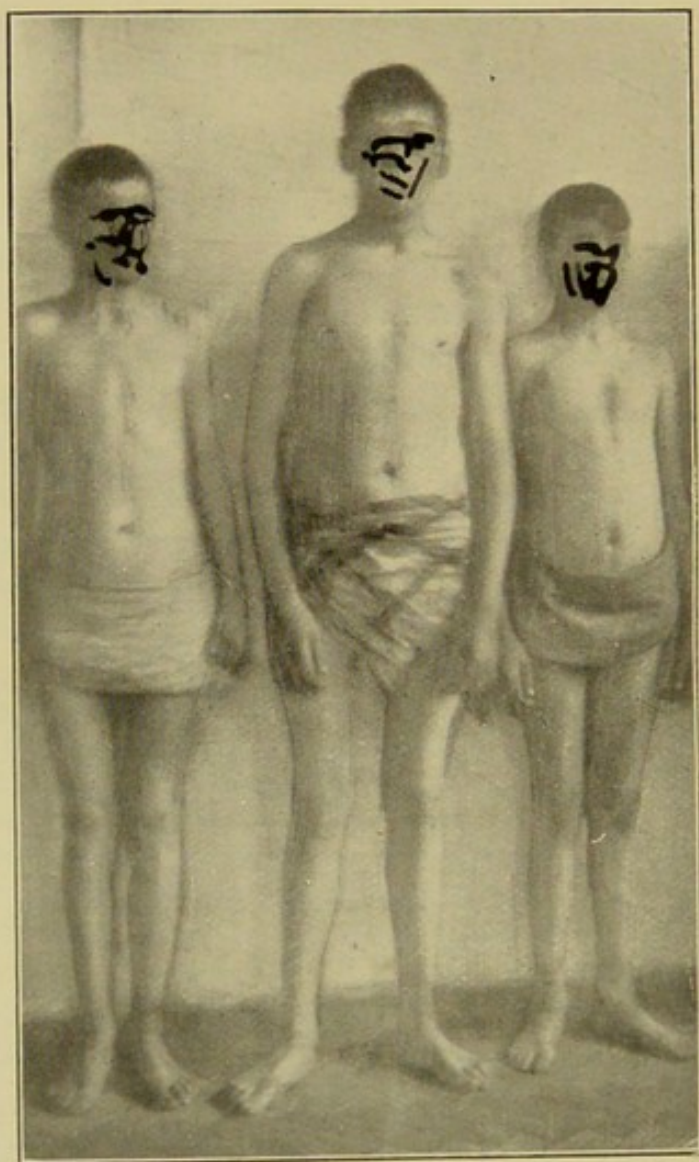


FIG. 75.

To show arrested development. The centre boy is 16 and about the average. The boys on either side are over 18 years of age and are 3 to 4 stone too light and 6 to 8 inches too short.

not regretfully, nor spitefully but painlessly. Strange to say, the sentence of death was cancelled.

This brute belongs to Class B of my system of classification,¹—the bloodthirsty degenerate. These ought, as much as possible, to be picked out before they commit some dastardly crime and either segregated, or destroyed painlessly if the cases be very marked.

There is another class that demands justice, Class C, the silly degenerate; segregation, as practised in Holland and Belgium, is the only treatment for them. An advance in our country on these systems would be to exercise compulsion, and place them under the humane care of the Salvation Army.

The treatment for degenerates.

Sterilisation is essential. It is safe, painless, and without mutilation; nor does it interfere with the liberty or pleasures of the person operated upon. The individual is in no way injured or disturbed, but this terrible propagation of degeneracy is thereby arrested.

I am hardly dealing in this treatise with the intelligent skilled criminal. As far as we go at present physical punishment appears to be the more scientific method for them, followed up by permanent segregation and for the sake of the race, sterilisation.

If we go to bedrock, Justice cannot punish the poor criminals in the present unreasonable manner. Justice would rather redress their grievances. The community reap what they sow. The strong become selfish and neglect the weak. If in a community there are 20 per cent. of honest poor, and 5 or 10 per cent of criminals, there is an injustice somewhere. Here is work for Justice, not for Law. If we imprison and still further harden the criminal we are not doing justice nor restoring the equilibrium of the community. We are making things worse. Justice demands information as to what led to his crime; in fact, the cause of his being a criminal.

See how the community is neglecting our young children. It takes no care or charge of the poor, allowing them to breed in ignorance and more recklessly than cattle. Fig. 75 shows 4 ordinary city boys; and what does it tell us? The tallest boy is nearly 17, of normal height and average weight; on each side of him are older boys, over 18 years of age; 6 to 8

The community and the poor.

¹ See chap. xvi.

inches too short and 3 to 4 stone too light. Although there is nothing wrong morally about these boys yet can they ever reach normal mentation ?

I selected another group for a photograph which shows the same condition. One of the boys, aged $18\frac{1}{2}$, is normal height, but a stone too light. On each side of him I placed older boys about 20 years of age, 8 to 11 inches too short, and too light by 2 to 3 stone.

Here is another photograph (Fig. 76), which represents a group of 3 men, who from no fault of their own, had fallen to the very lowest depth ; being homeless and starving in London, the richest and most extravagant city in the world. None of them are bad men or have been in any trouble. They represent the class which I style "derelicts" and are in no sense degenerate. Their ages from left to right are 19, 22, 21. All are teetotalers and two are non-smokers. They are of average intelligence and have had the ordinary State education. Two of them reached the sixth standard and one of them the fifth. There are no bad points to report nor are they weaklings. (See also Fig. 77.)

Is not Law convicted by Justice in the presence of the community ? Is it not a perverter of righteousness ? It must be made physiological. It is not at present even psychological.

What is the great issue before us ? The elevation of the degraded, the cure of the criminals, the salvation of the poor. It can never be done officially by an English Government. It is not in its sporty nature. It is done by the Dutch, but then they are religious and not sporty. In our own land General Booth stands out prominently as the specialist in criminal reform. While many religious agencies were busy doing good, he saw that beneath their work was a black mire of lost, degraded, human souls. He addressed himself to the task of raising these. He has 40 years' work to show us, and 40 years' experience to guide us.

General Booth said to me—

"I want a way out—a way out of all this misery and crime."

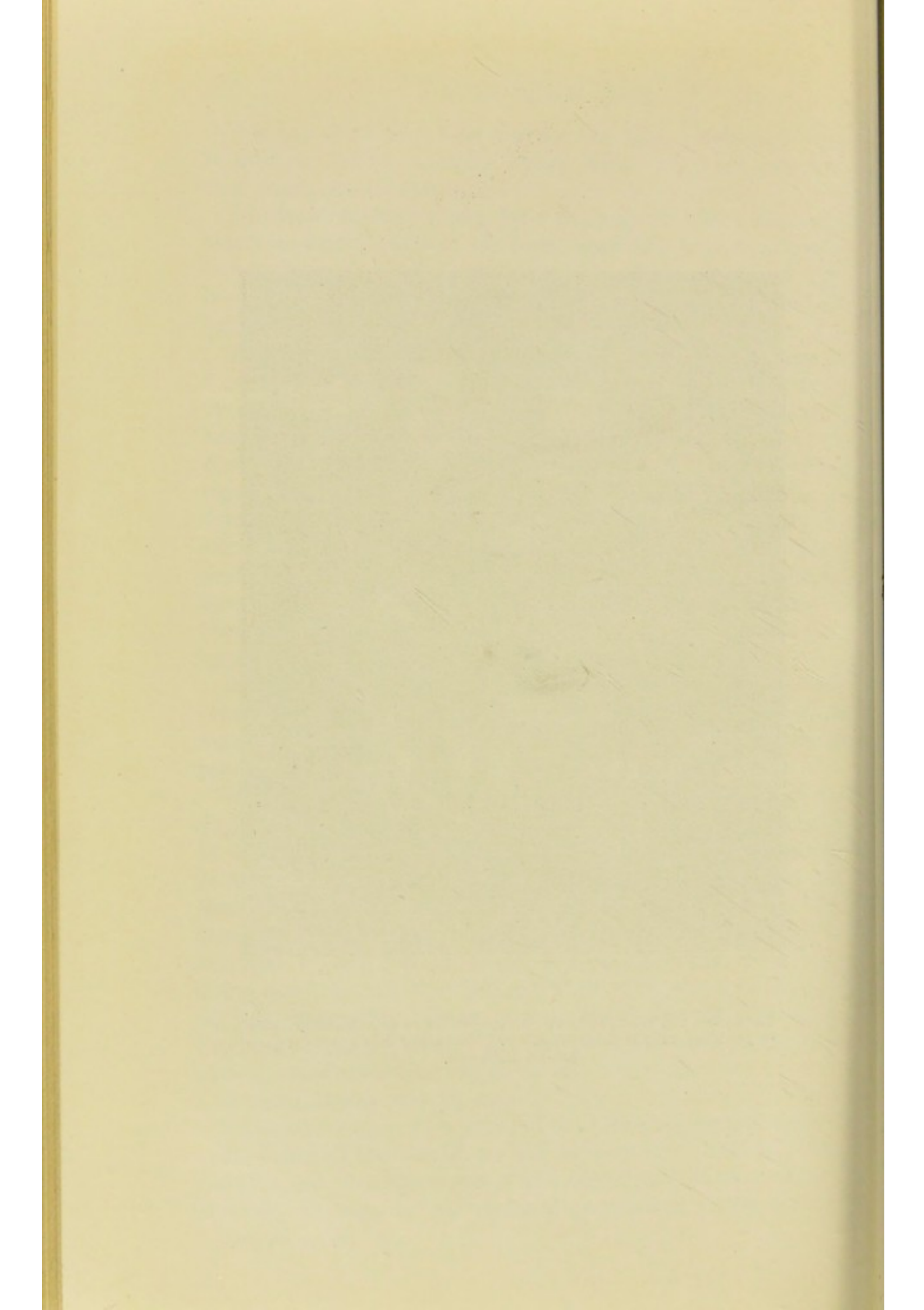
He can find the way if we will support him ; that is, if the country will give him some of the £6,000,000 which we spend annually in keeping our criminal population under control.

