

A new and easy method of curing the lues venerea : by the introduction of mercury into the system through the orifices of the absorbent vessels on the inside of the mouth, with the remarks of Dr. Hunter and Mr. Cruikshank in favour of this practice : also an essay on abscesses, and other observations in surgery / by Peter Clare.

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Fr. a.

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T. Douthett and son, Dublin, 1784

A NEW and EASY METHOD
OF CURING
The LUES VENEREA,

BY THE
Introduction of MERCURY into the System
through the Orifices of the absorbent Vessels
on the Inside of the Mouth.

WITH THE
REMARKS of Dr. HUNTER and Mr. CRUIKSHANK
in favour of this Practice.

ALSO
An ESSAY on ABSCESSSES,
and other Observations in SURGERY.

By PETER CLARE, SURGEON.

*Omnipotentis Dei est fontes castigare, nostrum vero mi-
seris pro virili succurrere, atque ægris opem ferre.*

SYDENHAM.

The THIRD EDITION.

Tr. A. 110

LONDON:

Printed for T. CADELL, in the Strand,
MDCCCLXXX.

[Price 2s. 6d.]



A NEW AND IMPROVED

OF THE

THE LIFE OF

BY

JOHN G. WHITTAKER, ESQ.
OF THE BARR, AT LINCOLN'S INN

IN TWO VOLUMES.
LONDON: PRINTED BY J. JOHNSON, ST. PAUL'S CHURCH-YARD.

AD 1811, OF THE FIRST EDITION.
AND NOW REPRINTED IN ONE VOLUME.

IN THREE VOLUMES.
LONDON: PRINTED BY J. JOHNSON, ST. PAUL'S CHURCH-YARD.
1811.

THE THIRD EDITION

LONDON:
Printed by J. JOHNSON, in the Strand.
1811.

TO THE
MASTER, WARDENS,
AND
COURT of ASSISTANTS,
OF THE
CORPORATION of SURGEONS
IN LONDON,

THIS BOOK IS INSCRIBED,
WITH GREAT RESPECT,

BY
THE AUTHOR.

TO THE

REVEREND FATHER

AND

CONGREGATION

OF THE

PARISH OF

ST. JOHN

OF

NEW YORK

IN

THE

CHURCH

OF

ST. JOHN

P R E F A C E.

TH E advantages derived to patients from the practice suggested by my discovery of the Absorption of Calomel into the circulation, by means of friction on the internal surfaces of the mouth, being great and uncontroverted, I am strongly induced to recommend a mature consideration and candid trial of it to every gentleman of the faculty. Although it may be deemed, for a moment, great presumption to deviate from the ordinary modes of practice, yet a little reflection will evince, that he is but a very indifferent member of the community who does not convey his observations and discoveries

to the world, if it were but to excite a spirit of enquiry and emulation in others, who possessing superior abilities for the task, may improve and bring his plans to perfection.

My ingenious friend Mr. *Cruikshank* having seen several of my patients, as well before they had entered on the process as during the course, and also after the cure, the public are referred for further satisfaction to his testimony*. Previous

* “ I seriously declare, that in a matter of so much moment, in which the health of millions might be concerned, and where my own reputation was actually at stake, no motive could have induced me to recommend a practice I secretly suspected would not be attended with success.

“ The great hinge on which your method turns, is the absorbing property of the human body. You affirm, that your Calomel is absorbed by the lymphatic vessels of the mouth. I find no difficulty in believing that it is; and am satisfied that this, as well as many other powders, may be absorbed by the surfaces of the body.” *Cruikshank's Letter to Clare*, 2d Edit. p. 7. “ My

vious to this I had frequently sent patients to *Windmill Street*, that Dr.

Hunter

“ My experiments, as far as they go, confirm
“ your practice.” Page 230, head the 10th.

