

The foot : its pains and penalties; being a concise view of the disorders of the feet; with advice for their proper treatment / by Lewis Durlacher.

Contributors

Durlacher, Lewis.
University College, London. Library Services

Publication/Creation

London : Alexander Durlacher, 1850.

Persistent URL

<https://wellcomecollection.org/works/mqq38krf>

Provider

University College London

License and attribution

This material has been provided by This material has been provided by UCL Library Services. The original may be consulted at UCL (University College London) where the originals may be consulted.

This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
<https://wellcomecollection.org>

The book cover is a deep blue color with a fine, woven texture. It features an intricate, embossed floral border in a lighter blue or silver tone. The border consists of four large, ornate corner pieces, each with a central floral motif and delicate, swirling lines extending towards the edges. The overall design is classic and elegant.

DURLACHER
ON THE FEET

Arch.

Orth SC

WE 880 DURC

55
Cat: 164-12

E 4

MEM

501/53
217 -

THE GENERAL INSTRUCTIONS OF THE
COMMISSIONER OF THE
GENERAL LAND OFFICE
IN
REGARD TO THE
MANNER OF
CONDUCTING THE
SURVEY OF THE
LANDS BELONGING TO THE
CROWN

THE GENERAL INSTRUCTIONS OF THE
COMMISSIONER OF THE
GENERAL LAND OFFICE
IN
REGARD TO THE
MANNER OF
CONDUCTING THE
SURVEY OF THE
LANDS BELONGING TO THE
CROWN

THE GENERAL INSTRUCTIONS OF THE
COMMISSIONER OF THE
GENERAL LAND OFFICE
IN
REGARD TO THE
MANNER OF
CONDUCTING THE
SURVEY OF THE
LANDS BELONGING TO THE
CROWN

By the same Author.

In 8vo, with Coloured Plates, price 10s. 6d.