General
Booth's
message
to
England.



FIG. 76.

The Author, with three youths who through no fault of their own are stranded on the lowest rung of the social ladder. What is our duty? None of these lads are Londoners.



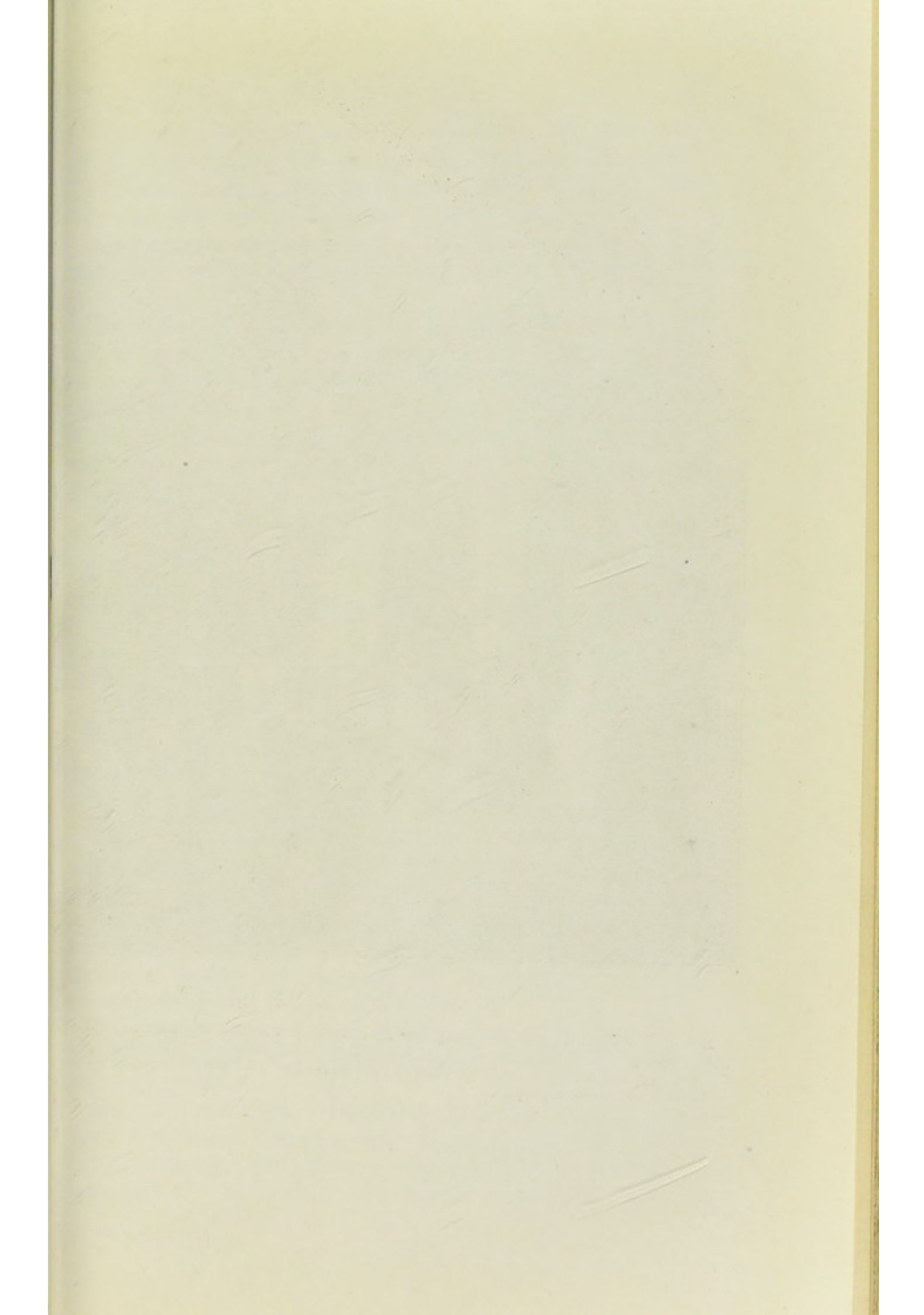




FIG. 77.

The object of this photograph is to demonstrate the building up of the bodies by infantile nutrition, a habit or custom which prevails among the poor on the Continent. These youths are of the same class and type as those in the previous photograph, and the difference in physique is no credit to the British people.

He has proved his efficiency in Australia. Eighteen years ago the colony gave him the juvenile convicts. He restored them to respectable lives, and planted them on farms. Now they can only half fill the prisons for juveniles. Is not that a good interest on the money—half the expenditure? The same class are no longer breeding criminals. That is what we want.

The General's message to the people of England is that if they give him the largest prison, and the money now being spent on it, he will guarantee to reduce crime, so that it will cost only half the amount in 7 years. He must have sole control and no interference from outside; and have the opportunity of placing suitable cases in the lunatic asylum and workhouse.

The General classifies the gaol-birds in this manner:—

- "A. The feeble-minded, who must always be under surveillance; in fact, all their lives.
- "B. Those who commit crime in despair (such as I have called derelicts). They are curable and may be restored to Society by sympathetic and religious methods. 'Convert them.'
- "C. The men who commit crime for the love of excitement; sporty men; those who have a passion for wickedness. They are curable by conversion.
- "D. The residuum.

"There is always a residuum that we cannot deal with, who must be shut up all their lives, but allowed amusements and light occupations. These men have forfeited their liberty as Britons."

The General guarantees to lessen crime, to convert the wicked, and to restore those who through an unfortunate slip are suffering more than they actually merit. When a man leaves prison he ought not to be branded, but treated as a brother. It is however essential to success that there should be full power, or authority, to keep control of the ex-convict by way of parental oversight.

The present police control is injudicious, as it does nothing for the man, and is not always successful in the interest of the community.

General Booth said, "Here is a man, there is the temptation. They must be kept apart. If you can, remove the temptation from the man; if not, move the man away from the temptation." In dealing with these people there must be

authority to compel them to do what is required of them.

The General makes only two groups:—

The
Free and
the Bond.

The Free and
The Bond.

As long as a man supports himself he is free. As soon as he stops working and has to be kept by his fellows, or if he commits crime, then he has forfeited his liberty and is bond. He must by compulsion remain bond until Society is satisfied that he has earned his liberty and can keep it. He must be dealt with morally, sympathetically and religiously on humanitarian lines.

I was very much struck at a previous interview, with the General's remark concerning the great difficulty the State has in dealing with convicts and unemployables. He said, "Give a man work which he can do. Don't ask him to undertake work which he cannot do." This seemed the key. How often I have seen the "unfinished" punished in prison for not fulfilling tasks, which were as wearisome as they were profitless. I have often applied that dictum to such cases.

The General arrives by experience at the same point as we do, who analyse the whole problem from the physiological aspect. We must deal with a man as he is.

If he be a healthy man, treat him as though he were responsible. If he be diseased in mind, treat him as a psychopath. If he is only half a man, treat him as half a man.

Cases.

As a further example of the wonderful social work done by the Salvation Army, I shall give a description of a tramp and then of a pickpocket. Both are converted (see Fig. 78).

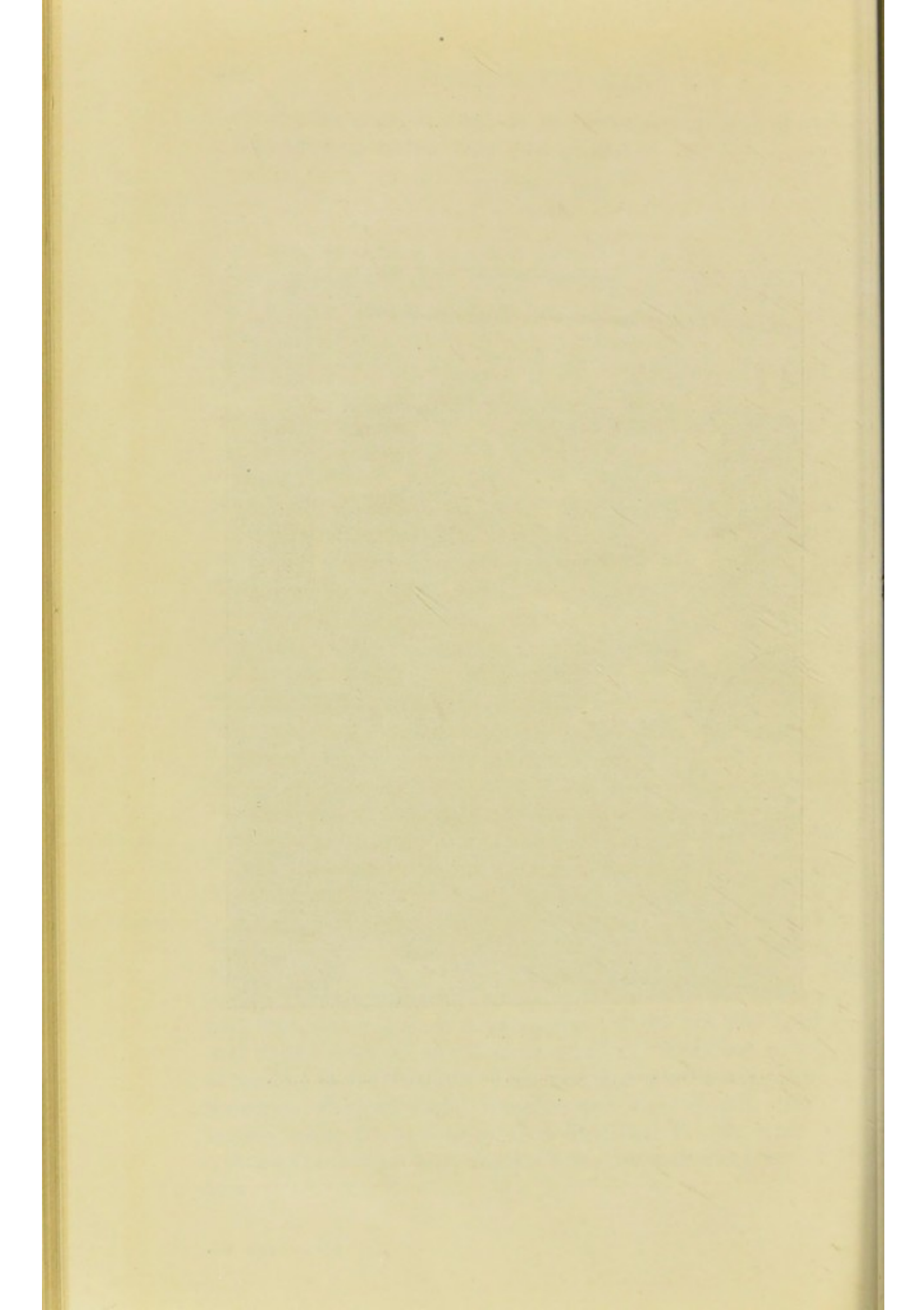
Tramp.