In the first edition of Mr. *Cruikshank's* Letter addressed to me, on my new method of introducing *Mercury* into the circulation by means of the Absorption which takes place from the inside of the mouth, that gentleman says, “ I own I am much disposed to believe, that your method of rubbing
“ Calomel will be attended with success. One
“ thing I have no doubt of, it will throw light
“ on the modern doctrine of Absorption, and it
“ may lead to still further important discoveries.”
P. 90.

In the 2d edition, Mr. *Cruikshank* says; “ Thus,
“ Sir, I have examined, with all the attention and
“ impartiality my present situation would admit of,
“ the merits of your proposed method of rubbing
“ Calomel on the internal surface of the mouth.
“ The proposal struck me at first; I thought it
“ more than probable you would succeed; I am
“ now satisfied that you have succeeded.” —
“ Should more weighty objections be even
“ found to lie in practice against your method,
“ than those I have taken notice of, (for what
“ method has no inconveniency?) you will at
“ any rate have the merit of having suggested
“ an ingenious idea, of having done your utmost
“ to be useful in your profession, and (if I may
“ be allowed to presage) of having laid the foundation of some excellent future practice in surgery.” P. 238.

Hunter and *Mr. Cruikshank* might inspect and strictly examine them; and these gentlemen gave me in return the strongest assurances of their approbation of this method. My motives for acting in so circumspect a manner, were not only an idea that such measures were proper to be taken by one who wished to obtain the good opinion and confidence of the public, but a desire of preventing malicious censure; also this consideration, that the best cause doth receive additional weight and lustre from the testimony of competent and credible witnesses. Some cases are selected from the many cures performed; to which many others equally successful would have been added in this edition, but that the publication of cases is considered by many as carrying an ostentatious, and by some, an empirical appearance,

ance, especially when they are very numerous and extraordinary.

It is almost universally admitted by the profession, that Mercury is absolutely necessary in the cure of the *Lues venerea*; and the design of the following pages is to prove, that the introduction of Calomel into the system by friction on the internal surfaces of the mouth, is the best method of administering this powerful antidote *.

Few

* Dr. William Saunders, Physician to St. Thomas's Hospital, in his Appendix to Mr. Professor Plenck's *New and Easy Method of giving Mercury*, translated by the Doctor, says, p. 136,—
“ Though I believe the operation of *Mercury*
“ in removing particular symptoms may be assisted
“ by *antimonials*, *sarsaparilla*, *mezereon*, *guaiacum*,
“ and other medicines, yet I am persuaded,
“ that cures have been vainly attributed to these,
“ which could not have been performed independent of *Mercury*; and from the prejudices
“ generally prevailing against the use of *Mercury*,
“ the public have been deceived by boasted specifics which have been said to contain no *Mercury*,
“ though such of them as have acquired
“ any

Few attempts to improve any art or science are well received at first by the public. Mankind too frequently think themselves affronted, and are prone to reject innovations as originating in self-conceit and impertinence. There are some, indeed, possessed

“ any degree of reputation, have been found,
 “ by a careful analysis, to have *Mercury* in their
 “ composition.”

A sudden salivation, every now and then, has explained beyond a doubt, that there was *Mercury* contained in their composition, though concealed with the nicest art, and denied with the utmost assurance.

Dr. *William Fordyce*, in his *Review of the Venereal Disease*, p. 136, Remark the 8th, says,—
 “ *Mercury* alone will in general cure most venereal complaints; the *sarsaparilla* will perhaps always cure what resists the power of *Mercury*: it is therefore probable that we may find in *Mercury* and *sarsaparilla*, properly combined, a certain cure for every case that can be called venereal.”—Dr. *George Fordyce*, Physician to *St. Thomas's Hospital*, observes, “ That when there is any ulcer, or any symptom of the matter's having been absorbed, the patient cannot be cured with safety and certainty unless *Mercury* be exhibited.” *Elements of the Practice of Physic*, p. 359.

fessed of knowledge and good sense, who are slow either to censure or applaud; requiring repeated proofs before they coincide with, or condemn any new practice. I hope in time to be able to convince their judgement, and to secure their approbation.