A TREATISE ON
C O R N S, B U N I O N S,
DISEASES OF THE NAILS,
AND THE GENERAL MANAGEMENT OF THE FEET.

~~~~~

“This extremely sensible, popular, and well-written Treatise, gives the result of a long experience, from the palace downwards, in one of the most extensive and vexatious fields of human suffering. He omits all technical terms, and writes clearly and intelligibly, vindicating his rational views and sober claims from the preposterous exaggeration of the empirics and daily advertiser.”

*Examiner.*

“It is a modest and sensible performance, the result obviously of much experience, and written in a fair and honest spirit. It is, in fact, the only work on the subject which has any pretensions to scientific accuracy, or can claim the attention of the legitimate practitioner.”

*British and Foreign Medical Review.*

“We have examined it with care, and can recommend it, as containing much useful information on subjects on which we have often in vain sought instruction in extensive medical libraries.”

*Athenæum.*

“We are sure of this, that Corns, and ignorant meddling with the feet, are far too universal among the educated classes, not to render Mr. D.’s work a very acceptable volume, and to all such we can conscientiously recommend it, as containing nothing but sound and wholesome advice.”

*Literary Gazette.*

“We close this article with expression, for the second time, of our favourable opinion of this work. We regard it as an able, faithful, and judicious view of the whole subject, by one who has profited by a long experience among those who are most liable to affections of this kind. As to the literary merits of the work, it comes up to the best standard of medical works. The style in which it is written is beyond what we were entitled to expect, and would do credit to any Fellow of the College of Physicians.”

*Northern Journal of Medicine.*

London: SIMPKIN, MARSHALL, & Co.;

May be had of all Booksellers; and of the Author,  
15, Old Burlington Street.

THE FOOT:

ITS PAINS AND PENALTIES.





Digitized by the Internet Archive  
in 2014

<https://archive.org/details/b21289037>

# THE FOOT:

ITS PAINS AND PENALTIES:

BEING

A CONCISE VIEW

OF

THE DISORDERS OF THE FEET;

WITH

*Advice for their proper Treatment.*

BY

LEWIS DURLACHER,

SURGEON-CHIROPODIST TO THE QUEEN.

---

LONDON:

PUBLISHED BY ALEXANDER DURLACHER,

No. 16, OLD BOND STREET.

1850.

2345

THE FOOT

THE HISTORY OF THE FOOT

THE HISTORY OF THE FOOT

THE HISTORY OF THE FOOT

THE HISTORY OF THE FOOT

THE HISTORY OF THE FOOT

THE HISTORY OF THE FOOT

THE HISTORY OF THE FOOT

THE HISTORY OF THE FOOT

THE HISTORY OF THE FOOT

THE HISTORY OF THE FOOT

954903

## CONTENTS.

---

|                                              | PAGE |
|----------------------------------------------|------|
| ADVERTISEMENT . . . . .                      | ix   |
| PREFACE . . . . .                            | xi   |
| INTRODUCTION . . . . .                       | 17   |
| OF THE CAUSE AND GROWTH OF CORNS . . . . .   | 29   |
| HARD CORNS . . . . .                         | 35   |
| CALLOSITIES . . . . .                        | 41   |
| SOFT CORNS . . . . .                         | 47   |
| FESTERED CORNS . . . . .                     | 60   |
| NEURO-VASCULAR CORNS . . . . .               | 64   |
| VASCULAR EXCRESCENCE . . . . .               | 69   |
| BUNIONS . . . . .                            | 74   |
| ON THE NAILS, AND THEIR DISEASES . . . . .   | 90   |
| THE MANAGEMENT OF THE FINGER NAILS . . . . . | 107  |
| WARTS . . . . .                              | 116  |
| CHILBLAINS . . . . .                         | 120  |
| ON THE MANAGEMENT OF THE FEET . . . . .      | 123  |



## ADVERTISEMENT.

---

WITH the view of disseminating some practical information on the treatment of Corns and other disorders of the feet, I was induced to publish a "Treatise on Corns, Bunions, the Diseases of Nails, and the General Management of the Feet," which, in the almost total absence of works on these subjects, might, I hoped, prove of some benefit.

The flattering reception which the book met at the hands of the public press and medical journals, and the numerous letters that I received from many of the most eminent of the medical profession, in all parts of the kingdom (for which I am fully impressed

with sentiments of gratitude,) have exceeded by far my most sanguine expectations.

But the work in question having been intended as much at least for those engaged in the treatment of diseases in general, as for the ordinary reader, contains many technical terms (unavoidably), and is amplified by various illustrations, which, though perfectly familiar to the surgeon, are not always clear to those whose studies do not incline to that direction. I have, therefore, deemed it advisable to offer to the public notice a Second Edition, embodying all the essentials of the former publication, but pruned of those technicalities, and rendered so popular throughout, that I hope it will be acceptable to every person interested in the subject.

L. DURLACHER.

15, *Old Burlington Street,*  
*April, 1850.*

## PREFACE.

---

AMONGST the endless aches and pains to which the human frame is liable, there are few ailments entailing annoyances so great and sufferings so acute as those which attack the feet. Corns are the universal torment of mankind; and although in general held of no moment, and indeed exciting little or no sympathy, still they do wring a confession of pain by many an outward indication, from those who are ashamed to acknowledge it in words.

“Long corns and short shoes  
To the enemies of Great Britain!”

was a standing toast during the late war, and



the author must undoubtedly have been a sad martyr, to wish no greater punishment to our enemies than corns.

It is, however, seriously to be regretted, that corns and other disorders of the feet, to which the majority of the people are subject, should have been considered of so little interest amongst the public, and scarcely to have been noticed in a proper manner by those continually tormented; although it is a well known fact that these local complaints when neglected, injure the general system by preventing the body from taking that natural and indispensable exercise so conducive to health; we can have no better evidence of the absence of proper attention to this subject than the notorious fact, that persons will cut their corns with razors, knives, and other unwieldy instruments, as if their toes were not of any importance to the general system. Others again are ready to trust themselves in the

hands of any man who, with plausibility, promises a radical cure, without thinking for one moment how soon an accident might deprive them of the power of taking exercise, and without regarding the various results which might follow. I have seen cases where the patients would have consulted half the surgeons in London for complaints of one-tenth the consequence, if situated in any other part of the body; whilst I have seldom succeeded in inducing them to keep their rooms for even a day, although the inflammation could be visibly traced, extending from the diseased part over the limb. All this confirms the observations that I have made respecting the slight estimation in which the feet are generally held.

Although I have devoted upwards of thirty years' practical experience to the investigation, and have tried various chemical and other remedial agents, yet I have never been

able to discover any radical cure for corns. The remedies which experience and a close attention to the subject have induced me to employ, are nitrate of silver, cold water, spirit lotions, soap plaster, &c.; and I have ever found these to be most efficacious, except in cases of a special or exceptional character.

Nevertheless, men are occasionally to be found bold enough in their ignorance and presumption, to assert by public advertisement, that they possess an infallible nostrum, capable of thoroughly eradicating corns; whilst others, who pretend to extract them, seek to aid their trickery and charlatanerie by exhibiting small spiculæ as the roots of the corns they have extracted, although it is a positive fact, from the structure of the skin, that such an assertion must be false, and the whole proceeding a species of jugglery. From such men the public, being unable of

themselves to distinguish between the competent practitioner and the empiric, ought to be protected either by legislative enactments, or by medical bodies licensing those who make chiropody a part of their regular medical education.

I have much reason to be grateful for the very fortunate circumstances under which my early professional career commenced; having been recommended by the late Sir Astley Cooper, and also by the late Sir Henry Hallford, and have had the honour of attending the successive English sovereigns. I am at present under many obligations to the members of the medical profession, by whom I am continually recommended, and am desirous of returning my thanks to them generally for their kindness, and more especially to Sir B. Brodie, Bart., Dr. Chambers, Sir Charles Clarke, Bart., Sir James Clark, Bart., Mr. B. Cooper, Dr. J. Forbes,

Dr. Hume, Mr. Keate, Mr. Lawrence, Mr. Travers, and Dr. Tweedie.

\* \* \* I wish to observe, that throughout the succeeding chapters of this work, whenever the toes are mentioned, they are described as consisting of the great toe, and the first, second, third, and little toes.

## INTRODUCTION.

---

THE disorders of which this work chiefly treats are those of the feet, arising principally from compression or friction, and most generally affecting the outer or scarf skin, which, in a healthy state, is imperceptibly wearing off, either as fine powder, or in minute scales, and is continually being regenerated. It is, therefore, necessary to mention some of the various opinions that have been brought forward as to the structure of the skin, in order in some degree to explain the formation of corns, &c. The recent investigations of German anatomists and physiologists have given rise to new views respecting its pro-

duction by what is called "the cell formation." I do not consider it necessary to do more than allude to their researches, contenting myself with observing, that some of their discoveries have been anticipated by Leuwenhoek, the Dutch anatomist, and by our own countryman, Dr. N. Grew.

The papers in which these writers promulgate their views were published in the "Philosophical Transactions" some time in the seventeenth century. They are remarkable for containing some very curious statements respecting the structure and formation of the skin, founded on actual investigations under the microscope. Leuwenhoek, whose letter is dated the 17th Sept., 1683, describes the cuticle as composed of round scales overlapping each other, like those of a fish, and so minute that a single grain of sand would cover from two hundred to two hundred and fifty. They are very thin, he says, their breadth being about twenty-five times greater than their thickness. He considers that there are not any pores in the skin; but that

the perspiration oozes from between the scales, though they adhere never so closely together. He reckons that there are one hundred openings in the space of a third part of a scale, and that these are so small that a grain of sand will cover two hundred of them. It will follow, then, that the body may exhale out of twenty thousand openings in a space not larger than may be covered by a grain of sand. The scales, unlike those of fishes, are not permanent, but come away in clusters; if, however, they are separated before they are loose, blood either follows, or at least there remains a red spot. Those on the hard and callous parts of the hands and feet, are of the same nature and shape as those on the body; but the latter are clear and transparent, while the others are so full of lines, and so thickly beset with globules, that they seem to be composed of nothing else. These scales are more adhesive than those which are situated elsewhere, and by this means, especially when the hands are employed in hard labour, the skin, though it be nothing



but scales, comes to be of an extraordinary thickness, the scales being then more packed and clotted together.

Dr. Grew principally contends for the existence of pores in the hands and feet, which, he says, are to be found under the microscope on the top of numerous ridges, and not buried in the furrows, and of a sufficient size that their structure may not be injured by compression.

Winslow's description of the skin is equally curious. He says the skin is a very extended tissue, composed of many tendinous, nervous, and vascular fibres, its formation being as wonderful as it is difficult to develope, it being in every sense like the texture of a hat. Several other quaint and singular theories were put forth about this period, by English and continental writers, respecting the origin and formation of the skin, some of them deriving it directly from the blood, after the evaporation of the serum, and others, again, considering it to be essentially produced by the effusion of a gelatinous fluid

from the circulating medium. These theories, while they may be regarded as amusing, are not altogether void of interest. In this state our knowledge as to the anatomy of the skin continued up to the end of the eighteenth century. A new impetus has, however, of late been given to investigations respecting it, by the discoveries made with the microscope.

The friction and pressure to which all prominent parts of the extremities are exposed, cause, by the local irritation they produce, the effusion or secretion of a larger quantity of outer skin than can be got rid of by the ordinary processes of nature. The scales consequently accumulate, and lie layer upon layer, forming indurated masses of larger or smaller size, constituting corns, callosities, or other diseases of the part, according to their situation, and the severity of the pressure or friction.

Very few adults possess that manly gait which should distinguish "the human form divine," in consequence of the confined and

compressed condition in which their feet have been placed by the unyielding material and bad shape of their shoes, and thus the natural spring and muscular action of the foot are lost, and they are deprived of the assistance that would be rendered by the action of the toes in progression. This is not the only instance in which the artificial restraints of society affect the health and comfort of individuals. The springing gait of the Highlanders mentioned by Sir Walter Scott, depended on their possessing the full command over the muscles of the feet: which proves they had not been deprived of their power by tightly-made and ill-fitting coverings.

It is most extraordinary, that in the present age of invention no real improvement should have been made in the external covering of the feet.\* If a section of the sole

\* Whenever in the course of the following pages, the word "shoe" is used, it must be understood to mean all the external coverings of the feet, and to correspond to the French generic term "chaussure."

of the shoe be applied against the sole of the foot, it will be found to be totally different from it in shape; seldom does the leather extend to the little toe, it being either much narrower across the fore part of the foot, or else inclining too suddenly inwards to form what are called "rights" and "lefts," so that in rising on the toes when walking, the whole weight of the body is thrown upon the little toe, and sometimes on the joint of the great toe. It is remarkable that after this kind of shoe has been worn from youth to manhood, the muscles and tendons become contracted, and the toes distorted in a manner corresponding to the form of pressure to which they are subject, so that the attempt to expand the foot when it is placed on the ground without the shoe becomes a source of pain. I have seen the toes contracted inwards and downwards, like birds' claws, and prove a cause of much inconvenience in walking.

In taking a retrospective view of the form of shoes until the nineteenth century, we shall find that fashion invariably dictated their

peculiar shape. In the reign of Edward the Fourth they were worn so exceedingly long-pointed, that a proclamation was issued to restrain their length; and in the reign of Queen Mary their breadth at the toes was equally preposterous, so that she was compelled to enact a sumptuary law to repress them within ordinary bounds. Still, amid all these changes, no mention was ever made of alterations in the sole of the shoe until the time of Elizabeth, when, as may be gathered from the writings of Shakspeare, they were worn rights and lefts. Launce, in the "Two Gentlemen of Verona," says—

"This shoe is my father;—no, this left shoe is my father;—no, no, this left shoe is my mother."—*Act II., Scene 3.*

And again, Hubert, in "King John," while describing the popular rumours of a French invasion, speaks of a tailor who—

"Standing on slippers, which his nimble haste  
Had falsely thrust upon contrary feet."

*Act IV., Scene 2.*

Shakspeare further alludes to corns as a sort of reproach—

“CAP. Welcome, gentlemen! Ladies that have  
their toes

Unplagued with corns, will have a bout with you.

Ah, ah, my mistresses! which of you all

Will now deny to dance? She that makes dainty, she  
I'll swear hath corns!”

ROMEO AND JULIET, *Act I., Scene 5.*

In the time of the first Charles and of Cromwell, high heels were in vogue, with broad toes in proportion; square-toed shoes were much worn in the reign of George the First, but afterwards became a term of reproach. In the times of the second and third Georges, ladies wore high heels tapering downwards to a point, equal to the flat surface of a shilling; their toes were forced into a close pointed shoe. There is a clever article on shoes in general, from the earliest records, illustrated by woodcuts, in the Penny Magazine.

Feet are occasionally met with in which there is a malformation of the toes, arising from hereditary predisposition, and not from

the distortion produced by wearing ill-made shoes. This has been very properly called "the family toe." It is remarkable that the first toe is the one principally affected, and it is either curved so as to project considerably above the others, or else it becomes much elongated. The entire foot, in after life, will participate more or less in the distortion. It is developed very early, notwithstanding the utmost care is used to prevent it. Corns frequently form on the projecting part of the distorted toe or toes, giving rise to the idea that the corn is itself an hereditary formation. This, however, I do not consider to be the case. The shape of the feet is certainly the same in families, generally speaking, and there may be an innate disposition in the skin to take on the action requisite for the production of corns, if exposed to the usual exciting cause; but I do not think, when proper attention is paid to the make of the shoe and stocking, that, however much the toes may be distorted, corns will grow

for no other reason than that the parents or other relatives were troubled with them.