The figure holding the pot was a typical tramp, and a most interesting character. He is aged 26. His father was a soldier, which may account for the roving disposition of this youth. The father drank heavily; the mother was temperate, and this young man is a teetotaler. There are two brothers and three sisters, all of whom are steady. There was no infant mortality in the family. This man has a certain amount of hebetude, sluggish facial muscles, and slow speech. He left school, when 13, having reached Standard V. He went into a shop as messenger boy, but had some bad luck which unsettled him.



FIG. 78.

Pickpocket and tramp, as they entered the portals of the Salvation Army.



When about 17 he started tramping, and in a casual ward fell in with an expert London thief. They went to Nottingham, and the thief tried to teach him the shoplifting business, but he was too slow to do any good at it and became a professional tramp. Once he engaged with a circus, and made a tour through Wales.

He says tramps don't steal as a practice, but in case of need they may help themselves to eggs, fruit, or other small things. As a rule, however, they get all they require by asking, except vegetables, which they greatly miss. Tramps as a rule are harmless. "The idea of a tramp is pleasing oneself." A tramp, then, is a country gentleman.¹ He used to take his tramps according to the seasons, visiting the Peake district for several weeks in the summer. In hot weather he went north. In winter he chose the southern counties; Devon and Cornwall are the only two counties he never visited. If a place suited him he would stay for some time.

There is no money to be made in tramping. A tramp may get 2s. or 3s. a day; or may go weeks without getting enough to live comfortably.

Tramps have their favourite "hunting grounds." The country districts are poor. The best places are round towns. Some tramps confine themselves to London, working the suburbs.

This friend, during his eight years of tramp life, always came to town to hear the bells of St. Paul's ringing in the New Year. On one of these occasions he met some officers of the Salvation Army, who asked him to come with them and have some hot soup. He went to the Blackfriars Shelter and was converted. He tried hard to resist the religious influence, but could not. The Staff Captain who first spoke to him had himself been a tramp.

Our friend now occupies a most responsible position of trust. He has a very pleasant face. He is sitting down with a cat on his knee, in the second photograph (Fig. 79), dressed as an officer of the Salvation Army.²

¹ See cartoons concerning this statement in *Punch*, January 19, 1910.

² His cranial measurements are as follows: $7\frac{1}{8}$ in. \times 6 in. wide; circumference, $21\frac{5}{8}$; antero-posterior dome, $13\frac{1}{4}$; lateral dome, 14 in.; cephalic index, 84.

Pick-
pocket.

The man eating a slice of bread (Fig. 78) has had a very sad life, which repeats almost to detail the account of Fagin's den, so admirably described by Dickens. He is a single man, about 32 years of age. He never knew either father or mother. His earliest memories carry him back to the age of 4, when he commenced his training as a pickpocket, in a thieves' den in Somers Town, N.W.

At the age of 7 he was proficient. Just fancy what this means! His trainers would get up a crowd, as only in London crowds can rapidly be formed, when this child, and others with him, had to pick pockets. If they were unsuccessful they were punished; and many a night when he got nothing he was frightened to go home and stayed out, sleeping in empty barges on the canals. In this thieves' den, the ladies and gentlemen would play cards, while the children had to practise on them. In time they usually acquired great ability.

When he was 8 years old he was charged at the police court, but some one appeared to claim him as his son, and so the charge was not pressed.

At the age of 10 he was sent to a reformatory for 5 years. This did not succeed in improving his morals, for when he was 16, he got a month for picking pockets. After this he had several sentences, making about 15 years in all. Once he got 7 years for a burglary in Regent Street. His last theft was in Trafalgar Square. Some one who saw it, hit him hard on the head with a stick; the police thought he had "had enough" and did not arrest him.

He has been converted 6 years. He is the right-hand figure in the second photograph (Fig. 79) in the uniform of the Salvation Army. He had impulses to steal for some time after his conversion. It is an interesting fact that such impulses do occur, for it shows that a thief must require a good deal of will power to overcome his weakness.¹ His hands are large and when at his trade had a more sensitive touch.

Dere-
licts.

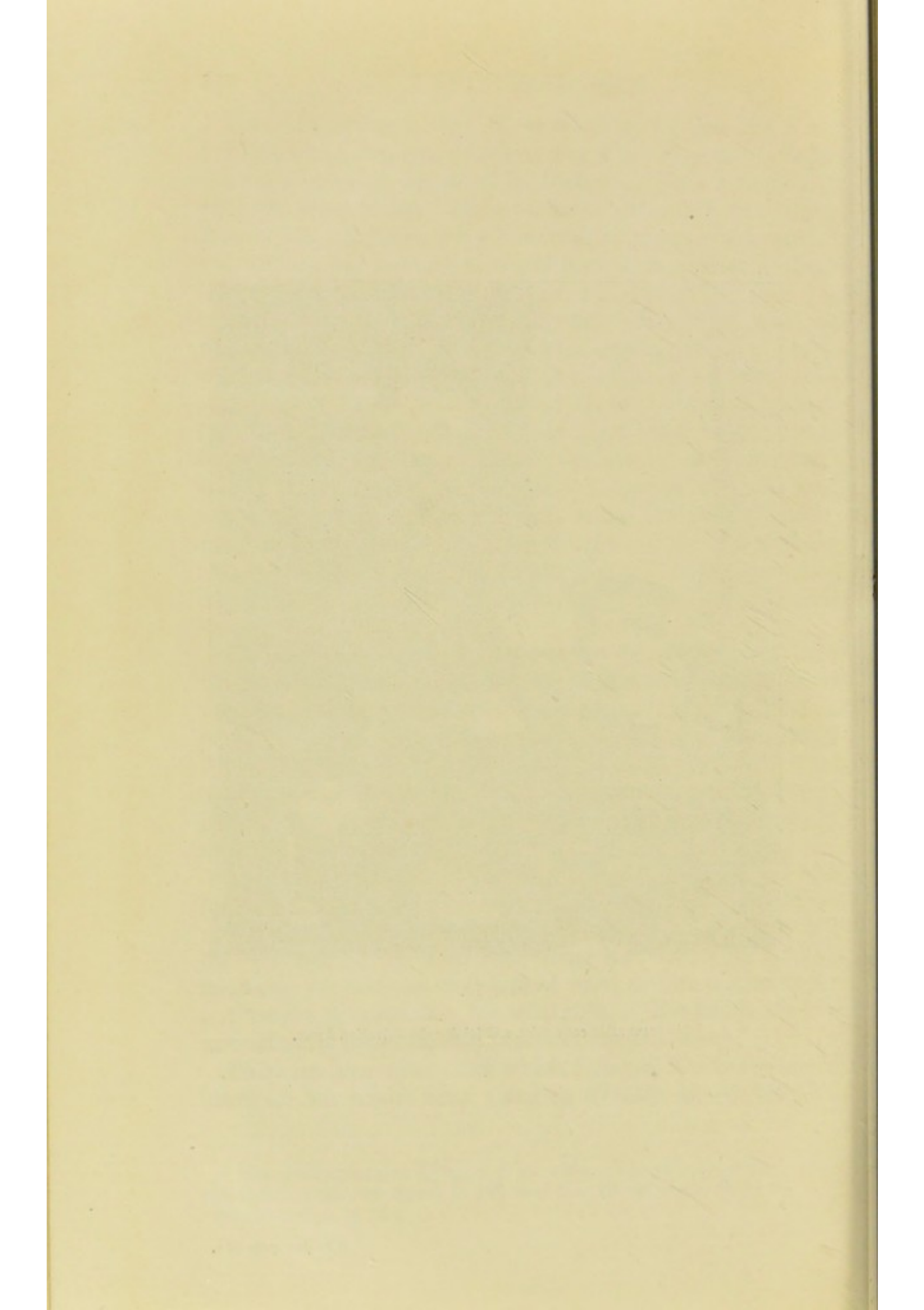
There are two more cases which I should like to describe to illustrate the social work going on silently in our big City;

¹ His skull measures $7\frac{5}{8}$ in. \times 6 in. wide. The circumference is $23\frac{1}{8}$; the antero-posterior dome is $12\frac{3}{4}$ and the lateral dome is 14 in. The cephalic index is $78\frac{2}{3}$.