Inoculation, the most noble discovery, perhaps, that was ever made, as having preserved an infinite number of lives, although we behold it at length universally adopted, at the first had a thousand prejudices to encounter *. There is, undoubtedly, a very great similarity between this mercurial process by absorption, and that of inoculation.

It

* *The double incision* in amputations of the limbs, in preference to the *single one*, a very important improvement in surgery, and the introduction of *the ligature of the blood vessels*, to supply the place of searing them with *the actual cautery*, notwithstanding their conspicuous advantages, were known long before they were generally practised.

It is well known the small pox is rendered much more mild, when conveyed into the system by inoculation, than it is in what is called *the natural small pox*. If a poison be made more mild by being thus absorbed, why may not an antidote also? If a less quantity of the variolous matter be not so noxious, yet be equally efficacious with a larger, may not the case be the same with respect to an antidote?

Should it be asked if this new method *always* succeeds—the answer is, that it does not; nor could it be expected, as it is a fact that *Mercury* alone will not effect a cure in every venereal case *. When *Mercury* succeeds,

* It was the observation of a surgeon who had acquired great reputation by the cure of the *Lues venerea*, that “too much *Mercury* might be given so
as

ceeds, (which it does almost universally) it certainly will in this process of absorption, which effectually and readily conveys the *Mercury* into the system, and keeps it there much better than the common and ordinary methods do. It must be observed also, that the neglect of the patients in pursuing the medicines and directions of their surgeons properly in every particular, will frustrate the best of remedies; and again, nothing is so dangerous, or yet so common, as patients discontinuing them too soon, and subjecting themselves thereby to a relapse *.

as for it to lose its effect, and he advised the leaving it off for a while, and then to return to it, when, he said, it would generally be found to succeed." This observation appears to have been well founded.

Dr. *George Fordyce*, in his *Elements of the Practice of Physick*, p. 117, says, "There is a *maximum* in the dose of all medicines, so that if they be exhibited in greater quantity, their effects are lost instead of being increased."

* The friction which attends the exercise of walking, riding, &c. will often prevent venereal
b
or

I have sometimes found it necessary to give *a solution of a quarter of a grain of Mercury sublimate* in five or six drops of water, and adding this to the *Calomel*, have applied it to the inside of the cheek with a view to expedite an affection of the salivary glands, and to assist in the cure; which addition has produced the desired effect, as Mr. *Cruikshank* will testify. Surely it is much better to give the sublimate thus than in the common way, which often disorders the stomach exceedingly,

There is no mercurial, in my opinion, better adapted, on the whole, for absorption and the cure, than *Calomel*.

It

or other sores from healing, although the system is saturated with Mercury; and if patients so circumstanced cannot or will not forego the fatigues of business or their pleasures, and peremptorily refuse to submit to rest, and an horizontal position of the body, they cannot reasonably expect to be cured.

It must be owned that other preparations of *Mercury* may produce the same good effect, and I know, from repeated experience, the corrosive sublimate will, when administered in this manner, that is, on the principle of absorption *from a thin cuticular surface*, in preference to the stomach, or the *thick external skin*, which is the point I contend for, rather than for the particular preparation of *Mercury*. Though *the external skin* certainly absorbs *water*, yet it does not appear to me to absorb *salt* dissolved in *water*. *A solution of sublimate* rubbed on the *entire outward skin**, produces none of the effects of *Mercury* on the system, but this solution rubbed on *the thin cuticular surfaces of the mouth*, does produce the effect of

b 2 *Mercury,*

* When the skin is *excoriated*, without doubt the sublimate may be absorbed, but, I apprehend, not otherwise.

