

# From Witchcraft to World Health



S. & V. Leff

## CONTENTS

CHAP.	PAGE
INTRODUCTION	9
1. PRIMITIVE MAN	11
2. EGYPTIAN MEDICINE	26
3. GREEK MEDICINE	43
4. ROMAN MEDICINE	62
5. THE MEDIEVAL AGE	82
6. THE RENAISSANCE	110
7. THE INDUSTRIAL REVOLUTION (1)	149
8. THE INDUSTRIAL REVOLUTION (2)	167
9. THE TWENTIETH CENTURY	188
10. POSTSCRIPT	226
INDEX	233

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TO  
WORLD HEALTH



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by

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1956

LAWRENCE & WISHART  
LONDON

*Printed in Great Britain by  
The Camelot Press Ltd., London and Southampton*

## CONTENTS

CHAP.	PAGE
INTRODUCTION	9
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INDEX	233

## ACKNOWLEDGEMENT

Our thanks are due to the Wellcome Historical Medical Library for their assistance in choosing and in making available many of the illustrations in this book.



## LIST OF ILLUSTRATIONS

	<i>facing page</i>
Spanish Cave Painting—prehistoric (Reproduced from Laignel-Lavastine's <i>Histoire Générale de la Médecine</i> by kind permission of Albin Michel Editeur, Paris)	16
Lion Chase. South African rock painting—recent	16
Consultation with Medicine Man—Africa (From <i>Prehistoria de la Medicina</i> by kind permission of the author, Dr. E. Casas Gaspar, Madrid)	17
Assyrians moving a winged bull—bas relief (By courtesy of the British Museum)	32
The Gold Coffin of Tut-Ankh-Amon (By kind permission of Editions "Tel", Paris)	33
Athletes—bas relief (Reproduced from E. N. Gardiner's <i>Athletics of the Ancient World</i> by kind permission of the Clarendon Press)	48
A Greek Clinic—vase painting	48
Temple of Aesculapius—reconstruction (Reproduced from <i>Le Médecin Divin</i> , by Ch. Kerenyi, by kind permission of Ciba Ltd., Basle)	49
First-aid treatment in the Roman Army (Reproduced from Charles Singer's <i>A Short History of Medicine</i> by kind permission of the Clarendon Press)	64
Crane worked with human labour by treadmill (From a bas relief in the Lateran Museum. "Photo Alinari")	64
Roman Baths	65
Street in Rome—Via Biberatica in Trajan's Market (By courtesy of the Musei Comunali, Rome)	65
Village hovel—interior (Reproduced from Laignel-Lavastine's <i>Histoire Générale de la Médecine</i> by kind permission of Albin Michel Editeur and Archives Photographique, Paris)	96
Reconstructed Interior of Fourteenth-century Hall (Penshurst, Kent) (From a model in the Metropolitan Museum of Fine Arts, New York)	96

	<i>facing page</i>
Plague scene, Naples (1656)	96
(Painting in the National Museum, Naples. Reproduced from Laignel-Lavastine by kind permission of Albin Michel Editeur)	
Hospital Ward, San Spirito, Rome (Seventeenth Century)	112
(Reproduced from Castiglioni's <i>A History of Medicine</i> by kind permission of Alfred A. Knopf, New York)	
Mr. Howard offering relief to prisoners, 1787	112
(From a painting by F. Wheatley reproduced by kind permission of the Earl of Harrowby)	
Title page of Vesalius' <i>De Humani Corporis Fabrica</i>	113
(From the copy in the Wellcome Historical Medical Library)	
Advertisement	160
(From <i>Quacks of Old London</i> )	
Travelling Quacks	161
Sairy Gamp, the disreputable nurse in <i>Martin Chuzzlewit</i> by Charles Dickens	161
The Field Lane Refuge "for the destitute and homeless poor"	176
(From <i>The Illustrated Times</i> , January 8th, 1859)	
Single-tap water supply for houses in Bethnal Green	176
(From <i>The Illustrated Times</i> , October 24th, 1863)	
The Health Visitor in the home	177
(By courtesy of Union Centrale des Arts Decoratifs, Paris)	
A Potteries Landscape	177
(By courtesy of <i>The Times</i> )	
Modern Medical Machinery	208
(By courtesy of the Institut de Radium de Paris)	
Health Centre in Prague	209
A typical colonial side-street	224
(By courtesy of the World Health Organisation)	
W.H.O. team-leader demonstrating treatment to health workers	225
(By courtesy of the World Health Organisation)	

## INTRODUCTION

### MAN'S QUEST FOR HEALTH

THIS book tells the story of man in his search for health. In recounting man's progress from witchcraft to world health, we must describe his first steps from the forest and jungle, and the eventful journey that has led to the concrete highways of the modern world; for in the struggle of man to live fully, the art and skill of medicine has been developed.

The history of medicine is more than a record of famous men and outstanding discoveries. It is the story of how men have lived and suffered, how they have struggled and triumphed; how they provided the conditions for men of genius to advance the campaign against ill-health—how mankind has made medicine.