FIG. 79.

The same after conversion and joining the Salvation Army.



whilst some of us are hurrying after pleasure, others seeking for wealth, or perhaps enjoying an honestly earned rest. It is well known that the Embankment is the resort of the very poorest of the poor; that many lie out there night after night in the cold, within a stone's throw of our omnipotent chambers of legislature. Many suicides are silently perpetrated; annually somewhere about 200 bodies are found in the Thames which cannot be identified. These two cases were very nearly falling into this melancholy group.

In the first case the name which is Scotch, speaks of a glorious ancestry, so that even if there be now a temporary disaster, there is some breed and stamina to withstand it. His father was a Londoner and in the theatrical line. Our friend was brought up at a church school in St. Giles in the Field. When 15 he ran away to sea and followed that career for 10 years. When about 25 years of age he had a very severe domestic affliction, which drove him to alcoholism. This lasted for 10 years. Twice he attempted suicide; once with a knife, and another time he threw himself into Wapping Basin.

He has for some years had charge of the Salvation Army "Shelters," and meets very rough men, the same class that frequent the casual ward; but he succeeds in drawing some good out of their hearts, rather than the workhouse plan of inviting the bad qualities. He is a remarkable man and one curious event is associated with his workhouse career. When in a London workhouse, on account of this alcoholism, he used to slip out of the lavatory window and down the pipe two stories, into the street. He then went to a public house opposite and had his *quantum*. But one night he drank double *quantum* and could only climb up one storey, where he fell into a drunken slumber and was caught. He was dismissed and never readmitted.

He was often reduced to a terribly weak condition during this sad career, and had many rough turns with the police. On one occasion when he had been pitched out of a public-house in the East End, he met a Salvation Army officer, who took him to the shelter at Burn Street, dressed his cuts and fed him.

The next day he was converted at a meeting and entirely

lost all desire for alcohol from that day. To the medical profession this is a most interesting fact.

Here is another case of a derelict, a normal in adverse stormy conditions,—shipwreck, followed by rescue and restoration.

This man is 39 years of age. His family had always been in good circumstances. His father was a hard drinker and his mother partook moderately. Out of a family of 6, 2 children died in infancy. Infant mortality, $\frac{2}{6}$. He went to a church school when 5, and to a boarding-school from the age of 12 to 15. His memory goes back to the age of 3 which shows a proper intelligence. From the age of 15 to 21 he was engaged in the City.

He got among fast company and for about 10 years was on the racket, until his conversion 8 years ago. He reckoned up the number of nights, in the particular year preceding his conversion, that he spent in bed. It came to 3 months, so that 9 months out of that year he was without shelter at night, wandering on the streets. These nights were frequently spent on the Embankment. One day, when he was very exhausted from drink and starvation, he thought he would go to the Salvation Army. He was on the Embankment, but could not manage it. He contemplated going into the river, not for the first time, but was moved on by the police. However he rested against the parapet and watched an old gentleman feeding gulls. This made him curse, that food should be given to gulls when so many were starving. He craved for that food, but was too proud to ask. He turned away, afraid lest he should use violence to the old man. As he turned he distinctly heard a voice say, "Are you quite fair? Have you ever done anything for me?" His many lost opportunities stood out vividly before him, and he became very penitent. At that moment a young woman came up and offered him some slices of bread and butter, which gave him enough strength to crawl to the Shelter. He says he was converted on the Embankment during that mental struggle, and suddenly and entirely lost the drink craving.

I must apologise to some of my readers for introducing the gull incident into a physiological treatise. The term

"conversion" means in religious circles a complete change forward, just as some use the term reversion, in biology, as a throw back. It is a psychic phenomenon, apparently of some importance, for in these two cases the tissues were soaked in alcohol, craving for more; yet, without touching the physical part, the thirst and temptation were lost. It looks as if these phenomena stood on a plane above the physical, and wears the appearance of a good tenant entering and casting out a disreputable, untidy one. Whatever our opinions we cannot ignore facts.

As function follows structure, so body comes before mind, and psychology follows physiology. Working on these lines, General Booth appeals to the soul after the body has been attended to. Here is the key to success. He says, "I have fed and clothed you, are you yet happy; or shall I make you happy?" The Salvation Army aims at happiness. There is no cant, no reckless condemnation; all is cheer, hope and rescue. Bury the past, look forward to the future. It is healthy religion because it is practical, especially for the derelicts and degenerates. It rouses and restores the fallen; while it guides, upholds and protects degenerates, who are incapable of doing anything for themselves. This appears to me the essence of practical religion.

Physio-
logical
religion.

As regards the very poor, the outcast, the harlot and the criminal, we must all agree that General Booth has formed a good and workable organisation, the Salvation Army. Where the lash has failed to reform, or chains to curb, the Salvation Army has effected cure. Its officers are conspicuous for their unbounded charity. Look at the photograph of the dear old coiner who has been 40 years in prison.¹ He is a Catholic. They do not disturb his faith but strengthen it and teach him to live up to it.

One writer who has attacked the Salvation Army, publicly and in books, complains that it does not fill its meeting houses in proportion to the sums of money received, and gives statistics which affect to support his statement. But this is where a misunderstanding comes in. The Salvation Army is not building up a sect. Its religion is built on first principles; detail may follow in individual cases. If the Salvationists rescue

¹ P. 204, chap. x.

a young man who is a Churchman, to take a case in point, as soon as he is converted, they send him home and tell him to go to his own church. Their work is done, they have others to take his place. In the case alluded to, the young man, a University Graduate, had imitated the Rake's Progress, and was cast out by his father. He was on the point of suicide from despair when rescued, and this happened many thousand miles from home. After his body came his soul. Even then the drama was not finished, for the Salvation Army in England had to reconcile the father—not an easy task; pay the boy's voyage home; and re-introduce him to his family. The restoration of a useful individual to a useful life was completed, and another case taken up.¹ But the great work of the Salvation Army must not overshadow what other religious bodies are doing.

Quaker-
ism,

In the year 1810, the Society of Friends started a prison mission, and Elizabeth Fry's name will always be associated with prison reform. Well do I remember the work of Friends among the very poor. They dug deep in the mire, and took those who were left by other missions, very much as the Salvation Army is doing now. Never in my experience have I heard a Quaker catechise any one of the poor as to his soul. It would have been repulsive to do so. They always began by supplying the temporary needs—coals, blankets, food and clothing. This was on physiological lines. Do not mistake their motive. It was not to enlarge their Society, for in those days membership was exceedingly difficult to obtain. Unfortunately, in the present day, the decadence of Quakerism is largely due to admitting the lower classes, who cannot possibly understand the principles of this once useful socio-religious body. In spite of their reticence, their religious influence was enormous. It came in the form of advice and example.

The
National
Children's
Home
and Or-
phanage.

Here is an illustration of a grand philanthropic work on intensely physiological lines. I allude to the work done in various parts of the country by the Wesleyan organisation, known as the National Children's Home and Orphanage.

I have been associated medically with their work in London

¹ Strange to relate, the expenses of the Salvation Army were never remitted. It reminds one of the cleansing of the ten lepers.