Mercury, being absorbed from those surfaces *. We know that the minutely divided particles of *quicksilver* in the *ung. merc. cærul.* are frequently conveyed into the habit by long friction, and we also know they are often rejected for days and weeks together, owing to the impenetrable texture and density of the skin, which circumstance justifies the calling this *an uncertain and ill absorbing surface*, and
is

* “ The cuticle (or scarf-skin) is itself not vascular, inorganic, and insensible. It not only makes an external covering to the body, but it lines some internal cavities, as *the mouth, the nose, the œsophagus*. It is every where *porous*, but these pores are probably of various diameters; and in some parts, I should also presume, it might be more *porous*, in others less so. This cuticle is also thicker in some places, and thinner in others. There is a greater secretion *on thin cuticular surfaces*, and of course they may be supposed *more porous*. The absorbents lie under it, and must be stimulated through it,—Absorption may take place through *the thickest cuticular surface, especially if severe and constant friction* be employed.” See *Cruikshank’s Letter to Clare* on this subject, p. 100, of the 1st edition of *An Essay on Abscesses, Wounds, &c.*

is a strong reason with me for preferring *the internal cuticular one*.

The generality of speculative writers form their theories first, then search for facts to establish their doctrine; this is reversed here, having discovered the fact * first, and being happy in having it elucidated by theory, and corroborated by anatomy, reason, and success.

With respect to the latter part of this work, on the subject of Abscesses, &c. †, having seen, in a long attendance on the practice of an hospital, *wounds* and *ulcers* treated by means quite opposite to each other, *lenient* and *irritating*, I formed an early opinion in favour of the first; from which it appeared to me, that in general the greatest advantages were

b 3

derived,

* *This new mode of absorption.*

† I have thought proper to alter the arrangement of this book, and to place the Essay on Abscesses, &c. at the conclusion.

derived, and seldom, if ever, any mischief.

My own practice since has confirmed me in this opinion.

Being persuaded this method of treatment will conduce much to the benefit of mankind, an attempt to recommend it, I hope, will continue to meet with a candid reception from the public.

Mr. *Pott* used frequently to remark, (and he has since published the same sentiments in the preface to his *Observations on Wounds of the Head*,) “ That many of those gentlemen who came to the hospital to finish their chirurgical education, were too apt to fix their attention on the operative part of surgery only. Operations, he observed, would seldom occur to them in practice, in comparison with the common business of *Surgery, Wounds and Ulcers*: as these must
daily

daily come under their care, he wished them *to endeavour particularly to make themselves masters of the healing art.*—There certainly is good sense in this advice, and it has been my study to pursue it.

Without attempting to derogate from the importance of great and necessary operations, let me make an observation in behalf of those who, discovering an aversion to cutting, are reported to decline the knife because they are deficient in proper resolution or the requisite abilities, or perhaps in both. It will, however, scarcely be denied, (being daily seen) that ordinary abilities suffice for this purpose; the true, and perhaps only reason why some surgeons are sparing of the knife is, that (besides a firm persuasion of the superior excellence of a contrary practice) they feel a strong propensity to do by others as they would

would be done by, a rule from which no consideration would ever tempt them to depart.

I am happy in every opportunity of giving the respectful testimony of a pupil to the merits of that great professor Dr. *Hunter*, whose distinguished abilities, joined with indefatigable attention, have exalted him to the highest rank in his profession; and whose celebrated lectures in anatomy, at the same time that they explain the structure of the human body, and the origin of diseases, point out their nature and cure, and have greatly improved the therapeutic art.

The Doctor's grand anatomical museum constitutes his chief ambition and delight. It is shewn to the inquisitive and learned of every nation with the utmost affability and polite condescension. It does him honour
in

in the present, and must certainly endear him to future ages.

The reader will find in this edition many weighty arguments advanced in favour of the new mode of Absorption by Mr. *Cruikshank*, whose "*Remarks on the Absorption of human bodies in general, together with some experiments on insensible perspiration,*" may be had of the publisher, there being a few copies of the 2d edition of the Essay on Abscesses, &c. remaining.

It has been thought proper to give *Answers* to a few objections raised by some candid members of our profession: as to others of a very different cast, of whom there are too many in every vocation, they do not deserve any sort of attention or regard.