I saw, some time since, a remarkable illustration of the hereditary nature of the distorted toe in the person of a gentleman of the name of O'Caghan or Caen. While in attendance on him I observed that he had a singularly-formed toe, and remarked that the distortion was peculiar to different families. He smiled at my observation, and told me that medical men were not alone aware of that fact, for that when travelling near the Giant's Causeway, he stopped at an inn kept by a man named Dick Caen, and claimed his hospitality on the score of relationship. The man stared at him, and said, "Then by my shoul, sir, if you are an O'Caghan, you must have Prince O'Caghan's crooked toe."

Various means have been devised to straighten the curved toes, by the use of ligatures and the application of strips of plaster, and more lately by the operation of dividing the contracted tendon, but I am not aware



that this proceeding has proved successful in all cases. I saw one case eighteen months after the operation, and the toe was then as much bent as before. Whether this was owing to a diseased condition of the bones, or to the tendon having reunited without elongation, or to a failure in the after treatment, I am not prepared to say. Amputation of the toe has been occasionally performed, on account of the inconvenience which the distortion causes. There are other malformations affecting the hands and feet, of which some curious cases are related.

It is necessary to remark, that corns, warts, and other excrescences of the hands and feet, which were for a long while regarded as diseases of a like nature, must in all probability have been known long before the Christian era, as may be gathered from such portions of the writings of the ancient Arabic and Greek authors as have descended to our times.

THE  
HAND AND FOOT,

ETC.

---

---

OF THE CAUSE AND GROWTH OF CORNS.

THE term corn is indiscriminately applied to every thickening of skin, or excrescence, incidental to the feet; the name is derived from the horny, insensible structure of the external skin, but is not strictly applicable to every induration.

Although all corns are similar in structure, they present varieties according to the parts upon which they are formed, or the tissue that becomes involved. They are classed under the following heads:—hard, callosities,

soft, festered, neuro-vascular; and vascular excrescence.

Pressure and friction are unquestionably the predisposing causes of corns, although in some instances they are erroneously supposed to be hereditary. Improperly made shoes invariably produce pressure upon the integuments of the toes and prominent parts of the feet, to which is opposed a corresponding resistance from the bone immediately beneath; in consequence of which, the secreting vessels are compressed between them and become injured and congested, a larger quantity of lymph is thrown out than is required for the formation of the new skin, so that layers are generated considerably sooner than the outer surface is worn off, thus forming layer upon layer, which become interwoven, and adhere together.

If the cause be removed, the inflammatory action ceases, and the result is simply an external induration of superficial irregular scales or laminæ; if continued, the irritation keeps up the increased action of the secreting ves-

sels of the already thickened skin, where it coagulates, producing bulbs or projections, generally of conical shape, descending into corresponding cells or depressions of irregular depths, according to the injury caused upon the immediate parts where the external pressure is most severe.

These bulbs are composed of layers, decreasing more and more in size as they approach the secreting point in the sensitive skin, where they become condensed and opaque by compression, visible as white or yellowish specks, according to the colouring matter of the skin, when the outer portion of the induration has been removed.

These irregularities, or projections, are what have been incorrectly called stems, or roots.

The point of the corn will frequently press on, and rupture some minute blood-vessel, producing extravasation of a red, brown, or black colour, the depth of tint depending on the length of time the blood has been effused. These discolorations are visible

through the thickened skin, although they very seldom rise to the surface.

If the pressure should be very severe, and the point of the corn descends near the articulation of a joint, inflammation will ensue in the surrounding parts.

Corns which grow between the toes are of the same structure as all others, but become soft from condensed perspiration, their position, and the approximation of the toes. Persons of gouty habit have frequently a discharge of chalk stones following the extraction of a corn.

When corns are produced by friction and slight pressure, they are the result of the shoes being too large and the leather hard, so that by the expansion of the foot, the little toe, or any prominent part, is constantly being rubbed and compressed by its own action. This may continue on and off for months, or even years, before any inconvenience is experienced; but progressively the skin increases, and is either detached from the true skin by fluid being poured out

between them, similar to the common blister, and a new covering produced, or the skin thickens into layers adhering to each other.

Corns produced by friction alone are generally superficial, and are seldom very painful, or cause much inconvenience.

Corns cannot strictly be considered a disease; they are only the exciting cause, by their pressure and effect upon the sensitive skin.

The pain caused by corns during their formation, arises from compression of the nerves by the shoe, and the congested state of the vessels, and usually ceases as soon as the shoe is removed.

In the chronic state it is influenced by the different atmospheric changes, varying in intensity according as the barometrical pressure is exerted upon the sensitive parts surrounding, or involved with the corn. It is well understood that these changes act more or less upon the living body without causing pain, except on diseased parts; and as the corn itself is perfectly insensible, and

not at all affected by the atmosphere, it forms a resisting body to the contraction or expansion of the surrounding skin; and thus becomes the cause of the pain which is experienced on these occasions.

It is difficult to state the precise weather that mostly produces pain, and equally so to account for its influence; whether it be cold with an easterly wind, which by its contractile action diminishes the calibre of the vessels, drawing the skin from the corn; or extreme heat, which by increased expansion forces the sensitive skin against it. The shooting pain most commonly complained of, is certainly experienced during that state of atmospheric change from heat to humidity which causes the barometer to fall, indicating rain, or when the clouds are surcharged with electricity prior to a storm.

Hypochondriacs and delicate females are very liable to be affected by all atmospheric changes, and frequently experience pain in their corns, even from the heat of the bed: strong and robust persons, on the contrary,

seldom notice, or are affected by the weather.

I have observed a kind of epidemic in some peculiar states of the atmospheric temperature, when every patient at the same time has been complaining of more pain than usual, and I have found the toes inflamed, and a small quantity of fluid under each corn.

It is a general remark with persons resident in the country, that they suffer most from their corns when in town, owing probably to the flat surface of the pavement causing an equal degree of pressure, to which they have not been previously accustomed.

#### HARD CORNS.

THIS is the general term by which all corns are commonly known, and constitutes that chronic thickening of the outward skin which is met with upon all prominent parts of the feet. It is the common corn which persons



are in the habit of arranging for themselves with the least chance of doing mischief; and, in many cases, with as much relief and advantage as can be obtained from the generality of corn-cutters. I shall, therefore, only notice those corns which cause the greatest pain, from the particular situations they occupy.

The little toe, from its position, is constantly subject to injury more than any other part of the foot, and corns are produced upon the whole of its outer surface. When deformed, either by being bent or pressed back upon the foot, so that the first joint stands higher than the others, there usually forms upon it a deep-seated corn, of a conical shape, the outer or external surface consisting of irregular scales, and the point penetrating towards the joint.

The corn which is seated close to the nail is acutely painful, and, to the unaccustomed eye, difficult to be discovered, being long and thin in its form, and concealed under the pellicle, near the root. This species of corn

more frequently attacks very young people, as soon as they commence wearing stout shoes, which are usually more pointed than the foot, so that the pressure is thrown exactly on the outer angle of the toe. If a corn is not developed, part of the nail will be destroyed, leaving in its place an equally painful thickened skin.

Sometimes one of the other toes stands much higher than the next, causing the outer parts near the nail, and the apex, to be exposed to the same degree of injury, and to a similar formation of corns.

A very troublesome corn is found under the great toe-nail. It is generally the result of accident, or from the nail having been allowed to grow to too great a length, so that it becomes compressed, or otherwise injured, against some hard substance, bruising the soft parts beneath, and thus producing a corn from extravasation. The patient is seldom aware of the period at which the injury was inflicted, as the corn is slow in its growth. When fully developed, a black or deep red

spot is clearly visible through the nail, and is the seat of severe pain. As this corn increases in size it gradually loosens the nail, which is easily removed as far as the seat of the disease.

The corn which is situated at the outer edge of the nail, and is embedded in the semilunar pellicle, demands great dexterity in its removal, as it is very thin and deeply seated, without any surrounding thickening.

Another form of corn is produced inside the inner fleshy flap of the great toe, extending in many cases under the edge of the nail. It is caused by the nail having been improperly cut, or by the first toe pressing against the flap, and pushing it up higher than ordinary, so that the inner skin becomes thickened in layers, as a protection against the sharp edge of the nail. The corn is formed under these layers, several of which must be removed before it can be brought into view, or extracted.\*

\* These cases require the skill of the Chiropodist, as they are difficult to see, and might be attended with serious consequences if improperly treated.

In very dry, harsh skins, corns or scales form in great numbers on the soles of the feet, in the hollow or arch, and on the under part of the heel.

They arise from constitutional disease of the skin, and produce little inconvenience, unless they are allowed to grow higher than the surrounding integuments; they then become troublesome, by producing irritation.

These scales (for they are not, strictly speaking, corns,) are easily picked out, when the foot has been previously soaked in hot water.

Cases occasionally come under notice, where the patient complains of considerable pain and tenderness on some of the toes, generally the little one, but no appearance of a corn can be detected. The toe, on examination, is found to be red and inflamed, and presents that state of irritability which precedes the formation of a corn. It is produced by friction, which is continued for a length of time before it causes sufficient pain to ex-

cite attention; it is very soon relieved, and requires nothing more than the alteration of the shoe, and the application of cold water dressing for a few days, when the inflammation will subside. I sometimes draw the nitrate of silver across the parts most complained of. Pressure will produce the same kind of irritation, but in a much shorter time.

In elderly people a small tuft or cuticular excrescence frequently forms in the centre of the apex of the toes, under the nail, to which it adheres. It is generally unattended with pain or any other inconvenience, except it be incised when the nail is cut. It then becomes acutely painful, and bleeds freely. No particular treatment is required beyond loosening the excrescence from the nail with a blunt-pointed instrument.

The treatment for common corns or indurations is exceedingly simple. It requires only to be carefully removed by scraping, or picking, with a small instrument made like a

very small scalpel, and afterwards covered with any mild gum or soap plaster; the feet should previously be soaked in warm water for ten or fifteen minutes.

## CALLOSITIES.

CALLOSITY is the term applied to the thickening of the skin in large layers upon the soles of the feet. They are principally situated over the projecting bones; and also form upon the ball of the great toe, around the edge of the heels, and on all broad prominent surfaces of the feet.

No material alteration takes place beyond the thickening, for the numerous lines and furrows of the skin can be seen in continuation with those of the normal integuments.

In very dry skins the whole of the callosity appears rugged, and covered with irregular scales, having in various parts small corns, frequently rising in single points or small

clusters, which on being cut sometimes bleed, without giving pain, or producing any inconvenience.

These indurations are more frequently caused by long-continued friction than by pressure, although they are occasionally produced by the latter only. When they are the result of friction, they arise from wearing an improperly made shoe, which allows the foot too much expansion or room to move about and rub upon some irregularity or prominence on its inner sole. In this case they are generally very large, extending all over the part subjected to friction.

When they are produced by pressure alone, a corn corresponding in situation to the projection in the shoe forms about the centre of the induration.

In most feet subject to this complaint, the bones at the articulations of the great and little toes are very prominent, and the integuments covering them form thick projections, so much so that the intermediate space constitutes an arch. In flat feet, thinly

covered with flesh, the bones are distinctly felt, so that the finger can be placed between each. In this case callosities not unfrequently form on their under surface.

Callosities are also sometimes produced by pressure upon the ball of the great toe, and then require especial attention, for when neglected, and the pressure continued, a troublesome corn forms upon the articulation of the joint, which is the part most subject to compression. When a callosity is produced in this situation, the toe is distorted and retracted, either from original deformity, injury, or the distortion produced by rheumatism.

The first indication of a callosity is a slight redness of the part, which remains for some time unnoticed; but if the friction is continued, by wearing the same description of shoe, the irritation produces a larger quantity of new skin than is thrown off, so that layers form progressively one upon another, until the induration is fully formed.

A callosity is sometimes of but little con-



sequence, and can be removed by scraping or rubbing off the skin. In some cases where it is smooth and of equal thickness, it proves beneficial as a protection to the sensitive skin beneath, and in this state does not cause any pain.

When it is allowed to become of such a thickness (for it sometimes grows exceedingly rapidly) as by its pressure upon the sensitive skin to produce effusion into the tissue beneath, the extravasation can be seen through the skin in large patches, adhering to its under surface.

When improperly treated, inflammation followed by suppuration is the result; the matter causes the skin to crack, leaving deep fissures with thickened edges, and often a dry unhealthy ulceration. This is very frequently the case when, from malformation of the foot, the diseased part cannot be sufficiently protected. I have seen many such cases, of very serious inconvenience to the patient.

In simple cases, all that is requisite is to

remove the thickened skin with care, and apply a piece of soap plaster. In the more severe instances, after the callosity has been removed, the ulceration must be treated according to the plan detailed in the succeeding case.

It is of course absolutely necessary to remove the cause by which the induration has been produced; and when it arises from malformation or distortion of the feet, to have boots so made as to avoid pressure upon the diseased parts. Where the complaint is upon the first or fourth bone, it will be of great service to have a hollow made in the sole of the shoe opposite to it, so that the pressure may be thrown more upon the centre of the foot.

A gentleman lately returned from India, was recommended by Mr. Lawrence to consult me about his feet. They were affected with a most peculiar malformation, the toes being drawn back upon the upper part of the foot, so as to compel him to walk principally on his heel, without bringing the toes to

the ground, and the hollow or arch of the feet was remarkably high. The skin covering the bones of the foot was much thickened, from the pressure to which it had been so long subject, and on being removed, an offensive sloughing ulceration was exposed. His general health was by no means good.

I immediately removed as much of the diseased skin as was in parts detached, and ordered the whole of the anterior part of the foot to be covered with a linseed meal poultice; and I further directed the feet to be soaked in hot water whenever the poultices were renewed.

Great improvement was manifest in a few days from this treatment, and the whole of the diseased skin was very soon removable with facility. I then applied the nitrate of silver daily over the ulceration, the poulticing being continued; the slough separated, the sores assumed a healthy aspect, and a cure was effected within the fortnight.

My patient left town for some time, and on his return to London I found the skin

again thickened, and extravasation commencing on certain prominent points. All that was necessary in this instance was to remove the thickening, and apply soap plaster over the entire sole of the foot.

To prevent a recurrence of the original complaint, a boot was so constructed as to support the arch of the foot, and to take off the great pressure from the diseased parts. In this it fully succeeded; and he returned to India quite capable of walking without pain: nor did he suffer any further inconvenience.

#### SOFT CORNS.

THESE excrescences of the skin are always situated between the toes, and derive their name from being constantly in a state of moisture, occasioned by the perspiration or exhalation which collects between the toes, and is condensed within the skin on some

prominent point where pressure has produced a corn.

Soft corns are not deep seated, and do not project much above the surface, on account of the structure of the parts, and the compression they are subject to.

They are generally caused by the bone of one toe being pressed against the opposite joint, or by the little toe being forced down upon the bone of the next toe. All prominent parts on the inner side of the toes are liable to this formation.