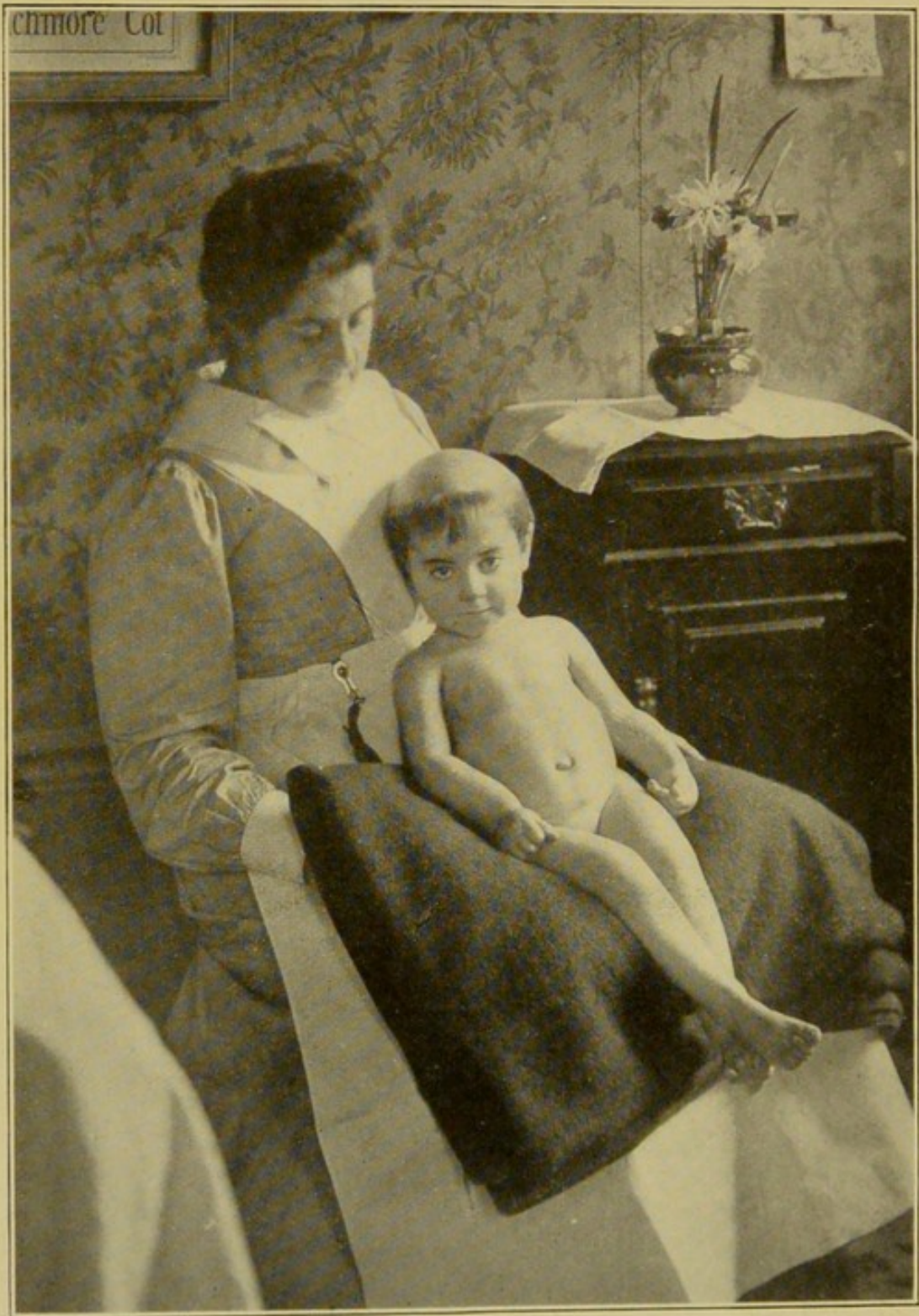


FIG. 80.

A little girl, aged four, with all hope destroyed before she saw daylight.

for many years and speak with knowledge. It happens to be an anniversary, about the twentieth, since I operated on a very delicate child in their Home. She is with them to-day, because she is not strong enough to go out and compete in the struggle for life. That is the splendid feature in their work and constitutes a veritable Home. It is not a proper home if you are kept only for 3 or 4 years, or turned out because you are 16 or even 20.

I happened to be visiting another bedridden cripple recently, and saw this little four-year-old girl shown in Fig. 80. She had been in the home 3 or 4 months. Her previous environment is beyond description. She suffers from rickets, distorting the hands, ribs and other parts. There is hydrocephalus, with an overhanging forehead. She weighed on admission 18 lb., whereas a girl of 4 should weigh 36 lb. After 3 months care she weighs 24 lb. Her length or height should be 36 in., whereas it is only 29 in.

At first she was in fear of every one, but when the sister—
Sister Emma—gained her confidence, the cry was for beer;
“Beer, mammy—more beer.”

Beer
when
three
years old.

This poor child can never become normal. It is a terrible thought, but nevertheless true that it is wrong to rear such. In reality all these poor children should meet with a painless end, which horrible idea the philanthropist will not entertain. He looks on sympathetically, but passively and does nothing. If we all realised this unpleasant truth about these afflicted ones we should no longer fine or imprison brutal parents. We would execute them. In less cruel cases sterilisation should be boldly resorted to.

There are many other good missions which succeed by similar methods. One to which I have been attracted is the St. Giles mission. Their general work is rendered national by the hundreds of lads rescued both from prison cells and off the streets. They are fed and clothed; then they yield to higher influences, becoming both honest and industrious.

Dr. Barnardo's great work amongst the children of the poor, waifs and strays, is too well appreciated to require special mention. I have heard him express the opinion that environment is the factor which ruins so many lives. He had the opportunity of observing many thousands of

children who passed through his institutions. Nutrition restored their bodies and gave impetus to mental development and repair.

The result of Dr. Barnado's work supports a favourite theory of mine, which is that we can find as good stock and breed among the poor as among the rich. The unfavourable environment in childhood destroys the good, so that they cannot be distinguished from the bad. In early youth for this reason it is difficult to separate the wheat from the tares. They all look like tares. This is a scientific argument in favour of caring for the children, as they do in Holland and Belgium, so that we may preserve the wheat from the tares.

The Church of England Waifs' and Strays' Society does a grand work. Their report taken from the *Times* in 1909 explains how nearly 15,000 children were handled, with only 5 per cent. of failures. In actual figures less than 800 cases. At least 12,000 children have been saved from the streets, from degradation and crime.

The Rev. F. W. Newland at Claremont, Pentonville, begins with a *crèche*. The poor toiling mothers, the white slaves of a prosperous commerce, have no decent homes wherein to leave their infants. Every infant in that *crèche* represents a life dragged from the form of degeneracy about which I am writing.

The white
slavery of
com-
merce.

Supposing we leave the actual criminal world, Society has still an account to settle with that large section of humanity, who live perpetually in the poverty zone.

I allude of course to the strongholds of our commercial industry, which control and hold down the wage earners at sweating figures. The accumulation of undue wealth is a crime against the community.

The millionaire in the liquor trade builds his castle on the ruins of thousands of homes, watered with the tears of the children. But can the benevolent draper, or pious potter, hold him up to execration? With a mortality of 200 per 1,000 of all children born in the pottery districts, how can the magnates rest in their beds at night?

There is in our country a white slavery equal to the slavery of the coloured races.

While we applaud the donor of £1,000 to an earthquake

fund at the Mansion House, or £10,000 to a tidal wave disaster, or even £50,000 for the unemployed, have not these vast sums been taken, not only out of the pockets, but out of the lives of the white slaves—out of the mouths of the children?

Should not the subscription list run thus—

From draper's white slaves	.	.	.	.	£1,000
From manufacturer's white slaves	.	.	.	.	£10,000
From potter's white slaves	.	.	.	.	£20,000

and so on?

Are there not many good "Christian" employers paying their girls 10s., 7s., even 5s. a week? Do they ever reflect how the balance of the minimum living wage must be made up? If they want details I, or any other medical man, can quite readily supply them.

Is there not an extraordinary kink in the human mind, not only in each one of us ordinary folk, but among the pious and those who court a good name, and a reputation for righteousness among the public? We are in reality dual personalities—Jekylls and Hydes. Some are Jekylls at home, in places of worship and in public; but they are Hydes in their offices and factories. This is England's cancer, her blot, her source of misery, disease and crime.

If for no other reason than the theory of compensation which I have alluded to, I should believe in a future state; an abode where the down-trodden, who have never known peace, might rest in sunshine; where those who had grown up in hate might dwell in love; and where those who toiled and never won, whose life was endless storm and stress, should finally cross the bar and abide in calm.

Ruskin sums up the situation thus ¹:

"There is no wealth but Life. Life including all its powers of love, of joy and of admiration.

"That country is the richest which nourishes the greatest number of noble and happy human beings; that man is richest who, having perfected the functions of his own life to the utmost, has also the widest helpful influence, both personal, and by means of his possessions, over the lives of others.

"And if, on due and honest thought over these things, it seems that the kind of existence to which men are now summoned by every plea of pity and claim of right, may, for some time at least, not be a luxurious one;—consider whether, even supposing it guiltless, luxury would be

¹ *Unto this Last.*

desired by any of us, if we saw clearly at our sides the suffering which accompanies it in the world. Luxury is indeed possible in the future—innocent and exquisite ; luxury for all, and by the help of all ; luxury at present can only be enjoyed by the ignorant ; the cruelest man living could not sit at his feast, unless he sat blindfold. Raise the veil boldly ; face the light ; and if, as yet, the light of the eye can only be through tears, and the light of the body through sackcloth, go thou forth weeping, bearing precious seed, until the time come, and the kingdom, when Christ's gift of bread, and bequest of peace, shall be 'Unto this last as unto thee,' and when, for earth's severed multitudes of the wicked and the weary, there shall be holier reconciliation than that of the narrow home, and calm economy where the wicked cease—not from trouble, but from troubling—and the weary are at rest."

APPENDIX

SECTION A

A LITTLE ABOUT TRAMPS.

(By one of them.)

A tramp's life is, on the whole, a happy one. One great reason for this is that he has no home ties, no domestic troubles, no appearances to keep up, nobody to please other than himself—this necessarily makes it a selfish life; true, he may be generous but he usually looks after *No. 1* first.

There are several types of tramps.

There are those who make a practice of touring the country over and over again visiting casual wards, and occasionally begging during the day for a meal, although this class would rather do without begging and whenever they do beg, it is of necessity. They, however, are not backward at asking gangs of workmen whom they happen to see at work during their tramp for the scraps of bread, etc., left over from their dinner, and this they prefer doing to begging from door to door, but this they only resort to about midday. This class of tramp are very independent and prefer to tramp alone; occasionally he will mate with another, but very little conversation ensues on the road, but when in the casual ward they exchange confidences freely and talk about their different experiences with the police or about begging, etc., where they were treated kindly and where they were treated roughly. I have never been an inmate of a casual ward, but my father was a work-house official and I have practically been brought up in the work-house. I have heard and read a great deal of certain signs which tramps make use of to signify the best calls and the worst for the purpose of begging, but only one tramp did I come across in the casual ward who knew these signs, and he told me in confidence that they were seldom used by his fraternity; they relied chiefly on what information they picked up at the casual wards.

They take a delight in annoying a certain class of *old fogey* whom they know of on the road, such as an irritable old farmer

whose bark is worse than his bite, and even when they know that they will get nothing they do not miss calling upon him and getting their little bit of fun, and then when they come across a fellow tramp in the casual ward who also knows that particular *old fogey* they have a rare old laugh at the farmer's expense. They also talk about the best routes and the best workhouses to call at : where the task is heavy and where it is light, what kind of master, doctor and labourmaster ; how to get round them for different things—medical treatment, clothing, etc.