*Non mihi, sed Rationi, aut quæ Ratio esse videtur
Militæ; securus quid mordicûs hic tenet, aut hic.*

SCALIGER.

Several

Several extracts from the books of modern writers are inserted, not merely with a view to enlarge, (the contrary being my wish and study) but to improve and embellish, and render this book of value to the purchaser.

Having been censured, on a former occasion, for making up a book of quotations, cases, and old stories, I shall probably meet with a similar treatment on account of the present publication *. If, however, the quotations, cases, and narrations, should appear to be to the point, and to contain needful information, what some
call

* The quotations, it is true, might have been omitted, and the reader have been referred to the respective books; but many chirurgical students and others, by whom this may be read, are not, perhaps, possessed of the different works. I flatter myself the extracts are such as will do credit to the authors, and render any apology, for the liberties I have taken with them, unnecessary.

call a Farrago, others will, perhaps, consider as a useful Miscellany.

*Si illum objurges vitæ qui auxilium tulit;
Quid facias illi, qui dederit damnum aut malum?*

TERENCE Andriæ.

Dr. *Mead* having published a sensible account of the stone in the kidneys and bladder, and of the most approved method of treating this disorder, his remarks are added in the way of notes, notwithstanding they are very long.

I have given a short history of lithontriptic and other pretended *specific* medicines, and have endeavoured to substitute a more safe and rational method of cure *.

* Mr. Professor *Plenck* says in his preface, speaking of the sordid venders of arcana; “ The constitution of physic at *Vienna* is in this respect well regulated; and this we owe to the wise councils of the noble *L. B. Van Swieten*, who employs his whole attention, and bestows great labour in enlarging the limits of medicine, especially of what relates to the practice: his attention wholly consists in this, that the most efficacious and certain remedies may be
“ daily

It is with a very pleasing sense of gratitude that I make my public acknowledgements to several gentlemen (some of the faculty among the rest) for their early approbation of this practice; the future and permanent success of which I have been anxious about, for their sakes, as well as my own, and also that of the community, which is essentially interested in the event.

Far

“ daily found out for the benefit and advantage
 “ of the unhappy sick, and likewise in totally
 “ banishing quacks, mountebanks, and the avaritious venders of arcana; while, in the mean
 “ time, at *Paris, London*, and in other large cities,
 “ that race of men are with impunity tolerated,
 “ to the common prejudice of mankind, and the
 “ reproach of physic. One wise resolution of this
 “ eminent man, is, that if any remedy be sufficiently recommended for its great utility, it is
 “ immediately published for the general good; for
 “ certainly the private advantage of one or two
 “ persons is not to be preferred to the common
 “ good of our fellow citizens.”—The empirics in this country laugh at our colleges and police, and exclaim,

O cives, cives, quærenda pecunia primum est.

Far from thinking there will be any cause to reflect in future on those who have espoused this practice either in a public or private manner, their testimony will, I trust, exhibit to the world a proof of superior discernment, liberality of sentiment, and truly laudable candour. We have every reason to expect success from a practice founded on an anatomical and physiological basis, and which seems to be adapted in a peculiar manner to the structure of the whole body, a body composed of a great variety of nervous, irritable fibres, and of vessels or conduits, circulating their respective fluids after the manner of an *hydraulic* machine*.

With

* For the information of some of my readers, I have selected from Mr. *Chefelden* the 12th chapter of his *Anatomy*, &c. p. 216, which gives a concise, yet general account of the course of the aliment and fluids; the sanguiferous, lacteal, and lymphatic vessels, and the whole animal œconomy.

With regard to saliva, it is said to promote an appetite, and help digestion.