Compression, which is unquestionably the primary cause of the corn, is commonly produced by wearing very narrow soled shoes, by which the toes are closely pressed together; so great is the pressure on the little toe, that it is often wedged down into the space against the lower part of the next, and causes the most painful species of soft corn.\*

\* Ladies are most subject to soft corns, and are more frequently afflicted by wearing French shoes with soles rarely exceeding two inches across the tread, when of the largest size. All shoes manufactured upon the same principle are equally injurious.

The nature of a soft corn, and the acuteness of the pain experienced, depend greatly upon the position it occupies. The degree of compression to which the part affected is subject, has a great influence in the production of inflammation. Suppuration is soon caused, owing to the thinness of the integuments, and the injury the true skin receives between the outward pressure and the resisting power of the bone.

The first symptom is a burning sensation between the toes, as if the parts were scalded, frequently followed by the formation of a blister, which is seldom observed, until the serous fluid irritates the true skin, and occasions pain. If the fluid is not evacuated or absorbed, a gelatinous concretion forms, which ultimately becomes a corn; or if it is discharged, and the new skin is not healthily reproduced, it thickens into layers, and a corn is generated.

The primary indication may likewise be known by a sensation as if gravel or a small stone was between the toes, attended by itch-

ing and smarting pain, and sometimes by a slight cracking of the skin.

In severe cases the symptoms commence by inflammation, the skin being but slightly thickened on some prominent point or articulation, and a corn is soon developed in the centre of the induration. It is recognised by being of a circular form, and of a yellowish brown or dirty red colour.

If it be not soon extracted, ulceration will take place, the foot become swollen, and the inflammation will extend up the leg. Great pain is experienced in the part affected during the formation of matter.

The corn, which is situated on the web between the third and little toes, shows itself as a white, spongy, moist thickening of the skin, it being occasioned by pressure, heat, and confinement of the perspiration, and in many instances by the want of sufficient care in keeping the parts properly cleansed and dry. It will sometimes fill up the whole space or surface of the web between the

toes; in other cases, the skin will be simply thickened, tough, and moist, with a corn fully developed in the centre.

A soft corn will sometimes appear as a circular white spot only, like a split pea: it is then generally situated on the middle joint, with a corresponding corn on the opposite toe. This is usually the case when the corn is situated on a prominent part.

It also commences as a small circular white thickening of the skin, rising similar to a pustule, having an orifice not bigger than a pin's point in the centre, and which is frequently concealed by a thin layer of skin, the removal of which permits the exudation of a small quantity of fluid. This corn is easily separated. It is painful when the toes are pressed together, and its formation is always preceded by slight inflammation.

A very troublesome corn is formed on the inner side of the great toe, there being a corresponding one on the opposite toe. It is usually broad and flat, and the centre is



bruised, with extravasated blood occupying either its entire extent, or else effused partially in small spots only.

In elderly persons whose feet do not freely perspire, and who have suffered for a length of time from this complaint, the corn is more strongly developed than in recent cases; the centre is harder, and appears of a darker colour; the layers are flat and much broader than in the ordinary corn, and surrounded by a whitish thick ridge or fringe of skin.

The treatment of soft corns varies in accordance with their position, and symptoms.

In ordinary cases the thickened skin should be removed to as great a depth as it presents a whitish appearance, and, if a corn has formed, it should be extracted. The nitrate of silver may then be slightly rubbed over the parts, and the toes kept as much apart as convenient, so as to prevent the cause of its re-formation.

The spongy substance which grows on the web between the third and little toes, may easily be removed by scraping or cutting it

out, until the integuments beneath appear red, when the pain will immediately cease. In this early state there is but little inflammation, and by removing the thickened skin as it forms, and touching the parts with nitrate of silver whenever required, a cure may be effected. In both cases a pledget of sponge or leather should be constantly worn between the ends of the toes, to keep the bones apart, but so placed as not to press upon the corn; and if by scraping or cutting, the parts have been made to bleed, the caustic must not at that time be applied.

When the disease has been of long standing, although relief may be afforded from time to time, its complete eradication is exceedingly difficult, as the spongy skin is very liable to become a regular growth.

In the worst cases, if there be much inflammation and swelling of the foot, perfect rest is requisite, and the limb should be well and frequently fomented. The application of leeches is occasionally necessary.

I was requested about seven o'clock one

evening to see a young lady, who was very desirous to go to a ball, but was suffering so much pain between the toes, that she could not put on her shoe.

The foot was much swollen, and slightly inflamed under the toes, and also on the upper part of the foot. There was very little thickening perceptible on the web between the toes, but there was a small black speck in the centre surrounded by a white ridge. The pressure caused great pain. I extracted this, and enlarged the orifice by removing the thickened ridge, commencing at the centre and cutting towards the margin. A large quantity of matter was thus evacuated, and immediate relief afforded. I ordered the foot to be kept in hot water for twenty minutes, a linseed meal poultice made with poppy decoction to be afterwards applied, and the foot rested horizontally until my next visit.

The foot was very much better by ten o'clock, but still not in a state to permit her dancing; but as the lady was determined to

go to the ball, I put a bit of lint spread with cold cream over the orifice, and placed between the toes a pad made with folded pieces of linen, sufficiently thick to take off pressure from the lower part, and the shoe was cut open on the top with the same view, the opening being covered with a rosette.

The next day, to my great surprise, I found that the foot was not in any respect worse, and by continuing the poultice for that day, and resting the limb for two days more, a cure was effected, by applying the usual remedies.

The rapid success in this case was obtained by removing, in the first instance, the exciting cause, getting the foot rested for a few hours, and avoiding all pressure when the shoe was obliged to be on.

It is requisite to caution persons suffering from these complaints to avoid applying violent remedies,—such as nitric acid, aromatic vinegar, &c.—as they may do themselves serious mischief. The following case will illustrate this observation:—

I was requested to attend a lady who had by the advice of a friend applied aromatic vinegar to a soft corn. I found her sitting on a sofa, with her foot (which was enormously swollen) resting on a pillow.

The acid had destroyed the skin around and beneath the toes, the surrounding part was denuded, and in a high state of inflammation, and discharging an ichorous fluid: the patient was quite feverish.

I ordered leeches to be applied on the foot, as near to the toes as possible, and hot fomentations to be constantly used. I further advised her to send for her usual medical attendant, that the general constitutional derangement might be attended to.

I was enabled by the third day to remove all the detached skin, there remaining an orifice presenting a funnel-like appearance running down between the toes. Poultices were applied for two days; the swelling of the foot subsided, and the cure was completed with a mild unctuous application.

When the inner sides of the toes appear

inflamed, and the patient complains of much pain, although little is to be seen on examination, cold applications should be made use of, a piece of lint soaked in cold water being placed between the toes, and enclosed by a strip of oiled silk passed round them both. This will remove the inflammation, and if there be any latent disease, it will become visible by the contraction and shrivelling of the skin.

I have met with a peculiar form of soft corn, where chalk has been secreted beneath it. This disease is of rare occurrence, and attacks those persons only who are subject to gout; it is attended with considerable pain and annoyance.

There is another disease affecting these parts of the toes, which, although not absolutely a soft corn, should be noticed here, as it may be mistaken for that complaint by persons who are subject to it. It is a kind of neuralgia seated between the toes, but which fortunately is not very common. It

constitutes a most troublesome and severe complaint, and one very difficult of removal.

The patient complains of a severe pain between two of the toes, along the inside of one or the other, generally the second and third, he can seldom tell which; it extends up the leg, and is increased when the toes are pressed together, more particularly after walking. Notwithstanding the most careful examination of the part, no obvious cause can be discovered for the pain, and like all similar affections of the nerves, there is not any remedy to be depended upon, as it appears to defy all medical treatment.

There is, however, sometimes a little redness and swelling apparent, or perhaps the bones forming the middle joint project in a slight degree, but not so much as to be noticed, unless the attention be especially drawn to them.

The disease is not permanent, but continues for a time, and then either ceases altogether, or disappears for a longer or a

shorter period. It is in all probability connected with some constitutional derangement. The only remedies which I have found to be beneficial are counter irritants, and the elevation or depression of one of the toes by mechanical means, to take off pressure from the affected nerve.

Another form of neuralgic affection occasionally attacks the nerve on the sole of the foot, below the third and fourth toes, but nearest to the third. The spot where the pain is experienced can at all times be exactly covered by the finger. The pain, which cannot be produced by the mere pressure of the finger, becomes very severe whilst walking, or whenever the foot is put to the ground.

The complaint appears to me to be very similar to that which I have just described, and I cannot assign any cause for its occurrence. Relief can only be afforded by the application of lateral compression, a strip of plaster about an inch wide being drawn tightly over the foot and round the sole. I



believe this application acts by drawing the bones closer together, and thus affording protection to the affected nerve, which, when the parts are capable of expansion, is more exposed to pressure.

#### FESTERED CORNS.

IN many cases of deformity, where the toes are by contraction drawn from their normal position, the middle joints become very prominent, and the skin covering them thin and tightly stretched. Whenever severe pressure or friction is exerted on these projecting points, a very painful and troublesome corn is produced.

The first appearance of this complaint is indicated by redness of the skin over the joint, and the whole toe being sensitive to the least pressure; as the disease proceeds, the skin becomes slightly thickened, semi-

transparent, and less laminated than in any other species of corns.

In some cases inflammation supervenes, and matter forms under the whole extent of its circumference.

As the inflammation increases, a corn is fully developed about the centre of the induration, seldom exceeding in size the head of a large pin, and decreasing inwardly to a thin thread-like point. This excites vascular irritability, and rapidly causes suppuration to take place in the bursa\* beneath, which has been inflamed by the pressure of the point of the corn, which, when extracted, has generally a part of the sac adhering to it. Sometimes the bursa is diseased without any thickening of the outer skin, and the only external appearance is the redness and swelling of the toe, with a very small white spot having a minute speck in the centre, usually situated upon the most prominent part of the joint.

\* This word, which will frequently occur, is used to designate a small bag containing fluid to lubricate the tendons.

When the corn is in this state, and not properly attended to, the serous fluid which is effused will cause great irritation, with excruciating pain and violent inflammation, not only in the toe but over the whole foot.

When the inflammation is severe, and extends over the foot, leeches may be applied in addition to the other treatment; cold spirit lotion should also be used; and the patient should be strictly prohibited from walking, and directed to keep the leg in an horizontal position until the inflammation subsides.

A gentleman called on me, suffering acutely from a corn of this description; the toe was much inflamed, and I discovered a small speck or corn on the top. I extracted it, and allowed about a drop of fluid to escape from a small hole, not larger than would admit the point of a common sized pin, and which appeared to pass through the skin. I applied a small piece of plaster, and recommended the application of a poultice as soon as possible.

He had great difficulty in putting on his

boot, which was much too small. I therefore requested him to take it off again and ride home, or his foot would become swollen and more inflamed. This he refused to do, as he had not far to go, and promised to attend to my instructions as soon as he returned home.

About six months afterwards, the same gentleman called on me again for the removal of another corn, and then reminded me of his previous case. He stated that soon after leaving me, he could bear the boot better than he expected, and meeting with a friend, he was tempted after dinner to spend the evening at Vauxhall. When he returned home, he could not get his boot off without the greatest difficulty and excruciating pain; he put his foot into hot water without receiving any benefit, and was restless the whole night. The next morning his foot was swollen as big as his head, as he expressed it, and the whole leg appeared red and shining. He sent immediately for an eminent surgeon, under whose hands he continued six weeks.

I mention this case to caution persons suffering from corns on the joints, attended with inflammation, from persisting in wearing a tight shoe, or subjecting the part to the least pressure whilst the inflammation and pain continue.

#### NEURO-VASCULAR CORNS.

THIS peculiar and painful species of corn is frequently met with in persons of fair complexion, with very fine and moist skins, in whom the true skin is consequently more than usually vascular, and more likely to take on inflammatory action from pressure.

It forms upon the projecting parts of the toes, according to their position or deformity.

When fully developed, the skin covering the affected part is slightly thickened and semi-transparent, having villi or nervous fibres clearly visible, running in zigzag whitish lines within the induration, and small corns appearing between them like

white specks, corresponding in form to the cells or depressions they occupy.

Although the outer skin of these corns is as insensible as any other thickening, the intermingled nervous filaments are so exceedingly sensitive to pressure, that the softest leather of any shoe can scarcely be borne, and the least touch in attempting to remove any part by an operation gives the most excruciating pain.

The peculiar character of this corn is the result of a more severe degree of pressure on the part than that by which the ordinary thickening is produced, and consequently a more intense inflammation is caused, so that the whole of the portion of true skin subject to compression participates, and its vascular structure, together with the nervous fibres, becomes enlarged, and to such an extent that, when the inflammation has been partly subdued by the removal of the shoe, by poultices, or by any other means which have been employed by the patient himself, the enlarged structures do not return to their

normal condition, but constitute a network, within whose meshes is deposited the adventitious matter produced by the thickening of the skin that is continually going on, and which becoming condensed, forms the small corns situated between the nervous fibres.

By the time the inflammatory action has entirely ceased, the nervous filaments are completely matted, as it were, within the outer skin.

Persons seldom apply for professional assistance in the acute stage of the complaint, for, when first attacked, the pain indicates the necessity of removing the pressure, and the inflammation is generally allayed by poultices or some simple application, which gives relief for a time, but does not remove the corn. When the same kind of shoe is again attempted to be worn, the severity of the pain produced obliges the sufferer to seek professional assistance.

I am fully of opinion that this is the species of corn which, when cut unskilfully, or improperly treated in persons of inflammatory

constitution, and particularly in aged people, has been productive of very serious consequences, and even in some instances of death, from the resulting mortification. This latter termination occurs more especially with persons advanced in life, in whom the lower extremities have already less vitality than other parts of the enfeebled frame, and, consequently, are unable to resist the effects of the additional irritation caused by an unskilful operation.

The first treatment should be by palliative remedies, particularly during the inflammatory state: the application of lint dipped in cold water, covered with oiled silk, or gutta percha, will generally be found sufficient for the purpose, together with rest, and the avoidance of all pressure.

When the irritation has ceased, the thickened skin may be carefully removed without giving much pain, if the nervous fibres are not touched by the instrument, after which soap plaster may be applied, at the same



time guarding the projecting joint from the pressure of the shoe by mechanical means.

In the chronic form, which is always unattended with inflammation, but where the skin is much thickened, it should be scraped off, until the white lines and intermediate specks are visible. The corns should then be very carefully picked out from between the filaments, great care being taken in the operation to avoid pricking them or producing hæmorrhage, as it would be attended with excruciating pain, and might cause great irritation and inflammation; the wetted lint should be afterwards applied for a few days, or until the soreness and pain cease, and then a small piece of soap cerate plaster should be placed over the corn, and worn continually.