In the early days even the most intelligent doctors could not explain the spread of infection, for there was no knowledge of germs nor any means of knowing; similarly, the skilful operations of modern surgery could not be performed until collective efforts had forged new metal and precision instruments.

This book is about the way men lived in different periods as well as about the illnesses from which they suffered, because these things are intimately connected; this can be seen even in a single industry where two men are employed in different jobs: the miner working underground is likely to contract silicosis, and the manager may suffer from diabetes or high blood pressure. When we look at the disease as part of the whole picture, and not merely alone, we are thinking along the lines of social medicine.

Medical students today are taught to adopt this broad and comprehensive approach to the science of medicine, and in their doing so, much that was flat and two-dimensional, printed words on a text-book page, suddenly springs to life; they see the patient in the round: a human being who has a family, a job, and a specific place in the community; and so the illness which the student wishes to understand and learn to treat is related to the human personality who is suffering from it and hoping for a cure. It makes medicine more

complex and more real; and therefore more promising, for success in any sphere depends on how firmly we grasp the whole truth of the situation we are trying to master.

As for the medical student, so for the layman, who shares with our early ancestors a healthy concern for physical well-being. It is fascinating to see how primitive man struggled to survive in a harsh world, hampered by ignorance and lack of material resources. Now, with an insight into social medicine, we can be more than merely amused or interested by the quaint beliefs and methods of yesterday (and even of today): we can begin to understand why and how medicine progressed during countless generations. We can also understand how, as in the past, the story of medicine has been linked with the story of mankind, so it will be in the future, with doctors and the people together using the methods of social medicine so that all can enjoy life and good health.

## Chapter One

### PRIMITIVE MAN

#### *The Pattern Unfolds*

THE story of medicine is the story of man: man's most constant problem has always been how to keep alive. Death is the final enemy, and to hold him off as long as possible man has to overcome famine and disease. Disease is as old as life itself, but by many victories civilised man has achieved an average life-span of three-score years and ten: a passage of time that is difficult to envisage in one sweep. How far, then, must we stretch our imagination to reach backwards five hundred thousand years, to try to understand how our earliest fathers battled with disease?

Prehistoric man survived in a world that was difficult and dangerous. How did he learn to defend himself, to protect his relatively weak body, and eventually to outstrip in power and achievement all other living things? To find the answers to these questions we must examine the relics that have been left, and try to clothe the bare bones with flesh and blood.

Thousands of generations and new races of man have come and gone, the vast majority without evolving even an elementary script, and so leaving no written records. Nevertheless, traces of their existence have been scattered about the earth, far apart in space and time; ready to give the answers to many of the questions man asks about himself.

From the remains of bones unearthed in Africa, Asia and Europe, we can get a picture of early man: the strong, hairy body so like an animal's, the low forehead and receding chin, the crouching posture ready for flight or attack.

In places as far apart as the river-valleys of France and the steppes of Siberia, evidence has been gathered of the ways he supplied his first needs from the raw materials available, even though no wooden implements have survived, and experts do not always agree about the stones which early man used as tools; some possibly having been

shaped by the action of wind and weather, but others clearly made by the deliberate hand of a craftsman.

About five hundred thousand years ago, man's ancestors emerged from their shelter in the trees of the thick forests to find their living in the green open spaces and river valleys. Like the prehistoric bear and lion, early man crept into the darkness of a deep cave to protect himself from the cold and the night. This was his first home; and like every home, it was left with the imprint of his daily customs. Students of man's history have entered such caves and have been able to reconstruct how the inhabitants ate, slept and worked.

Further knowledge can be gained from a study of primitive peoples who are alive today. The life of the Old Stone Age men is reflected by a few backward and isolated groups living in the jungles of Malaya and Central Africa, in the deserts of north-west Australia and South Africa, and in the Arctic regions.

### *The Beginning of Progress in the Stone Age*

What gave man the ability to move far ahead of other animals, so that he overcame his fear and grew strong enough to master them?

His first advance was when he stood upright and freed his hands for more work. The fingers that scratched the earth for edible roots grew more sensitive, more exploring. Brain and hand working together in the endless search for food found that a suitable stone could be made to open a shell that had been too hard a nut to crack with the bare fist; a sharp stick in the hand was worth ten broken and bleeding finger-nails digging into the resistant soil for insect larvae and plants.

A stone in the hand of a man could kill a small animal, a squirrel or a rabbit; with stone spears and axes he could overcome more powerful beasts. But one man alone, even with a weapon, could not face an animal much larger than himself. So man, a rare creature on earth at first, lived and worked together in groups: he could be bold because he was united with his fellow-men.

Man's skill and inventiveness increased with his growing tasks, and his social organisation became more complex. It seemed a natural division that men should engage in hunting, and women remain nearer the settlement to care for the young. The women earned their living in a less strenuous way, which in time proved to be the most

rewarding of all human activities, since part of their duties was to gather herbs and seeds, and they probably carried out the earliest cultivation of edible grasses and pulses.