A tramp does not want work, but if offered a job he might take it and work a day or two and then leave, even if the work found him is permanent. Whilst at work he is a good worker. Whenever he accepts work it is because he wants a carouse, or perhaps a new rig out in clothing, which he will get at a second-hand shop for a few shillings. When he has earned sufficient for his purpose he will draw it and depart, resuming his tramp again.

They rather like the bath which they are forced to have at each casual ward on admission, providing it is not made too cold for them. Those who resent the bath are those who are not regular callers at the casual ward. It is said that tramps seldom, if ever, have a bath, but this is not true of the casual ward patroniser.

There is a story told of two tramps who visited a casual ward for the *first* time, and as is usually the custom they had to strip and enter the bath (there being two baths going at a time). After undressing they stood a while scrutinising each other. Presently one remarked to the other, "My word, Bill, you ain't 'arf dirty—why you're dirtier than I." The reply came, "Well, and what about that, ain't I older?"

On the whole the casual ward tramp is a lover of cleanliness as far as he is able to practise it. He generally gets through his task early, so that he might have time left to wash himself, and brush his clothes and boots prior to leaving.

Another class of tramp is the *professional moucher*. He is a lazy type of tramp, despised by all others. He does not travel fast, but works the district well before leaving it ; he generally makes one large town his centre, and then works the surrounding districts, returning to the centre each evening laden with whatever he may have been able to *mouch*. He generally wears two or three coats, all of which pockets he fills with the stock received, bread, etc. ; besides which he generally has a bag or sack in which he carries such things as old clothes, boots, etc. These he sells in the lodging-houses which he patronises, to the other lodgers, at a few coppers a time. He generally stays in a place where working men lodge, because he has a better chance there of disposing of his stock ; but he has

a warm time of it with his fellow-lodgers, who, although they purchase his articles because of the *bargains* he offers, yet hate the sight of him because of his mouching habits, having to work hard for the money they get, which often is less than what the tramp gets by mouching.

Whether he would reckon his life happy or not I scarcely know, for I never did converse with a professional *moucher* but always avoided him, for I had no sympathy with his mode of living.

Another type of tramp is the one who has some genuine means of obtaining a living, with which I would class hawkers, musicians, etc. These undoubtedly are the happiest, and in this category I would class myself whilst on the road. Of course they have varying experiences, according to the nature of their calling. For instance, I knew a man who once had a greengrocer's shop in Sheffield—he was crippled in one arm (his mother dropped him whilst a baby and his right arm had ceased to grow, but he could use it a little)—married with one child; he learnt to play a violin, but had no knowledge of music, but could easily pick up music-hall ditties and old English ballads, etc. Being of a lazy disposition, and not caring for the hard work entailed in a greengrocer's business, he looked about for an easier way of earning a livelihood. By some means or another he found out that little fortunes were being made by crippled musicians. Therefore he decided to sell up the shop and take to the road. He sold up the business and home, sent his wife and child to her mother's, took train to Liverpool and started playing in the streets. He bared his arm to show how he was crippled and played much worse than he was capable of doing, the tunes being barely recognisable, and the money streamed in. He took a house in Liverpool and got his wife and child over and stayed there several months. When he had worked Liverpool fairly well, he took train to Birmingham, thence to London, Nottingham, Manchester and back to Liverpool, making several pounds a week, sending money to his wife and mother regularly for a considerable time. I met him at Bolton in Lancashire; he took a liking to me and for *my* convenience he tramped from town to town. He was a Scotchman¹ and naturally would not assist me financially. I was earning good money but not sufficient to warrant my journeying by train, as my earnings fluctuated, sometimes doing well and sometimes badly. He took me to Liverpool, where I lodged with his wife (and incidentally forestalled him in her affections, causing trouble which resulted in him leaving her, touring the country with

¹ Let all Scotchmen make a note of this word "naturally."

another woman, I remaining in Liverpool with his wife for a few months, leaving her later by mutual agreement). I had known him go out in Liverpool about 3.30 in the afternoon, stand in London Road for a while, return about 4.30 with over a sovereign in copper and sixpenny bits. This he assured me was a very ordinary occurrence. During the latter days of our friendship he became lazier and would only go out when his stock of money had almost exhausted. He also had been warned by the police about baring his arm, which frightened him a little, but he overcame this difficulty by having a tight-fitting sleeve made for his crippled arm. The effect was not quite so good as previously, but the crippled arm was obvious; he nevertheless felt a little nervous.

I mention his case to illustrate the brightest side of things. Musicians generally do well anywhere and everywhere, especially if crippled; hawkers vary according to the nature of their goods and the district. In some towns certain goods go well, whilst in other districts the same goods are difficult to dispose of. I came across a Cockney in Sheffield who was selling copies of music at prices varying from 1*d.* to 6*d.* each, and who informed me that in London and suburbs his music sold like hot cakes, but in Sheffield he with difficulty secured his lodging money out of them. I myself had quite an opposite experience. I did very badly in London, and exceedingly well in the provinces, but this was probably because my goods needed some little explanation before a sale could be effected and this Londoners were not prepared to listen to, they being too much worried by hawkers with various novelties, whilst in country places there are fewer hawkers (with novelties) and therefore a better hearing is obtained. My own experience was a mixed one, sometimes swimming and sometimes sinking, but this was mostly my own fault—drinking habits.

This latter type of tramp travel the country at their leisure and generally through thickly-populated neighbourhoods; they generally feed well, but not often—about two meals a day and occasionally three. The evening is the time they set to work mostly; with the exception of door to door hawkers, who do their business during the day, finishing early. Those who work (?) in the evenings usually lounge about during the day unless they have their stock to replenish.

Some of the means employed to earn a living which I have closely come in contact with during my tramping days are as follows :—

Pictorial postcards (own make).

Home-made pincushions.

Hawking—music sheets, novelties and usual hawkers' outfit.

Quack medicines.—Corn cure, toothache, sore feet, ointment and powder, tonics, etc., etc. Market places and occasionally street corners where “pitching” is allowed.

Musicians, hawkers, and street artists do not usually drink excessively, but wire workers are noted for being drunkards, also quack medicine vendors and most of those who have to visit public-houses to ply their wares.

Playing a musical instrument.—Violin, tin whistle, concertina, cornet, flute, phonograph, harmonium and singing.

Wire-working.—Puzzles, platehangers, toasting forks, iron holders, teapot-lid holders (my own), flower-pot holders and various novelties.

Tub-mending.—Well paying job, requiring little capital.

Flowers.—Made out of potatoes and carrots, turnips, etc.

Bungs.—These were little cylinders made out of waste brown paper and made to fit any size beer-barrel taps. Sold at 2d. a dozen.

Pavement artists.

A TRAMP'S GLOSSARY

<i>Spike</i>	The casual ward.
<i>Lump</i>	The workhouse (proper).
<i>Swag</i>	Hawker's outfit.
<i>Swag shop.</i>	Hawkers' supply shop.
<i>Tommy</i>	Bread.
<i>Chuck</i>	Bread.
<i>Grub</i>	Food of any description.
<i>Kip</i>	The price of a night's lodging.
<i>Kip-house</i>	Lodging-house.
<i>Doss</i>	Night's lodging.
<i>Doss-house</i>	Lodging-house.
<i>Totting</i> or }	To go from house to house gathering remnants of cloth, old clothes, etc., and selling the same.
<i>Tatting</i> }	
<i>Griddling</i>	To go singing or playing an instrument in the streets.
“ <i>Bulling the teapot</i> ”	The act of pouring hot water upon an already exhausted supply of tea-leaves; by this method a mug of very weak tea is obtained, a common practice in lodging-houses.
<i>Moucher</i>	One who exists purely on charity.
<i>Cadger</i>	One who continually begs even when he could afford to buy.

<i>Mile stone inspector</i>	A "swanky" term denoting a tramp.
<i>A soldier</i>	A red herring.
<i>Stir</i>	A prison.
<i>Swank</i>	High-sounding talk for a menial position ; to make things appear better than what they really are.
<i>Glimming</i>	Opening carriage doors in the streets.
<i>Busking</i>	Singing outside public-houses. Here they get plenty of coppers and beer.

SECTION B

The Degenerates' Prayer*(expressing the real truth)*

"Have pity upon us, good Lord, because we do the things we ought not to do, and we do not the things we ought to do—and there is no health in us.

But Thou, O Lord, knowest that we are the tainted offspring of forefathers beggared in their bodies by luxury and riotous living, and of fathers who sapped their manhood in vice.

Pardon our murders, our brutalities, our thefts, our crimes of cunning and cruelty, which we daily commit.

Put sorrow and penitence in our hearts.

Forgive our fellow men, who have helped to cripple our childhood and who now torture us and curse us—for they are blind.

Teach them how to be just to us, for Thou, O Lord, knowest the heart of man.

Our hope is in Thee for Justice, and our trust for Mercy."

INDEX OF SUBJECTS

A.

Accessory Chromosome, 154
 Adultery, 57
 Affiliation, 110 ; in Germany and America, 111
 Alcohol for young mothers, 64 ; prenatal cause, 64
 Alcoholic parentage of criminals, 64 ; responsibility of, 90
 Aments and Amentia, 7
 Argument, the, 1
 Arrested development, 174
 Association areas of brain, 226, 255
 Astrœa, Goddess of Justice, 117

B.