With the usual caution against pressure, perfect relief will thus be obtained.

Although a radical cure cannot be insured, relief will certainly be given, and in many cases the nervous filaments will disappear,

leaving a slight thickening. This, however, seldom causes any pain.

## VASCULAR EXCRESCENCE.

A VERY painful vascular excrescence is occasionally met with, situated on the soles of the feet, upon the plantar, or under side of the heel; also on the little toe, and sometimes on the sides of the great toe, close under the nail. It is easily distinguished from a common corn, as it has more the appearance and character of a wart, but cannot be so considered, as they come principally on the hands and fingers, and on parts where there is no pressure; are seldom painful, and grow without any apparent cause: but this excrescence is always painful, and is never produced without previous pressure.

This disease is a deep-seated spongy or vascular substance, forming a circumscribed tumour, not projecting much beyond the level of the thickened skin; when fully de-

veloped, the whole of the surface is studded with red and black specks, and the surrounding integuments are inflamed and swollen.

In some cases the minute extravasations are not distinctly defined; the excrescence then appears as a softened tuft, the vascular fibres composing which, seem to be of unequal length. When an attempt at extirpation is made with the knife, hæmorrhage to a considerable extent immediately follows, all the minute vessels pouring forth their contents very profusely.

This disease has been noticed as connected with a cancerous diathesis, but I am perfectly convinced that there is nothing malignant in its character, never having met with a case which did not yield to the application of nitrate of silver, and in which an effectual cure was not obtained in a very short time; it is likewise satisfactory to know that the disease never returns.]

In the generality of cases the patients are young, and have what is usually called fleshy feet, moist and clammy tissue, and the skin

thin. It is seldom met with in children under ten years of age, nor in aged persons; women are less liable to it than men.

The principal symptoms are a burning sensation in the part affected, which is very sensitive to the touch, attended with aching and throbbing pain, particularly after walking, when the shoe has been removed, and on lifting the foot from the ground. I have never been able to ascertain satisfactorily the cause of this complaint, none of the patients recollecting any previous indication before the pain became so intense as to require medical aid. Some persons have observed the skin to be somewhat thickened on the part, but did not experience any pain or inconvenience.

The general treatment is simple, and requires but perseverance in the use of the nitrate of silver, to effect a radical cure. The excrescence should be incised superficially before each application.

I was recommended by Sir J. Clark, Bart., to see a gentleman attached to the

Belgian embassy, who had been confined to his room for nearly three months with a disease on the under part of his heels.

I observed about the centre, more particularly on one heel, an irregular oblong substance, about an inch long and three-quarters of an inch wide, with a hard thickened, callous edge, and two similar, but smaller ones, towards the side of the heel, exceedingly sensitive to the touch, and having all the characters of the excrescence just described. The gentleman's health had suffered from long confinement and want of exercise.

I treated this case in the usual manner, and the disease has not since returned, nor caused the least inconvenience.

I received the following history of the case:—The gentleman had occasion to travel from the Continent at a very short notice, and put on a new pair of boots, which gave him great pain in his heels whenever he put his feet to the ground, but having no opportunity to remove them, he bore the pain

until his arrival in England, when on examining his boots, he found wooden pegs projecting to about the eighth of an inch in the heels, which, from the pressure, had produced inflammation with great soreness, and gave rise to the disease. He had been under medical treatment from the time of his arrival.

I attended a surgeon of eminence about four years ago, who had a growth of this kind at the apex of the index finger, by the side of and under the nail. It was, however, more inconvenient than painful. He could hardly assign a cause for its production, but most probably it might have been produced by local violence, or by the presence of some foreign body, which had been forced under the nail, and removed at the time, without causing sufficient pain to attract notice.

The treatment pursued was, as in the preceding case, first by the removal of the nail beyond the diseased structure, and then the repeated application of caustic. Many months elapsed before a perfect cure was

effected, owing to the care with which small portions of the excrescence were taken away upon each occasion. Up to the present time there has not been any return of the disease.

#### BUNIONS.

THE word bunion, which has been almost indiscriminately applied by the public to any hard and painful tumour or corn on the feet, should be restricted in its use to designate an enlargement over the first joint of the great or little toe, produced by pressure or by some other cause, effecting a change in the position of the joint.

The derivation of the term is somewhat obscure, nor do any of our lexicographers allude to it. It is probably a modification of the word "Oignon," which was formerly and is still, used in France to designate the disease. The term, although not a scientific one, can scarcely be regarded as altogether

inapplicable, as the enlargement does in a measure resemble a skinned onion in smoothness and roundness, while the plexus or knot of superficial corns, so frequently seated upon its upper surface, is represented in the bulb by the remains of the closely cut roots.

Boyer says it is called "oignon," or "onion," as well from its rounded shape as from the thin scales of thickened skin which form on the upper surface, and can be removed separately, like the layers of an onion.—("Traité des Maladies Chirurgicales.")

Very little information can be gathered from the works of the early writers on surgery respecting bunions. They do not mention any disease which, from the description, can be considered as the complaint in question; and even later authors have thrown but little light upon the subject, as they have generally chosen to adopt the opinions of those who have preceded them, in preference to investigating for themselves. They speak of a bunion merely as a species of corn, without



reference to the diseased condition of the joint which follows.

One of the most frequent and certain causes of a bunion is the wearing of shoes made too short, and with a narrow sole, so that the feet are subjected to an undue degree of pressure, both laterally and longitudinally, and the whole weight of the body is thrown upon the articulation of the bones of the feet with the great and little toes, there not being sufficient room for the foot to expand, nor for the great toe to extend itself, so that the proper motions of the joint and the regular action of the muscles are impeded, whereby excruciating pain is produced, followed by inflammation, malposition of the great toe, and the ultimate formation of a severe bunion.

When a bunion is produced by distortion, or hereditary malformation, the great toe, which should be in a straight line with the foot, lies transversely over or under the next toe, causing a projection of the joint, which is subjected to continual pressure on the

most prominent parts, gradually increasing in severity as the swelling enlarges, until a bunion is fully developed.

Constitutional derangement, producing a relaxation of the system, may also act as an occasional cause of bunion in persons predisposed to that complaint, by inducing a feebleness in the joints, principally of the great toe, with pain after walking, which frequently continues after the shoes have been removed and the feet are at rest. This cause is influenced by a peculiar state of atmospheric temperature, affecting the feet in particular constitutions.

Among the other constitutional causes may be ranked rheumatism and gout, which induce progressive deformity of the feet, distort the toes, and carry, by the contraction of the flexor tendons, the point of the great toe obliquely across the others, and thus produce that state of the foot by which the enlargement of the joint, constituting a bunion, is caused.

As persons advance in age, the fluids of

the system are not supplied in the usual abundance; and this is especially the case with regard to the secretions lubricating the joints, which, in consequence, become stiff, and the toes may even become partly ankylosed, from the want of sufficient nourishment. This is not an unfrequent occurrence in the joints of the great toe of aged persons, and of course does not admit of relief. Little inconvenience, however, is occasioned, unless from the pressure of the shoe, and the want of elasticity in walking.

A bunion consists of an enlargement or thickening of the common integuments over the first joint of the great toe, seldom affecting both feet at the same time, caused either by compression, or by an unnatural obliquity of the great toe outwards, by which the position of the joint between it and the metatarsal bone is changed. When the disease is first noticed, it is attended with trifling pain and inconvenience, but from the continued and increasing pressure, and the non-removal of the cause that originally produced

it, inflammation is set up, the skin covering the joint becomes involved, thickens in layers or scales over a considerable surface, and is studded with clusters of small superficial corns.

If the disease, in this advanced stage, be neglected or improperly treated, or if the patient take an unusual degree of exercise with a more than ordinarily tight shoe, the inflammatory action will be renewed or increased, the bursa beneath will become enlarged between the skin and the bone, and fluid will be effused, causing considerable swelling over the articulation, attended with exquisite pain and tenderness, which will be felt, not only in the joint itself, but also extending to all the surrounding parts.

If the disease still proceeds, the pain and swelling continue to increase, and suppuration takes place within the cavity of the bursa, which, on account of the depth of its situation and the abnormal thickening of the integuments, is very slow in bursting externally. Sometimes the ichorous fluid burrows

into the adjoining cellular tissue, producing ulceration, and in some cases causing caries of the bones, and not unfrequently exfoliation of the joint.

A protuberance is occasionally met with on the corresponding joint of the little toe, and may be regarded as a species of bunion, which, from its position, is not subjected to the same amount of pressure in walking, but the pain and inconvenience otherwise are not less severe than in ordinary cases in which the joint of the great toe is affected. The symptoms and appearance are precisely the same, but in the worst cases, although attended with great irritation, the inflammation rarely does much mischief, or extends further than the bursa: it is more amenable to proper treatment.

When this tumour is caused by the little toe being forced obliquely out of its position, and under the next, it will sometimes enlarge to a great extent, so as to project considerably; the skin will be thickened without inflammation, and also without pain, except

when pressed upon. The chief complaint in this case arises from the unsightliness of the joint.

Although a radical cure of a perfectly-formed bunion can seldom be promised, yet in most cases, if not in all, relief from the pain and other inconveniences may be afforded by proper treatment. The time required for this purpose will vary very much; in many cases palliatives must be used for a length of time before a cure can be effected, and even then the enlargement of the joint does not entirely disappear. In all cases it is advisable not to have recourse to violent modes of treatment, more especially when the bursa is inflamed, as very serious consequences have been known to ensue.

The most beneficial and proper local remedies I generally use are cold water dressings, spirit lotions, and the application of diachylon and soap plasters; in the more severe cases, linseed meal poultices, made with decoction of poppies, the nitrate of silver, potassa fusa,

and also nitric acid : but these latter remedies must be employed with the greatest caution.

When a bunion first forms it appears inflamed, but is not attended with much swelling ; the pain in the joint is mostly felt when the shoe is worn ; it continues for a few days and then subsides, re-occurring, however, at intervals for many months, without increasing in severity, so as to require medical advice. If it be caused by wearing a short, badly-made shoe, it will be immediately relieved by removing it, and a cure effected by bathing the foot night and morning with a spirit lotion.

Even if the shoe should not appear afterwards to press injuriously on the foot, it ought not again to be worn, for if the patient persist in doing so, the pain and irritation will gradually increase in proportion as the foot is used, and be felt more especially in the joint, under the ball, and along the toe. Inflammation will extend in an equal degree, and proceed over the instep ; the integuments covering the joint will be thickened,

the skin will form scales, or layers, and corns be generated, either on one elevated point, or else in small superficial clusters on various parts of the bunion.

The best mode of treatment in such a case would be to reduce the inflammation by rest, and by the application of cold lotions, after which the corns may be carefully extracted, and a plaster, made with soap-cerate and adhesive plaster, applied over the joint. If the great toe is inclined obliquely inwards towards the others, a piece of sponge, or a pledget made with tape or linen of sufficient thickness, should be placed between the first and the great toe, so as to bring the latter in a parallel line with the joint and bones of the foot. In this manner, the patient wearing a properly-made shoe, a cure may be soon effected, but the plaster must be retained over the joint for some time after the pain and inflammation have subsided.

A similar class of symptoms will frequently occur, without any external cause, from constitutional derangement; the joint affected



and the foot are very painful, giving rise to great inconvenience in walking, the natural action of the foot from heel to toe being impeded, so that sufficient exercise cannot be taken. The pain does not always cease when the shoe is taken off, but often continues for several hours afterwards. External remedies are of but little service, the disease being influenced chiefly by the state of the atmosphere, improving as the weather becomes more favourable, and getting worse with an opposite state of the temperature. As the general health is affected, so in a manner are also the bunions which arise from symptomatic derangement.

The pain and inflammation in these cases come on sometimes so suddenly, that the patient is apt to mistake the attack, and attribute it to gout, from which, however, it may easily be distinguished by the external tenderness of the joint, and the persistence of the inflammation in the latter disease, whereas in bunions the part is not painful to

the touch, and the inflammatory symptoms soon subside with the removal of the shoe, and the adoption of the usual treatment.

Persons in very delicate health sometimes suffer from severe pain in the joints, without enlargement or inflammation, and no appearance of disease can be traced in the joint. The skin is tender to the touch, and the foot feels clammy and moist.

I was requested by a physician to visit a lady in ill health, who complained of pain in her right foot, particularly in the joint of the great toe. I examined the part very carefully, but could not discover any cause for the pain; it was sensitive to pressure, and the foot was swollen, but there were not any signs of inflammation. An anodyne spirit lotion used for a few days diminished the sensitiveness of the skin; but the pain still continuing in the joint, I directed a plaster, prepared with belladonna and soap, spread on thin leather, to be applied, and drawn tightly over and under the joint, so

as to cover half the foot. From this remedy great relief was experienced, and in a few days the pain was entirely removed.

A small tumour is occasionally found on the top of the instep, caused by the pressure of the boot. It is situated under the skin, and is hard and immovable. When the accompanying inflammation has subsided, and the pressure that produced it has been removed, the skin is occasionally found to be thickened, and a corn, which is superficial and easily removed, is the result. In many cases it presents a strong resemblance to a ganglion.

In cases of rheumatic or gouty distortion of the feet, but little benefit can be expected from external applications. The disorders should be treated on general principles, those remedies being used which are employed for the removal of the same diseases when attacking other parts of the body. Very easy shoes should be worn to prevent pressure on the joints.

His late Majesty, William the Fourth,

suffered severely from rheumatic and gouty affections in the hands and feet. His fingers became very contracted and painful, and at last he could scarcely hold a pen without inconvenience. His Majesty's toes were also deformed and tender, so that he was continually complaining of them, but nothing could be found to afford relief. Boots were made of buckskin, and afterwards of chamois leather, which caused but little pressure, and they were so large, that in walking his Majesty had an unseemly shambling gait. The deformity, however, continued to increase, and the feet were occasionally painful to the time of his decease.

When the enlargement or bunion at the outer side of the foot, at its articulation with the little toe, commences with itching, heat, and pain, increased by the pressure of the shoe and by walking, the seam of the stocking will most probably be found to have made an indentation along the joint by being pressed against it. To remove the pain, the part of the stocking where the seam is must be

drawn under or over the foot, and a spirit wash applied to the joint, either as a poultice with bread, or else by means of a piece of rag properly folded and wetted with it. The redness will soon disappear and the pain cease: a cure will be effected afterwards by wearing a soap plaster.

If the bursa becomes inflamed, it must be treated in the same manner as the similar affection of the bunion on the great toe.

The exciting causes must in all cases be removed.

When the unsightly deformity of a distorted joint is the sole cause of complaint, some mechanical means must be invented for its concealment.