Living and working so close to the earth, sleeping and rising in harmony with a natural rhythm, bound always for survival's sake to the closest observation of natural processes, mankind achieved at last a profound revolution: the Old Stone Age moved forward from a food-gathering to a food-producing economy; the era of the New Stone Age had begun.

As man prospered and his social organisation developed, he was able to produce a surplus of food to support specialist workers who improved their skill by devoting their whole time to their craft; in this way the witch-doctor emerged as a professional practitioner, receiving a share of the communal products in return for his services.

### *The Medical Problems of Primitive Man*

The way in which man lived and struggled for an existence had a profound influence on the pattern of accidents and illnesses from which he suffered.

Violence struck at him from all sides: from the natural accidents of falling trees and rocks, from storm-blasts and shafts of lightning, from the savage beasts with whom he shared the jungles and the forests, and, most savage act of all, from hostile encounters with his fellow-men.

The earliest known case of a healed fracture is that of a reptile millions of years ago, and since then an increasing number of injured bones have lain scattered throughout the earth, testifying to the violent nature of the world wherein living things struggled to survive; and in the New Stone Age, the hand of man is clearly seen as an active agent in the general atmosphere of violence.

Man's brutality towards his fellows arose first out of the competition for land and out of rival interests of competing tribes. The skill that turned pieces of rock into useful tools was applied also to the creation of cruel weapons; the stone battle-axes and the flint daggers lying under glass in museums today are ancient witnesses to the murderous extremes to which man will resort when he lives in a harsh and unrelenting world.

The dark caves wet with moisture from underground rivulets and streams were the earliest form of shelter that men found in common with other animals. Such damp dwelling-places inflicted the age-old disease of rheumatism on the bones and joints of their inhabitants. Arthritic deformities can be seen in the skeletons of animals millions of years old, and so much evidence of rheumatism has been brought to light in the skeletons of prehistoric cave bears that it has been given the special name of "cave-gout". It is clear that the aching and creaking bones, the sharp spasms of pain, and the crippling deformities of rheumatic diseases tormented our ancestors as they do many modern victims of a damp environment.

With the absence of the remains of soft parts and with no written history of this time, it is difficult to detect the exact nature of the illnesses man suffered from. Infectious diseases must, however, have been prevalent; for although it is not possible to isolate specific germs, bacteria have been found in very early rocks, and microscopic examinations of coal have revealed various types of bacteria in the petrified remains of fish and reptiles. It must be assumed that they are the ancestors of present-day disease germs, and that germs are at least as old as man himself.

The type of food eaten by early man also influenced the diseases from which he suffered. Rickets, for example, has been found in prehistoric bones in northern countries where food must at times have been very scarce and sunlight rare. Famine must have stalked constantly behind and before him, periods of hunger alternating with those of glut.

Dental disease is an affliction not confined to civilisation; the experts agree that pyorrhoea and teeth discoloured with tartar have always been with us, even before the days of nicotine-staining tobacco. The teeth of primitive man show considerable wearing away, probably due to the coarse food he ate. Animals also suffered, but not to the same extent as man; according to the evidence available, there is no doubt that the pangs of toothache were felt in prehistoric times.

#### *Magic and Medicine*

It has not been easy to explore the world in which primitive man lived: it is even more difficult to see the world as he did. He has left



some record of his inner vision in cave paintings and other works of art, and more can be learnt by studying the customs of present-day primitive societies. Significantly, primitive communities with a similar mode of living, yet far from each other in space and time, solve their medical problems in strikingly parallel ways. All primitive societies, ancient and modern, show the same trends of expression, whether it is in the art and skill of medicine, or in the traditions of their folklore.

Much of what happened to primitive man in his daily life mystified him; the diseases and physical disasters which took away his strength must have caused him fear and bewilderment. In his panic, he speculated feverishly about the cause of his afflictions, and he made serious efforts to overcome his powerful and unpredictable enemy, disease. Without knowledge of how his body was made and worked, primitive man had to face up to the attacks of germs and parasites, and the results of physical and mental disorders.

Like the animals, he had a natural defence in the instinctive quest for healing. The animal licks his wound; the primitive man seeks balm for his pain in the cool waters of a stream, or in the mineral springs and geysers which spurt from the earth close to his home. A four-legged creature hobbles on three legs, to rest the one that is injured; the man with the fractured limb creeps to his dark cave or hut. They both feel intuitively that rest is the great healer. A sick dog will seek the plants or grasses that can help to cure it; man may well have learnt from observing animals the medicinal value of herbs.

The inquiring mind always looks for a cause. Primitive man sought the cause of illness outside himself. Some things appeared connected, such as the falling rock which breaks the leg of the passer-by; where the cause was not obvious, it was always assumed that it must lie in some unknown outer force.

Other mysteries excited his fear and his imagination. Where was *he* when his body slept? What was the relation between these seeming brothers, sleep and death? Shakespeare re-echoed an age-long cry of wonder when he asked, through Hamlet: "For in that sleep of death, what dreams may come?"

Primitive man could well be afraid of his shadow, or identify it