Balance, the Great, 117
 Beer when four years old, 359
 Black Cap, 59
 Bleeders, 198
 Blood, thirst for, 92, 332
 Booth's, General, message to England, 350
 Borstal system, 332
 Brain, the, association areas, 226, 255 ; of an alcoholic, 235 ; basal ganglia, 222 ; cerebrum, 222 ; convolutions, 223 ; cortex, 223 ; of a degenerate, 231 ; examination of degenerate's, 271 ; functional areas, 225, 256 ; microscopic structure, 228, 258 ; pattern, 224 ; physiology of, 220 ; size and weight, 223 ; sulci, 223 ; supra-normal child, of a, 235
 Brains, lower forms, 222
 Breed, 43 ; in animals and man, 193
 British methods, 116, and results, 116

Brutal crime, explanation and treatment, 322, 327

C.

Capital punishment, 87
 Cells, prenatal and post-natal, 5
 Cell, germinal, 144 ; nerve, 229
 Chevalier de Beaumont, 158
 Children, care of, 235 ; defective, 22 ; in workhouses, 107 ; motherless, 107 ; criminal instincts, 52
 Church Army work, 330
 Church control, 59 ; control of marriage, 162
 Chromatin, 145
 Chromosomes, 145 ; accessory, 154
 Civilisation, a curse, 9
 Class legislation, 60
 Clergy, benefit of, 59
 Codes, criminal, 123
 Commerce, the white slavery, 360
 Congenity, 175
 Consanguinity in marriage, 179
 Conversion, 249
 Cortex, the, 223 ; its development, 265 ; layers of, 259
 Crime and crimes, 56 ; abnormal, 112 ; a disease, 111 ; a drama, 113 ; among savages, 57 ; brutal, 327 ; emotional, 92 ; groups of, 60 ; sentence to fit, 132 ; transition in, 56 ; wild animals, 56
 Criminals, alcoholic parentage, 64 ; are conscientious objectors, 104 ; a social product, 48 ; bloodthirsty group, B, 322 ; classification, 54 ; congenital or born, 37 ; degenerate, not all degenerate, 31 ; derivation of term, 48 ; entitled to compensation, 145 ; expert, 3 ;

- how are they made, 63; important factors making, 63; infant mortality, 67; the instinct in children, 52; as invalids, 342; lunatic asylums at Tournai, 316; a malformation, 114; the manufactured, 129; not a hero, despicable, 49; not a class, 50; normals, A, 321; potential criminals, 51; qualities, 38; reactions, 40; require sorting out, 112; treatment of juveniles in Belgium, 306; in Holland, 284
- Treatment of rich, 320; (types of (A, B, C), 321; trial a drama, 113; tubercle, 66; the type, 51; weak-minded, 4
- D.
- Degenerate, the brain of, 271; a contradiction, 37; demands justice, 13; fertility, 36; literature on, 31; mental capacity, 34; not responsible, 82; physical endurance, 35; a weakling, 36; is weak-minded, 13
- Degenerates, 55; treatment of, 322
- Degeneracy, biochemical, 32; cases of, 211; continuity of, 184; Féré, 32; Ferri, 38; follows on civilisation, 217; in Holland, 293; how to arrest, 219; how disease starts, 211; is it inherited or congenital? 178; Lombroso, 40; meaning of, 33; more accurate view of, 203; Morel, 33; Ottolenghi, 33; physical basis of, 230; P. C. Smith, 33; the two questions, 217
- Degeneration, stigmata of, 237
- Derelicts, 55, 354
- Derelicts and vagabonds in Belgium and Holland, 286
- Desertion, 167
- Development and its dangers, 170
- Divorce, 167
- Dual personality, 93; a boy in Holland, 282; dual consciousness, 250
- Duty, our, 10
- Dutch colony at Assen, 287
- E.
- Ecclesiastical Courts, 59
- Education, failure of compulsory, 17; ideals of, 20; my code, 24
- Emotional crime, 92; insanity, 91, 93; irresponsibility, 91; moral offences, 94; religion for criminals, 345
- Emotions, physical centre of, 98; St. Paul on the, 96; seat of, 240
- Environment, 61; reacts on heredity, 210
- Epilepsy, 46
- Equity, 127
- Ethics, 248
- Eugenics, 10
- Evolution of brain, 172; of human species, 172
- F.
- Feeble-minded, 16; definition of, 330; is it spontaneous? 214; Royal Commission, 213; secret taints, 215
- Filial regression, 181
- Food adulteration, 103
- Free and Bond, 352
- G.
- Gamut of humanity, 6
- General Booth's message to England, 350
- Germinal elements, 144, 145
- Germ plasm, continuity of, 148; Weismann on, 147
- H.
- Heart, weighing of, 117
- Heights, 332, 336
- Heredity, definition of, 175; *de novo*, 210; diagrammatic scheme of, 236; problem of, 184
- Hermaphroditism, 156; applies to us all, 161
- Holland, care of 'youth, 279; prisons, 278; social hygiene, 278; Tucht schools, 281
- Homo, varieties of, 5, 6, 261

Humanity, abnormal, 11
 Human races, 188
 Hysteria, 240

I.

Idiots and imbeciles, 7, 16
 Imbecile, operation on speechless, 223, 257
 Inconsistency, 106
 Infant mortality, 37; among criminals, 67
 Insane, criminal, 12; degenerate, 11; responsibility of, 89
 Insanities of intellect, 12
 Insanity, emotional, 91, 93; intellectual, 91; often obscure, 98
 Instinct versus intelligence, 227
 Intellect, divided into prenatal and post-natal, 229; layers of, 5, 270; St. Paul on, 96
 Intelligence, 9; *versus* intellect, 227

J.

Jews, the, 190
 Judicial institutions out of date, 345
 Jukes family, the, 210
 Justice, is biological, 145; Astroea, Goddess of, 117; physiology of, 144; *versus* equity, 127; *versus* law, 127
 Juvenile adults: the corresponding class in Holland, 283; in Belgium, 298
 Juvenile criminals, 332; examination of, 335
 Juveniles, examination of degenerates, 331

L.

Law, attitude of, 121; common, 126; evolution in, 128; Norman, 122; ridiculous, 139; *versus* Justice, 127; what is? 122
 Laws badly administered, 329
 Lawyer, as a man, 111
 Lex talionis, 123
 Lust and crimes, 42, 108

M.

Males, becoming females, 153; bi-potential, 156; importance of, 180
 Maleducation, 69
 Malnutrition, 69
 Marriage, 161; a Bureau necessary, 165; civil, 162; claims of church, 162; consanguinity, 179; misfits in, 165; responsibility in, 99; religious, 162
 Memory, 337
 Mendelian principles, 195; and brachydactyle, 201; and congenital cataract, 200; and hereditary disease, 197; ratio or plan of, 201; and tallness, 198
 Merxplas, the colony of, 295-301; classification of inmates, 298; financial side, 297; punishments at, 299
 Message to the good women of England, 339
 Mind, where is? 239; mystic's view, 243; physical basis of, 254; physiological aspect of, 243; seat of, 241
 Missing link, the, 189
 Moral control, in Dutch criminal colony, 289
 Moral offences, 95
 Motive, 102
 Murder, 57; lunatic hung for, 84
 Mutations, 207

N.

National Children's Home, 358
 Nature, tries to repair damage, 193
 Negative aspect of wickedness, 206
 Negroids, 188, 190
 Nerve action, 221
 Normal man, becomes an invalid, 81; his fall, 81
 Nutrition, value of, 149

O.

Offences, the constant repetition of, among youths, 338

Ontogenesis, 264
 Opportunities lost, 338
 Orphanages in Holland, 285 ;
 the Wesleyan, 358
 Outlawry, 123 ; hygiene of, 124

P.

Palates, 337
 Pangenesis wrong, 147
 Paranoia, 44
 Paul, St., on personality, 96 ;
 intellect, 96 ; responsibility,
 97
 Perverts, 54
 Personality, dual, 93 ; intellec-
 tual alone responsible, 96
 Physiology of justice, 144 ; of the
 brain, 221
 Physiological religion, 357
 Physical basis of degeneracy, 230 ;
 of personality, 254
 Phylogenesis, 264
 Pickpocket, 354
 Pith of the argument, 4
 Pleasure—what is ? 240
 Political prisoners, persecution,
 140
 Poor, the, duty of community,
 339
 Post-natal development, 5, 245,
 268, 275
 Predisposition, 176
 Prison, for chronics, 130 ; popu-
 lation, 49
 Prison at Hoorn, 292
 Procreation, 183
 Punishment, 57
 Psychic processes, 248 ; in moral
 control, 289
 Psychological characters, trans-
 mission of, 182, 202
 Psychopath, 43
 Pyramidal layers, the, 228 ; divi-
 sion into two, 244 ; seat of
 mind, 241, 261
 Prenatal and post-natal layers,
 229, 244, 262 ; what the post-
 natal layer means, 245

Q.

Quakers, purity of, 216
 Quakerism, 358

R.

Reflex action, 222

Refuge, Houses of, in Belgium,
 303

Religion, 248 ; effect of, 58 ;
 emotional, 345 ; its value in
 penal colonies, 300 ; value
 of, 344

Repressive measures in Belgium,
 301

Resistance, racial, 176

Responsibility, 70 ; of alcoholism,
 90 ; in common life, 72 ;
 of degenerates, 83 ; different
 applications of, 74 ; differ-
 ent levels of, 75 ; difficult to
 estimate, 95 ; of epileptics,
 89 ; fictitious, 77 ; illus-
 trations of, 72 ; insane, 88 ;
 legal, 79 ; in marriage, 99 ;
 monomaniacs, 90 ; muni-
 cipal, 77 ; original meaning,
 71 ; St. Paul on, 97 ; its
 physiological application, 71 ;
 of tainted humanity, 88 ; of
 those once insane, 83 ; an
 undefined term, 70

Revenge, punishment is, 57

Reversion, 174, 209

Reward *versus* penalties, 289

Robbery, 57

Roman period, 58

Royal Commission on feeble-
 minded, 14, 213

S.