A young lady desired my advice for an enlargement of this description, which was principally caused by the distortion of the bones. She had always been very delicate, and subject to great relaxation of the joints, so that she could force her feet into shoes of almost any size, and had been unconsciously wearing those that were too short for her, and had thus produced distortion. She did

not suffer from pain, and her object was merely to get rid of the deformity, and to have a better shaped foot.

By pressing laterally on the bones of the foot, I could bring them much closer together, and doing so seemed to me to give the toes a spring outwards; I therefore applied a strip of adhesive plaster, an inch and a half wide, over the joint, and over that again a piece of crape tightly sewn (which latter the young lady had herself been in the habit of using before I saw her). The support thus afforded was very comfortable, and by a little alteration in the shape of the shoe, the distortion was scarcely perceptible.

When the joint is merely distorted, without any inflammation or induration of the skin, the only inconvenience experienced being from the pressure of the shoe, a mechanical means of relief may be had recourse to, by filling up the hollow between the joint and the upper part of the great toe with a piece of adhesive leather sufficiently thick to take off the pressure.

## ON THE NAILS, AND THEIR DISEASES.

THE nails are placed at the extremities of the fingers and toes, to cover and protect from injury the numerous sensitive nerves of touch. They are composed of a horny, insensible structure, arranged in laminæ or layers of longitudinal fibres similar to whale-bone, and running from the root to the apex. They adhere upon the under or concave surface by rugæ or grooves to the true skin, by which they are maintained in their situation.

Beyond the root or semilunar substance the true skin is much more vascular, and imparts a degree of redness, which is visible through the diaphanous structure of the nails, varying in intensity according to the temperament of the individual, and also according to the existence of certain diseases.

The nails are generally fully developed at birth, and continue to grow, under various modifications, until death. Their growth is rarely obstructed by fever or disease of the skin.

The toe nails are liable to many disorders from accidents, and to peculiarities in their growth, taking on different appearances according to age and altered secretions. They are somewhat thicker than those of the fingers, although similarly constructed, and, consequently, are better calculated to protect the toes from many serious injuries they might else be subject to in walking.

There are some nails, however well formed, which after a time begin to thicken, and acquire in a few years such a degree of thickness and deformity, as to render it exceedingly difficult to cut them with the instruments generally in use, and consequently they are allowed to grow until they cause inconvenience and pain. In this state the assistance of the chiropodist is required to cut the nails, which can only be done with a strong pair of nail nippers.



The nails are capable of being bent or curved by heat, moisture, and pressure, and very frequently, when allowed to grow to a great length beyond the point of the toes, are compressed by the shoe into various shapes, in the same manner as heat and pressure act upon the common horn.

At this period the fibres or longitudinal lines are not strongly marked, and the nails are much more supple and thin than at a later time of life. As we advance in years they appear more opaque, and, without any particular disease, become harder and thicker.

In some persons a spongy substance forms under the edge of the great toe nails, unattended with pain; it adheres to the nail itself, and is an exuberant growth from the secreting surfaces beneath. It is easily picked out, leaving a hollow between the nail and skin, according to the quantity removed.

This increased secretion appears to be thrown out for the protection of the sensitive parts beneath, and ought not to be removed

unless, by being concreted under the edge of the nail, it causes pressure, and consequently pain. It is softer on the inner side of the nail, particularly if covered by the first toe; it is then of the consistence of pomatum, and causes a permanent stain on the nail.

There is frequently a peculiar spongy substance under and about the centre of deformed nails, of honeycomb appearance, very different from that just described, from which oozes a disagreeable ichorous discharge, loosening the nail as far as the disease extends. It is not very painful unless the nail is lifted up by sticking to the stocking, but requires to be attended to, as it is sometimes followed by ulceration. The cause is difficult to ascertain, as persons are generally not aware of having met with any accident by which the complaint could have been produced. By cutting away the loose nail, and desiccating the part with nitrate of silver, the oozing soon ceases, and the toe gets well.

A very severe accident occasionally arises

from persons scraping the centre of the great toe nail, in the belief that it will grow thicker where it has been scraped, and thinner at the sides, so as to prevent its growing in. This, however, is an erroneous practice, and, by continuing this method upon the same places, the nail will become broken with irregular edges, which press against and inflame the parts: the irritation soon produces a fungus, which rises through the opening, and is exceedingly painful.

I was requested by the late Sir Astley Cooper, Bart., to see a lady who was in the habit of scraping the great toe nail with a razor, and who had accidentally let the razor slip through it. The pain at the time was very severe, and instead of using adhesive plaster, she applied poultices; the splintered portion of the nail was pressed down upon and into the flesh, and caused considerable irritation, which was followed by the growth of fungus, springing up through the wound. In this state the lady consulted Sir Astley, who advised her to see me, that I might

remove the small pieces of nail which were pressing on the sensitive parts beneath. The toe was so excessively irritable, that I could not lift up the penetrating points of nail without giving great pain; I therefore applied the caustic daily, in the hope of reducing the fungus; but as the exciting cause remained, very little progress was made.

The lady being obliged to return into the country, I advised her to have the nitrate of silver applied daily by her surgeon, and the spiculæ of nail which would be destroyed carefully picked out. In a very short time after she left town I received a letter requesting my attendance in Sussex, as the toe had become so very painful as to prevent her walking. I found it very much inflamed, and the splintered portion of nail sticking in the fungus, which had risen much higher than when she was in London. I immediately perceived that unless the broken nail was removed, the disease could not be cured, and I accordingly ordered poultices to be applied regularly until the next day to cleanse and soften

the part; after which I commenced dividing the nail below the disease, near to the semi-lunar fold, and gradually dissected it upwards: very small pieces only were removed at the time, for the lady dreaded the least pain. The fungus was also freely rubbed with the nitrate of silver. This treatment was pursued for upwards of a fortnight, until I had cleared away the nail from around the fungus. The application of caustic, followed by pressure, was continued daily, until the exuberant growth was entirely reduced, and the pain and inflammation were subdued. The part was afterwards protected by strips of adhesive plaster drawn over the toe, and in about five months' time a new and perfect nail was produced.

At times the side of the nail will curve inwards without any thickening, so as to enclose the flesh; it is not painful unless when pressed upon, and only requires the nail to be kept closely cut. I have seen a case, however, where the curvature extended nearly to the centre of the toe; it was ex-

ceedingly painful, for which I could not account, until I removed the upper part of the nail, when a corn was discovered beneath it, which had not been visible externally. Immediate relief was afforded by its extraction, but when the nail grew again, it resumed its curved form.

A trifling complaint often happens to the outer side of the great toe nail by the splitting of a longitudinal fibre, or thin edge, from the top to very near the root: it does not cause any pain, unless it becomes entangled in the stocking, so as to be torn further down into the quick. The piece must not be pulled out, but should be carefully separated from the skin, by first wetting the part with water, and then dissecting it out with a small cutting instrument, taking care not to wound the flesh.

In cases of accidents from violent collision of the toe against a stone, or any other hard substance, extravasation will immediately follow the blow, and be attended with great pain; if the injury is very severe, the nail

becomes loosened and falls off, and a new and perfect nail will be again produced. If the whole of the nail is not detached, and the loosened part requires to be cut away, it frequently follows that a deformity is the result, particularly if the injury extends to the semilunar fold. Immoderate exercise will likewise cause the nails to fall off without any apparent local cause, excepting an uneasy sensation in the toe, around the insertion of the nail, together with a slight degree of swelling and redness.

The most severe and painful injury to which the great toe nails are liable, is that caused by the fall of a heavy weight, or from the tread of a horse. The soft parts of the toe are generally very much bruised and inflamed; and the extravasation commonly extends to the secreting vessels at the root of the nail, so that a larger or smaller number of the layers of which the nail is composed lose their adhesion to the root, and become incapable of assisting in its further nourishment.

When the inflammation has subsided, the nail which has been injured very soon falls off, leaving the part covered and protected only by a new skin. Nature, however, endeavours to supply a new nail; but as the secreting glands at the root have also suffered from the accident, their power is greatly diminished, and an imperfect nail is the result.

The peculiar shape is produced by the projecting or overlapping of the thickened scales upon each other, commencing with that which is growing at the root of the nail, whence the nourishment is derived, each new scale thrusting forward the one previously formed.

When the nail does not extend to the end of the toe, a very thick yellowish cuticular substance supplies its place. After this state has existed for several years, it becomes dry and brittle, as if it contained a large proportion of the earthy phosphates.

I have known some persons who have shed their nails periodically, without suffering any inconvenience, and being, in fact,



scarcely aware of it at the time of the occurrence.

Sometimes, in putting on a tight boot, the stocking is drawn up at the heel, by which the tops of the nails are compressed downwards, producing severe pain, and, if long continued, it may cause them to fall off.

The usual time for the growth of a new nail is from four to six months, much depending upon the healthy state of the secretions.

The most formidable disease connected with the toe nail is that which is called "the nail growing into the flesh." It is met with most frequently in the great toe, but all the other toes are liable to the same complaint, but less severely. It is caused by an improper manner of cutting the nails, or by the flap of flesh being forced up against the edge of the nail, from wearing shoes too narrow, or badly made across the toes, or from the edge of the nail being curved, or taking some other vicious direction.

Persons, when they first feel pain in the

sides of the toe, are apt to regard it as caused by the nail having been allowed to grow to too great a length, and accordingly commence cutting it, thence deriving temporary relief. In consequence of the pressure of the shoe, which is still continued, the flap is forced more against the remaining rough edge in walking than before, and there is consequently more pain and uneasiness experienced, but lower down, nearer the root. The flap thickens, is pushed upwards still further, and partially covers the nail, which, as the pain continues, is again and again cut, until the scissors can no longer reach the part which is supposed to cause the suffering. The consequence is, that a point is left which penetrates the flesh, keeps up and increases the previously-existing irritation, produces severe pain and ulceration, and, if neglected, fungus sprouts forth from the part most affected.

In other cases, the nail forms such a decided curve under the flap, that its edge, along the whole length of the toe, is im-

bedded in the soft parts, which become inflamed and so much swollen, that not above one-half of the nail can be seen. Walking will increase the inflammation, and ulceration will take place in the whole length of the furrow. Under improper treatment, or neglect, this state will continue with many persons for months, until the whole is covered with fungus, or what is denominated proud flesh. The pain will then be so severe, that the weight of the body cannot be sustained upon the toe, and the patient is compelled to rest the limb.

His late Majesty, George the Fourth, was under my care, on account of the nail of the great toe on the left foot pressing into the flesh. It was much curved and thickened, principally towards the root. When walking, the pressure of the soft parts against the edge gave pain: by its being properly attended to every fortnight, but little inconvenience was experienced, nor did it produce ulceration, nor any kind of sore.

From the state of his Majesty's health,

instead of cutting away a portion of the nail, I only thinned it occasionally. This did not at all times satisfy his Majesty; he said there was a fulness about the lower part of the nail which he wished to have removed, and would frequently force one of my instruments under it, to show me what he considered ought to be cut away. This I always, by some excuse or other, avoided doing.

At one of my operations I was treating the nail in the usual manner, when his Majesty asked me if I had got the piece out. I gave an evasive answer, when he rather pettishly remarked, that I did not understand, or would not perform, what he required; and with that his Majesty took the thin or handle part of a dressing comb, which was lying before him, and thrust it violently under the nail, forcing the piece upwards and outwards, so that the nail was lifted from the matrix or fold of skin to which it adhered. The rough manner in which this was done caused him great pain. The piece remained sticking out beyond the flap,

so that I was compelled to detach and remove it from the surrounding soft parts. The next day the toe was much inflamed, and erysipelas had commenced on the foot; it was therefore considered proper that Sir Astley Cooper should be sent for. The case remained under his hands for some time.

His Majesty, with his usual kindness and urbanity, being apprehensive I was uneasy about his foot, desired Sir Astley to send me a note (the copy of which is appended at the foot of the page),\* stating there could not be any blame attached to the operation I had performed.

As soon as the inflammation had subsided,

---

\* "Sir Astley Cooper presents his compliments to Mr. Durlacher, and assures him that his mind may be perfectly at ease respecting the inflammation of his Majesty's foot, which has arisen from no fault of Mr. Durlacher's. His Majesty expresses entire satisfaction at Mr. Durlacher's conduct on all occasions: and Sir Astley Cooper is happy in being able to bear testimony to the dexterity and judgment of Mr. Durlacher.

"New Street, May 9th, 1823."

I waited on his Majesty as usual, and followed my previous practice. His Majesty then gave his word that he would not touch the nail again, and this promise he strictly adhered to. I had the honour to arrange his Majesty's nails until six days previously to his death.

Of the preventive or palliative measures, I shall only notice those which have been most commonly in use, or have been recommended from their peculiarity. Cutting a notch in the upper surface of the nail, and scraping the centre with a knife or a piece of glass, is one of the most ancient operations that have been employed; cotton or lint has also been pushed under the edges of the nail, for the purpose of raising the corners; and then followed the use of tinfoil or silver plate, with the same intention of preventing the nail penetrating into the flesh. Another plan was recommended a few years since, which consisted in scraping the nail very thin along its upper surface, and afterwards applying a square piece of cork on the part,

and retaining it there with a bandage tightly applied, so as, by the pressure on the centre, to elevate the sides of the nail.

These mechanical means have seldom succeeded, because the substance placed under the nail is pressed by the thickened curvature more severely upon the flesh, and, consequently, can seldom be borne for any length of time. Another objection applies to the method last alluded to, because no common shoe will admit the foot with the cork and bandage.

The most general application used by the profession for this disease (without having recourse to instruments) is nitrate of silver, freely and repeatedly rubbed between the nail and flap, with the intention to destroy both. This sometimes succeeds, when the disease does not arise from a point or sharp edge of the nail penetrating into and irritating the flesh, and the ulceration is not very extensive.

I have seen a case, however, where this plan of treatment was pursued to such an

extent, that a piece of caustic was absolutely laid in between the nail and the flap of skin, its corrosive action exciting very violent irritation and constitutional derangement, without being of any benefit, so that after the incidental inflammation had been removed by appropriate treatment, the excision of the nail was requisite.

When the nail has penetrated into the flesh, and ulceration has commenced, these palliative measures prove of but little service, even when practised before the appearance of proud flesh, and relief can only be obtained by the excision of the diseased part of the nail.

#### THE MANAGEMENT OF THE FINGER NAILS.

THE nails of the fingers, when well formed, contribute greatly to the symmetry of the hand. They constitute in the lady an important feature of personal attraction.

According to European fashion, they



should be of an oval figure, transparent, without specks or ridges of any kind; the semilunar fold, or white half circle, should be fully developed, and the pellicle, or cuticle, which forms the configuration around the root of the nail, thin and well defined, and, when properly arranged, should represent, as nearly as possible, the shape of a half filbert.

The proper arrangement of the nails is to cut them of an oval shape, corresponding with the form of the fingers; they should not be allowed to grow too long, as it is difficult to keep them clean; nor too short, as it allows the end of the fingers to become flattened and enlarged, by being pressed upwards against the nails, and gives them a clumsy appearance. The skin which forms the semicircle around, and adheres to the nail, requires particular attention, as it is frequently dragged on with its growth, drawing the skin below the nail so tense, as to cause it to crack and separate into what are called ag-nails. This is easily remedied by

carefully separating the skin from the nail by a blunt, half-round instrument. Many persons are in the habit of continually cutting this pellicle, in consequence of which it becomes exceedingly irregular, and often injurious to the growth of the nail. They also frequently pick under the nails with a pin, pen-knife, or the point of sharp scissors, with the intention of keeping them clean, by doing which they often loosen them and occasion considerable injury.

The nails should be cleansed with a brush, not too hard, and the semicircular skin should not be cut away, but only loosened, without touching the quick, the fingers being afterwards dipped in tepid water, and the skin pushed back with a towel. This method, which should be practised daily, will keep the nails of a proper shape, prevent ag-nails, and the pellicle from thickening or becoming ragged.

When the nails are naturally rugged, or ill-formed, the longitudinal ridges or fibres should be slightly scraped and rubbed with

lemon, afterwards rinsed in water, and well dried with the towel; but if the nails are very thin, no benefit will be derived by scraping; on the contrary, it might cause them to split. If the nails grow more to one side than the other, they should be cut in such a manner as to make the point come as near as possible in the centre of the end of the finger.

The biting or picking of the nails is an unfortunate and pitiful habit, which can seldom be prevented, and frequently continues for life; in many cases they are so disfigured as to be scarcely visible, and that which remains is covered with skin, so that the top of the fingers appears clumsy and unsightly.

For this disagreeable habit my general practice is, to remove as much as possible of the thickened skin which confines the nails, and cover one or two of them with black sticking plaster, so that the person, on looking at the black spots, may think and recollect for what purpose they were placed there; at night,

gloves should also be worn. With young people I have for a time succeeded by promises of rewarding them with that for which they are most anxious.

The most remarkable case with which I am acquainted was that of a young gentleman, who was very much addicted to this disagreeable propensity; various plans were tried without the least effect, but as he was very desirous of learning the flute, a master was obtained, upon his promise to forego the habit. He continued learning for upwards of a twelvemonth, and certainly, during that time, did not touch his nails; they grew to the apex of his fingers, but rather flatter than they ought to have been. About this time he became dissatisfied with the little proficiency he had made, and declined flute playing. In less than six months afterwards his nails were as bad as ever, although he never was caught in the act of biting or picking them.

It is a most remarkable fact, that middle-aged persons who are addicted to this per-

nicious habit, seldom or ever refrain from it, and, when in thought, have their fingers to their teeth, as if they were gnawing a bone.

The finger nails are liable to but few accidents that require notice, excepting extravasation from violent pinches or severe contusions, which often cause them to fall off. If cold applications are used immediately after this accident has occurred, the pain will soon be relieved, and the mischief which generally follows may be prevented. If the bruise be very severe, and the pain should continue, the addition of a few drops of laudanum and Eau de Cologne to half a wine-glassful of water, will form a very useful lotion. Dipping the finger into it, or applying wetted rag or lint, will materially assist in the absorption of the extravasation.

The nails are sometimes accidentally torn across, the laceration running down laterally, one side or the other, in the direction of the fibres, part of the nail being detached from the integuments. The necessary treatment consists in the removal of the loose part as

speedily as possible, and then dressing the top of the finger with spermaceti, cold cream, or any other emollient ointment, after which it should be properly protected with a finger-stall of soft kid leather. The pain soon ceases, and in the course of time, as the new nail grows, the deficiency is filled up. It may be proper here to remark, that nature does not remedy any injury to a nail, such as the elision of a portion thereof, either in the centre or at the sides, by filling it up; the removal of the deficient part is effected only by the progressive growth of the layers at the root, by which it is ultimately carried forward beyond the end of the finger, or toe, where it is cut off in the ordinary way.

When a splinter of wood, or any other substance, has been forced under the nail so far that it cannot be laid hold of with the forceps or tweezers, and yet is visible, the readiest means for its extraction, and that which is attended with the least pain, is to cut down upon it, by carefully removing a narrow wedge-shaped piece of the nail, until

the end of the substance can be taken hold of with the forceps. Cold water dressing should then be applied for a few hours, and the part afterwards protected with a piece of black caoutchouc sticking-plaster.

The nails are, in many persons, very liable to split longitudinally, when they have grown to a certain length, particularly if they are of thin texture, and the individual has a dry skin. There is usually a line or fine ridge running along the nail, indicating where the splitting takes place; it is exceedingly disagreeable and annoying, as the nail, if not properly cut, is apt to catch in almost everything the finger takes hold of, and sometimes is torn downwards, producing severe pain. The tendency to splitting is very seldom perfectly cured, but by proper management may be prevented to a certain extent. Very little is required to keep them in order: they must be cut as short as possible, and if the split extends below the part which is usually cut, it should be covered with the caoutchouc

plaster, and the nail kept cut down as close to the finger as possible.

The most painful disease is an inflammatory swelling around the nail, called paronychia, or whitlow. It sometimes extends to the root, and is followed by suppuration and ulceration under the edge of the nail. In the worst cases, deep seated abscesses frequently destroy the soft parts and injure the covering of the bone. The disease has been divided into different species, according to the situations which it occupies. It is not always a local complaint, but is connected with constitutional debility, and many young persons are subject to it periodically. The treatment consists of poultices and the use of escharotics, but it is a disease for which surgical advice should be always taken, as it will, when neglected, continue for many months, and ultimately prove of serious consequence.

On all occasions where the nails have been lost by accident or disease, or have been



only partially destroyed, it will be advisable to apply cold cream, spread on a piece of lint or cambric, on the end of the finger, and to protect it by wearing a stall made of soft kid leather, until the growth of the nail is completed.

#### WARTS.

WARTS (in Latin, *Verrucæ*,) are generally small, hard, indolent tumours, or tubercles, situated on various parts of the body, but principally on the hands and fingers. In their structure they differ altogether from that of corns, as they arise directly from the true skin, whereas corns are a disorder of the outer skin alone.

Warts are described by authors as of three kinds, the division into varieties depending solely on their shape. The round are the most common. The flat warts are broader and longer, but not so prominent as the preceding; and the third variety are the pendulous.

Those common, well-known warts, which arise either from some local irritation of the skin, or without any known cause, and which are altogether independent of the constitution, are alone treated of in this chapter.

They occur much more frequently on the hands of children and young persons, than on those of the more advanced in life, and occasionally persist or return, in spite of every treatment that can be adopted, yet are known to disappear spontaneously.

Innumerable popular remedies have been from time to time recommended for the treatment and cure of warts. Some of them are of a most singular and extraordinary nature; others presenting a great likelihood of success from the character of the remedy itself: many of them still hold possession of the public mind, and are occasionally had recourse to.

Etmuller seriously mentions as a certain remedy the green moss gathered from the skulls of persons who have died a violent death; this is to be exposed to the air and

made into a paste; and Juncker states, that a thread drawn from the shirt of a dying criminal from near the arm-pit is equally valuable: as many knots are to be tied in the thread as there are warts to be destroyed, and each knot is to be rubbed on the corresponding wart, after which the thread is directed to be buried in a moist place. As the knots rot away, so, says Juncker, will the warts consume and disappear. He adds, he has never known it to fail. A piece of stolen raw beef is also occasionally employed for the cure of warts, by rubbing them with it and afterwards burying it; its decomposition will be attended by a similar process in the warts. Many more such absurdities are to be found in the works of ancient writers on surgery. Warts are sometimes even charmed away. It is almost needless to observe, that these and other superstitious observances, which are now confined to weak-minded and uneducated persons, are totally incompetent to effect the desired purpose.

The general methodic treatment consists

in the application of caustic, alkalies, acids, and escharotics, or else their removal by the ligature or the knife.

The pendulous wart, which is connected with the integuments by a small footstalk, is readily removable by the application of a ligature of horse hair or waxed silk thrown around and drawn tight, and secured with a surgeon's knot. When deprived of the access of blood, by which its vitality is sustained, the wart will gradually shrivel up and separate. If there should afterwards appear any remains of a root, it must be touched with nitrate of silver until destroyed, for if any portion remain, the wart is certain to be reproduced.

The caustic alkalies may be frequently applied for the removal of the round and flat warts, but they will not always be successful. The best treatment is to cut the wart as close as possible without giving pain, and, while yet bleeding, freely to rub the lunar caustic on it. This operation is to be repeated until the whole is entirely destroyed. In

some cases nitric acid may be used instead of the nitrate of silver, but great care is requisite in using either of these escharotics, when the wart is seated near or upon a joint, where the skin is thin, as considerable mischief may follow their indiscriminate application.

#### CHILBLAINS.

ALTHOUGH chilblains come more directly under the notice of the surgeon than of the chiropodist, yet as they affect the integuments of the feet, it will not be considered inconsistent with the nature of this work to offer a few observations on them.

A chilblain is the result of exposure to severe cold, followed by the too sudden application of heat, and is produced by the rapid distention or congestion of the bloodvessels, which had been previously contracted. It presents the appearance of an inflammatory swelling of a lurid red or deep

purple colour, and is accompanied with intense itching and pungent pain, which frequently become intolerable. Persons of a weakly or scrofulous constitution, and the young and aged, are much more liable to the formation of chilblains than are the robust and healthy. They sometimes arise from constitutional causes, more especially such as impede or diminish the circulation, and are met with principally on the hands and feet.

When neglected or improperly treated, the colour of the affected part deepens; it vesiculates and becomes ulcerated, sometimes even producing caries of the bone beneath, or, in bad constitutions, terminating in gangrene or mortification. There is, however, but little danger to be apprehended, when proper care and attention have been used.

As preventive measures, the best plan to adopt is wearing warm coverings to the feet, and taking moderate exercise, walking rather briskly, being particularly careful not to approach near the fire whilst the feet are ex-

cessively cold and painful. Gentle friction with a flesh brush, or a coarse towel, may be frequently used with advantage, taking care not to abrade the skin; wearing oiled silk socks to come up above the ankles has also been found useful.

The remedies recommended are innumerable, but the benefit to be derived from any of the recipes will depend upon the state of the local disease and of the general health of the patient; those most in use are sea water or brine, stimulants of every description, such as camphorated spirit, vinegar and spirits of wine, turpentine, soap liniment with cantharides, &c. These applications must, however, only be used previously to ulceration.

When the chilblain breaks, and becomes what is termed a "kibe," it should not be tampered with, and the ordinary medical attendant should be consulted, as delay cannot but be injurious. Attention to the general health also becomes indispensably necessary.

## ON THE MANAGEMENT OF THE FEET.

THE proper management of the feet is of the greatest consequence to health and comfort, nor is there any subject connected with medical science which requires more attention. However trivial the instructions I am about to offer may appear, their value will be appreciated when the necessity of keeping the feet in proper order is taken into consideration, as there is no part of the human frame of more importance to our well-being, or which requires more personal care.

From the first wearing of socks and shoes, great care and attention are requisite. In the first instance, the socks in summer should be made of fine cotton or silk, in cold weather of a woollen fabric, and of sufficient length, that every toe may have room to extend itself.\*

---

\* If a stocking could be made in the same manner as a glove, that each toe might have a separate stall, so as to prevent their coming in contact with each



The feet should be washed evening and morning, the same as are the hands, and wiped thoroughly dry, particularly between the toes, and the nails should not be cut too often, nor at any time shorter than to be on a level with the tops of the toes. It is also advisable that the shoes be a size larger than the foot, and made of soft kid leather.

When there is a tendency to hereditary malformation, it generally begins to show itself in the toes of one foot, but sometimes in both, from the age of four to seven years. The deformity commences particularly in the first toe, which lies over or under the second, or the upper part of it is confined between the great toe and the second, so that when they are all pressed together, the middle joint of the first toe is elevated higher than the others. This hereditary develop-

---

other, the toes of children might, I think, be kept in their proper places, and with attention to the make and fit of the shoes, the formation of corns be prevented. The difficulty would be in obtaining a good form of the toe-stalls, as they should be made with only one seam, and that under each toe.

ment or malformation is very remarkable, and I have had many opportunities of observing it.

If the malformation is very considerable, it may be advisable at this early age to endeavour to straighten the toes, to effect which, I should recommend a piece of stiff pasteboard, padded with wadding, covered with silk, and cut to the shape of the under surface of the foot, to be applied from the waist or hollow to the tips of the toes, so that they may rest firmly on it; at the end of the pasteboard, holes or slits should be cut on each side of the toe requiring to be compressed, and a piece of narrow ribbon crossed over the toe, and passed through the holes, the toe being properly pressed down before the ribbon is secured to the under part of the pasteboard.

A more simple plan consists in the application of a narrow strip of adhesive plaster, turned round the toes which require to be kept in their proper position, passed under the others, then crossed over the instep,

under the foot, and brought over again. It must be drawn sufficiently tight to prevent the toes from slipping. The plaster should be changed once a week, or oftener, if it does not adhere.

Whilst attending a lady who had been under my care for many years for bunions, caused by a deformity of the left foot, and for a corn at the end of her little toe, she showed me the feet of her son, a child about four years of age as a specimen of perfection, and extolled the care she had taken in ordering his shoes and socks. The next year I was requested to see the child, as he complained of pain in his left foot, and to my great surprise I found his little toe bent under the next, and a corn in the same situation as on his mother's foot. The first toe was also more raised than the great and second toes. In fact, the whole foot was an example of hereditary deformity, notwithstanding the same attention had been paid to his feet as when I first saw him. The right foot was of a natural shape.

About this period of life, from four to seven years of age, and in some instances earlier, corns which are easily removed are apt to form superficially upon the projecting joints, and should be picked out, after the feet have been bathed, by the nurses or those who have the care of the children, as soon as the thickening is visible. If the corn soon returns and gives pain, it should be submitted to a competent practitioner, for by proper management and attention, many years of suffering and inconvenience may be prevented. It matters not whether they are caused by hereditary or constitutional predisposition, or mere friction; they cannot be too soon attended to.

From the age of seven years and upwards, in consequence of the child taking more exercise and wearing stronger shoes, corns are of more frequent occurrence, and the soft species between the toes, mostly developed, occasioning great pain, which the child endeavours to ease by walking on the inside of the foot, and throwing the weight

of the body on the edge of the great toe and inner side of the heel, thus causing the ankle to turn outwards, inducing great weakness in the feet, and producing an unseemly roll in walking.