Salvation Army, work, 328

Sex, Bateson on, 151 ; Castle's
 theory, 151 ; determined in
 ova, 150 ; Dusing's experi-
 ments, 149 ; equilibrium of,
 161 ; Giard's observations,
 152 ; Heape's theory, 148 ;
 is it mixed, 155 ; nourish-
 ment theory of Yung, 148 ;
 Orton's observations, 153 ;
 singleness of, is incorrect,
 161

Sexual elements, development of,
 157

Slavery, white, 360

Social hygiene in Holland, 278

Stigmata of degeneration, 237

T.

Tallness as a dominant, 198

- Teaching, methods, 21
 Teeth, 293, 311, 331, 337
 Theory of the book, 1
 Tradition, 63
 Tramps, experiences of, 352, Appendix A
 Treatment of criminals as invalids, 342
 Treatment of blood-thirsty degenerates, group B, 327; classification of, 320; a Dutch judge on, 318; object of, 113, 346; of normal criminals, group A, 327; of weak-minded, group C, 325, 328
 Trial, criminals, a drama, 113
- U.
- Unfinished man, not allowed for in law, 129; degenerate is, 235
- V.
- Vagabondage in Belgium, 294; what it means, 294
 Vagrancy Acts, 137; the problem of, 295
 Vanity, 41
 Variations, 207
 Vengeance, 58
 Visceral sensations, 239
- W.
- Way out, 347
 Weights, 332, 336
 White slavery of commerce, 360
 Wickedness, negative rather than positive, 206
 Williams II, 134
 Women, treatment of in Belgium, 304
- Z.
- Zygote, the, 146



LIST OF AUTHORITIES

A.

Arnold, Matthew, 19
Attwater, W. T., *preface*

B.

Barker, L. F., 259
Barnardo, Dr., 360
Barnett, Mrs., 107
Bateson, Prof. W., 151, 207
Berry, Mrs. Dickinson, 22
Blackstone, 128
Bolton, Dr. I. S., 3, 256, 258,
259, 260, 261, 263, 265, 268,
273
Booth, General, 330, 350, 357
Bowkett, Sidney, *preface*
Bracton, 123, 164
Brereton, Cloudesley, *preface*
Broca, Paul, 2, 254, 276
Brodmann, 258
Budge, Dr. E. A. Wallis, 121

C.

Campbell, Dr. A. W., 3, 231, 260,
261, 272, 273
Castle, 151
Correns, 151
Coucke, N., 314

D.

Darbishire, 154
Darwin, 56, 147, 175, 179, 180,
207, 208
Délage, 148, 156, 171
De Somer, 316
De Vries, 207
Doncaster, 151
Dusing, 149

E.

Ellis, Havelock, 56
Emley, Maurice, *preface*

F.

Farabee, 201
Féré, 32, 34
Ferri, 38
Flechsigg, 254, 255
Fry, Elizabeth, 339, 343, 358
Fuller, Dr., 107

G.

Galton, Sir Francis, 181-198, 212
Gladstone, 106
Goring, Dr. Charles, 66
Gorst, Sir John, 23

H.

Hagreen, H. W. O., *preface*
Harmont, Herr, 292
Heape, W., 148
Hondius, Herr, 289
Hunter, John, 254

J.

Jackson, Dr. Hughlings, 46, 254,
255

K.

Kappers, A., 263
Keith, Prof. Arthur, 189
Kerr, Dr., 23
Kraft-Ebing, 42, 91

L.

Landois, 259
Laurence, Mrs. Pethrick, 142
Lebourg, M. A., 307
Lister, Lord, 254
Lombroso, 40, 237
Lowe, Robert, 18
Lytton, Lady Constance, 107, 142

M.

Macaulay, Lord, 123
MacNaghten, Judge, 82

Maitland, 123
Malthus, 56
Maudsley, 38
Mendel, Gregor, 195
Mercier, Dr. C., 71, 83
Metchnikoff, 188

N.

Napoleon, 122
Neild, T., *preface*
Nettleship, 200
Neugebauer, 156
Newcastle, Duke of, 18
Newland, F. W., 360

O.

Oettingen, 179
Orton, 179
Ottolenghi, Prof., 33

P.

Pankhurst, Miss, 107
Paul, St., 35, 93, 96
Payne, James, 330
Pearson, Karl, 182
Pollock, Baron, 123

R.

Rhodes, Dr. Milsom, 50
Ruskin, 360

S.

Sambon, Dr., 176
Savill, Dr. T., 250
Schwalbe, 186, 189
Serlé, Captain, R.N., 278

Sewell, 104
Sherbrooke, Lord, 18
Sherrington, Prof., 238, 240
Simpson, Sir James, 254
Sims, G. R., 41, 49
Smalley, Dr., 16
Smith, Elliot, 173, 222
Smith, Geoffrey, 152
Smith, P. C., 33
Solomon, Miss, 106
Spencer, Herbert, 56
Stephens, Justice, 127
Stroobant, Louis, *preface*, 295
Sylvestri, 151

T.

Telfer, Capt., 160
Thomson, J. A., 148

V.

Virchow, 254
Vogt, H., 255, 263, 264

W.

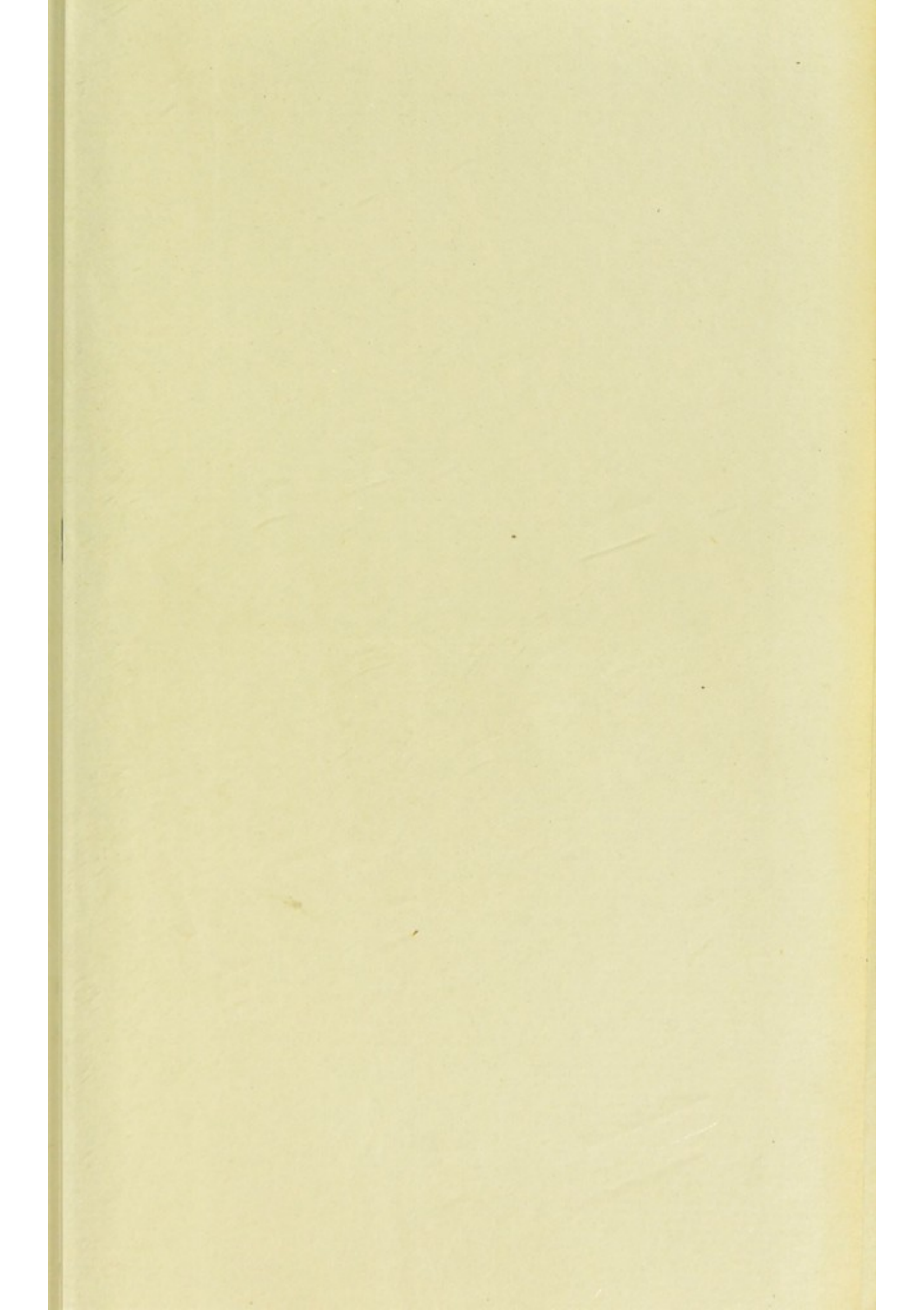
Waesberghe, A. van, 309
Wallace, A. R., 186, 188
Watson, G. A., 173, 227, 258, 263
Weismann, 147, 206, 208
Wheatley, W., 326
White, Arnold, *Introductory Preface*
Wilson, E. B., 154, 171
Wilson, Dr. Parker, 16

Y.

Yung, 148







M. Blewett