Nurses should watch children when at play or walking, to see that they place their feet firmly on the ground, and if any irregularity is perceivable in either or both feet, such as rolling from side to side, or walking on the inside of the foot, the toes should be carefully examined, as most probably a soft corn will be found on the web between the third and little toes, and frequently in a state of suppuration, for many children have a dread of anything being done to their feet, and endeavour to relieve the pain in all manner of ways, rather than complain.

If the inner ankle appear much larger than natural, and in walking presses much inwards, as if the child had not any support for the foot, it generally proceeds from relaxation of the ligaments, produced by delicacy of constitution. Under these circum-

stances medical advice should be taken, because, if neglected and allowed to proceed for a length of time, a confirmed awkward gait will be the consequence.

If resulting from corns, they should be carefully and properly removed, and every means adopted to make the child, when walking, bear on the outside of the foot, the nurse being first assured no cause of pain remains. If it be produced by weakness of the ankles, well-adapted laced boots should be worn, with an extra thickness of sole on the inner side, so that the ankles may be supported, and at the same time kept in a natural position.

These complaints must not be confounded with the diseases of weak and sickly children, for weakness of the ankles is often produced by constitutional debility, and may also be caused by an affection of either the loins or knees, which requires proper surgical treatment.

Young persons should be strictly cautioned not to tear off the toe nails, which they are

very apt to do to save trouble, from the facility with which it is effected. Much mischief, however, may be caused by such a practice, especially with the great-toe nails, which, being formed of longitudinal fibres, the laceration is more likely to be continued laterally towards the glands or root, than completely across.

Children in the nursery should be watched when they put on or take off their socks; and boys, when sent to school, should be instructed to cut their nails in a proper manner, and impressed with the evil consequences of tearing them. They should be taught that cleanliness is essential to health, and directed either to sponge their feet, or wipe them with the end of a wet towel, every morning, rubbing them afterwards thoroughly dry, particularly between the toes.

Children, when at school, should not have more than two pairs of shoes in wear, as otherwise they would become too small, and then be the source of much mischief, and prevent that exercise so essential to their health

and pursuits. If the shoes are too short, the toes are pressed back towards the instep, or otherwise deformed, and are subject to corns; and if too narrow, the toes are pressed together, become painful and inflamed, and give rise to that malformation of the foot which is called bunion.

When the shoes need repairs, because they are burst at the sides, or require soleing, the school shoemaker not unfrequently takes in the upper leather, or lays a new piece badly sewn on the broken part, so that the seams are likely to bruise the toes. When such is the case, and the boy experiences pain or difficulty in walking, or the feet are chafed and bruised, they should no longer be worn.

A youth passing through London on his way to Scotland from Eton, called to consult me about a soft corn on his right foot. He limped into the room, and drew off his boot with some difficulty.

On examination, I found the little toe completely wedged down upon the next, and



sticking to it: separating them gave great pain. The corn had suppurated, and the discharge was offensive; there was a deep ulcer with thickened edges, and the foot was much inflamed. All this was entirely owing to the severe pressure of the boot.

I did what was necessary, and desired him to rest his foot; this, however, I was given to understand was impossible, as the carriage was waiting at the door to convey him to the railway station. On looking at his boots, I could not conceive how he had walked in them, or even got them on, as they were in every way considerably too small. It appeared that he had not been provided with any other since the last vacation, and could not purchase a new pair until his return home. He had never had corns, or anything else the matter with his feet previously.

I ripped open the boot between the sole and upper leather, and when he put it on afterwards all the toes projected completely over the side of the sole, and in this manner he commenced his journey.

This case clearly shows how careless boys at school are about their feet, and how needful it is to caution them against the consequences of neglect.

The employment of foot baths, either hot or cold, must depend greatly on the difference of constitution and habit. For persons advanced in age, the tepid bath is preferable, particularly if they are subject to gout or rheumatism. Any sudden change of temperature in such cases might do harm, and the feet ought not to be put into water of any kind, while the patient is actually suffering from either of those disorders, except by the direction of the medical attendant.

The proper time for bathing the feet is at night, when retiring to rest.

In advanced age persons do not generally bathe the feet; they would, however, derive great comfort from sponging them once or twice a-week, or oftener, with soap and warm water, wiping them thoroughly dry immediately afterwards, then using the flesh brush, and rubbing off the loose cuticle or scales

with a coarse towel. When there is any accumulation between the toes, a fine cloth, wetted with Eau de Cologne or any other spirit, may be drawn backwards and forwards between them two or three times a week.

These rules will be of great use to persons in feeble health.

Adults in good health may bathe their feet every morning with cold water, wipe them thoroughly dry afterwards, and then rub Eau de Cologne freely over them with the palm of the hand. When dressing for dinner, the feet should be washed with soap and water in the same manner as the hands.\*

---

\* A paste may be made, and kept in pots ready for use, by scraping Windsor or other soap into flakes, and beating it up with hot water to the consistence of pomatum. A small quantity of this may be put on the end of a wet towel, and the feet washed with it. The towel must afterwards be rinsed, and the superfluous water wrung out, then Eau de Cologne poured on the damp part, and the feet well rubbed with it.

This paste, thus used, will be found to be very serviceable by travellers who have not time for general ablutions.

Care should be taken that the side seams on the foot of the stocking do not press against the little toe, such being (from the pressure of the shoe) one of the common causes of corns, and also productive of severe pain from those already formed.\*

When a hot foot bath is required previously to cutting the nails, &c., it should be used in the morning, and made with bran and water, but if the skin is naturally soft and moist, salt may be substituted for the bran. The temperature of the water should be from 90° to 96° Fahrenheit, and the feet

---

\* I am convinced that continual pain and annoyance are produced by the pressure of the shoe against the seam, however trivial it may appear to those who have not felt the inconvenience. This becomes evident on taking off the stocking immediately after walking, when a corresponding indentation will be seen along the side of the foot to the point of the toe. I knew a gentleman who frequently in walking was compelled to stop in the streets and twist his stocking round, to remove the pain he suffered from a corn on his little toe. There will be less difficulty in keeping the seam off the toes by wearing the stocking inside out,—that is to say, the smooth surface next the foot.

should not be kept in the bath more than fifteen minutes. As soon as they have been dried, the callosities (particularly those about the heel) and excrescences of all kinds, should be scraped or rubbed off with a coarse towel, pumice stone, a fine rasp, or corn rubber.

If the skin about the heel is very thick and chapped, it must be rubbed until it becomes smooth, after which a little cold or Circassian cream may be applied. If the fissures extend through the skin (as is sometimes the case), after the thickening has been removed, a piece of soap plaster should be drawn tightly round the heel, to keep them in apposition.

When a bath is used medicinally, or in consequence of fatigue, the evening is the most proper time.

Ladies, for general use, should wear silk or fine thread stockings; and spun silk in the winter; even when the feet are naturally cold, the usual under stocking will be sufficient for additional warmth. If they are liable to swollen feet, particularly about the

ankles, support may be obtained by wearing the elastic boots, which will be found exceedingly comfortable, as the ankles will be supported and freed from the usual pressure of lacing, the boots being made with an elastic spring over each ankle, yields equally in all parts to the swelling. Walking shoes should be made of kid or dog skin, and for wet weather, of fine French calf, with double soles; if the feet be affected with bunions, the elastic spring let into the centre of the vamp will be found very beneficial, as, while affording support, it will yield with the same facility to the feet as the boots do to the ankles.

Silk and satin dress shoes are made upon the same principle, but whatever boot or shoe is worn, comfort in walking will chiefly depend on a correct fit.

Sportsmen, during the shooting season, ought to wear woollen stockings, and change them daily; the shoes should be made right and left, and fit firmly over the instep and round the ankle, so as to prevent the foot

from slipping about in them; the soles ought to be considerably thicker than they are usually made, with a full tread, and the waist narrow; the outside not too much twisted, but made straight until above the little toe, and then shaped to the foot; the upper leather should be very pliable and soft, lined throughout (instead of the usual narrow pieces pressing on the toes), and properly fitted, so as not to have any ridges or uneven surface. If the shoes can be depended on as waterproof, they would be preferable.

The foot of the stocking, as far up as the ankle, should be well rubbed over with common yellow soap, to prevent the feet from being chafed or galled. Stockings thus prepared ought to be worn constantly during the season. Half a dozen pairs may be prepared at once, so as to have them always in readiness. When the stockings are changed in the evening, of course the clean ones should be worn without soap.

After the day's fatigue, the feet should be kept for ten or fifteen minutes in hot water,

in which two large handfuls of salt have been previously dissolved; then wiped thoroughly dry, and well rubbed with Eau de Cologne, brandy, or other spirit.

A celebrated sportsman told me, that when using the soaped stockings thus prepared, he has seen a lather forced out above his shoes, from the heat of his feet, and the continual friction in walking. He also informed me, that he has been frequently obliged to change his stockings during the day without catching cold, or suffering any other inconvenience. He never neglected the hot bath in the evening, and always rose quite refreshed the next morning. During the whole season his feet were never chafed nor blistered.

I have heard of the feet having been rubbed with tallow, previously to a day's sporting, for the same purpose, but I cannot speak in favour of the plan, as I have never met with a person who had given it a trial. The action of the soap upon the skin in keeping it moist and supple, can be readily accounted for by the quantity of alkali it contains.



Pedestrians who take immoderate exercise, or undertake a walking tour on the continent, should wear woollen stockings and shoes with broad thick soles, and take particular care of their feet, washing them every morning with soap and water. If they are accustomed to use cold water, and the feet are tender, they may be sponged, or bathed for a few minutes in salt and water, and then thoroughly dried. In the evening the feet should be bathed in hot water for ten or fifteen minutes, wiped with a coarse cloth, and placed in a horizontal position by lying on a couch, or resting them on a chair; after having been exposed to the air for some time, they should be well wetted with spirits, and clean stockings put on.

If annoyed with corns, after the bathing they may be picked or scraped with a small, blunt-pointed knife, or instrument made on purpose, or rubbed with a corn rubber, a fine rasp, or any other safe means, but a razor or other sharp instrument should not be used on any account, as an accident may

soon occur, and by drawing blood, however slightly, the next day's journey may be prevented, or, if persisted in, inflammation may come on, and put an entire stop to the traveller's anticipated pleasure.

I knew a gentleman who left London for a pedestrian tour through Switzerland, previously to which his feet were put in order. When he arrived at Geneva, finding his corns not so comfortable as he could wish, he was recommended by the waiter at the hotel where he was staying, to a German corn-cutter, and, contrary to my instructions not to apply to any person abroad who was unknown to him, he placed himself under his hands.

Unfortunately, he did not know the language, and while he was endeavouring to explain that he only wanted his corns carefully pared, the waiter held his foot, the operator ran an instrument round the corn, and then tore it out. The operation gave him great pain, and his toe bled freely. The next day the foot became so inflamed, that he

was obliged to send for a surgeon, to remain six weeks at the hotel, and ultimately to return to England, without accomplishing his journey.

I mention this case to caution others against employing persons who are not professionally recommended to them, and that they should, if possible, become their own operators, in preference to having recourse to unknown empirics.

If blisters arise on the toes, and in situations where the skin is likely to be broken, they should be punctured with a needle, at the part where there is most fluid collected, and the contents pressed out with a cambric handkerchief or a piece of lint. This should be done in the evening after bathing the feet, so that they may be rested afterwards. If the blister is situated on the point of the little toe, or on any other part that is not very painful, it is better not to interfere, but to allow the serum or fluid to be absorbed, and when the skin is dried up to remove it.

The same plan should be adopted if the

feet are inclined to be chafed, as was directed for sportsmen.

Short shoes must not be worn on any account, especially when sporting or taking exercise, as they press on the tops of the toes (particularly on the great one, which is more sensitive than the others), causing in them, and at the root of the nail, a degree of uneasiness which is seldom noticed, unless attended with pain and inconvenience.

Whenever blood is found on the foot of the stockings, the toes and nails should be carefully examined, and if by pressing on the nails blood oozes out or collects around the root, attended with redness and swelling of the toes, it may be inferred that the shoes are too short, and the toes are driven against their points.

The cause of the mischief should be at once removed, when a piece of lint wetted with zinc lotion, and applied around the nail and toe, will be sufficient to restore the parts to a healthy state. If the nail feel loose, it must be cut as closely as possible to the top

of the toe, all pressure should be avoided, and the lint continued until the oozing has ceased.

The perspiration of the feet seldom requires medical interference, unless it is either to such an excess as to be annoying, or the odour becomes so very disagreeable as to be offensive. This latter is a source of exceeding discomfort to many persons who are otherwise in good health. The odour is most perceptible in warm weather or in hot rooms, and in many cases is so foetid, that the society of the afflicted person is avoided.

No effectual cure can be expected, but cleanliness is absolutely necessary; changing the stockings frequently, washing the feet with rose water, and rubbing them with scented oils twice a day, is all that can be done. If the perspiration is profuse, an astringent lotion may be used after bathing, and before employing the scents. A solution of the chloride of lime or sodium may be also used with advantage.

The most extraordinary case I have met

with was that of a gentleman, whose feet perspired so profusely, that he changed his stockings whenever he had an opportunity during the day. The skin was white and shrivelled, like the hands of a washerwoman who had been at work during the whole day; the odour was not remarkably offensive, but sufficiently so to be a nuisance. His health was not much affected, but the complaint was a constant annoyance, as he could not go far from home, nor take sufficient exercise, and at times was compelled to debar himself from the society of his friends. If in hot weather he had been from circumstances prevented from attending to his feet as usual, his stockings would be so saturated as to cause the skin to peel off in large thick layers, leaving the feet very sore for many days. At the time I saw him, although his stockings had been put on only two hours, they were quite soaked through.

When the skin breaks into fissures between the toes, the cracks extending around and under them, it is caused by an acrid condi-

tion of the perspiration, or the want of sufficient ablution. In either case it is easily cured by washing the parts with warm soap and water, and applying a piece of lint or rag wetted with camphorated spirit or tincture of myrrh; or, if there be much moisture, by dusting between the toes every morning with a muslin bag containing hair powder, chalk, or Fuller's earth, dried and rubbed into a fine powder, the parts being first well washed and dried.

When the toes adhere together from the pressure of the shoes, a piece of new silver or tissue paper, folded and cut to the shape of the top of the toes, placed as far down between them as it will go, absorbs the perspiration, and frequently prevents the formation of soft corns. It should be changed every day and kept perfectly smooth.

The want of perspiration, with a dry and burning skin, arises more from constitutional disturbance than from local disorder. Dyspeptic and rheumatic persons are particularly liable to it, and suffer more or less as the

stomach is deranged. To relieve the harsh, hot skin, the feet should be bathed in warm water mixed with oatmeal or bran, and should be frequently rested, especially after walking; but the greatest benefit will be derived from the restoration of health under judicious medical advice. A foot bath, containing the bicarbonate of potash in solution, is frequently very beneficial.

Cold, clammy feet, are indicative of debility, and little relief can be obtained from external applications. Camphorated spirit, or any stimulating preparation, well rubbed over the feet, will, however, be found extremely serviceable.

THE END.



LONDON:

SAVILL AND EDWARDS, PRINTERS,

4, CHANDOS STREET.