“ The aliment being received into the mouth,
 “ is there masticated and impregnated with saliva,
 “ which is pressed out of the salivary glands by
 “ the motions of the jaw and the muscles that
 “ move it and the tongue. Then it descends
 “ through the pharynx into the stomach, where
 “ it is digested by the juices of the stomach,
 “ (which are what is thrown out of the glands of
 “ its inmost coat, and saliva out of the mouth)
 “ and a moderate warmth and attrition. Then
 “ it is thrown through the pylorus or right orifice
 “ of the stomach into the duodenum, where it is
 “ mixed with bile from the gall bladder and liver,
 “ and the pancreatic juice from the pancreatic
 “ gland. These fluids serve farther to attenuate
 “ the digested aliment, and probably to make the
 “ fluid part separate better from the feces. After
 “ this, it is continually moved by the peristaltic
 “ motion of the guts, and the compression of the
 “ diaphragm and abdominal muscles, by which
 “ forces the fluid parts are pressed into the lac-
 “ teals, and the gross parts through the guts to
 “ the anus.

“ The chyle, or thin and milky part of the
 “ aliment, being received into the lacteals from
 “ all the small guts, they carry it into the recep-
 “ taculum chyli, and from thence the duc-
 “ tus thoracicus carries it into the left subclavian
 “ vein,

tion. As a proof that it does so, whenever the duct is divided in the cheek, and the saliva escapes through the wound, the patient immediately

“ vein, where it mixes with the blood, and passes
“ with it to the heart.

“ All the veins being emptied into two branches,
“ viz. the ascending and descending *aorta*, they
“ empty into the right auricle of the heart; the
“ right auricle unloads into the right ventricle,
“ which throws the blood through the pulmo-
“ nary artery into the lungs; from the lungs the
“ blood is brought by the pulmonary veins into
“ the left auricle, and from that into the left ven-
“ tricle, by which it is thrown into the *aorta*, and
“ distributed through the body. From the extre-
“ mities of the arteries arise the veins and lym-
“ phatics; the veins to collect the blood and bring
“ it back to the heart, and the lymphatics to re-
“ turn the lymph or thinner parts of the blood,
“ from the arteries to the veins and the *vasa lac-*
“ *tea*, where it mixes with the chyle, and then
“ passes with it into the left subclavian vein, and
“ to the heart.

“ All the fluids that pass into the stomach and
“ guts being carried into the blood-vessels, the
“ greatest part of them are separated and carried
“ off by proper vessels, viz. urine from the kid-
“ neys, bile from the liver, &c. and these juices
“ carry along with them whatever might be inju-
“ rious to the animal œconomy.”

loses his appetite, and becomes extremely emaciated, but recovers both when the saliva is reconveyed through its proper channel into the stomach.

“ The saliva is secreted by several
 “ glands of the mouth; and the
 “ principal part of it is thrown down
 “ into the stomach, to answer some
 “ purpose in the digestion of the
 “ food. It is a fluid of an adhesive
 “ viscosity, with difficulty diffusible
 “ through water. It consists of wa-
 “ ter, a mucilage similar to that of
 “ the *mucus* and the salts of the
 “ blood, but not in so large a pro-
 “ portion as they are contained in
 “ the serum. It contains a larger
 “ proportion of water than the *mu-*
 “ *cus*. In its other properties it is
 “ similar to the *mucus*, in as far as
 “ they have been investigated.” Dr.
 G. Fordyce’s Elements, &c. p. 45.

Mr.

Mr. *Plenck* has remarked, p. 116,
 “ that a simple mucilage destroys the
 “ specific *stimulus* of Mercury, while
 “ at the same time its antivenereal
 “ virtues are preserved.”

*Grande tulit punctum qui miscuit utile dulci
 Mercurio sputum * ; reddent bene mixta salutem.*

It has been suggested that the making the cure of the *Lues venerea* more expeditious and easy to the patient, instead of conferring a benefit, does an injury to society, as it encourages vice by taking away in a great degree the punishment attending it. Not long since application was made to a person high in office to grant a patent for a *venereal preventive*, which was refused ; at the same time the parties were told, that every encouragement would be given to remedies which *cured* that disorder, but not to those

medicines (if any such there were) by which it was to be *prevented* *.

††† A *Glossary* is added, for the use of those who are unacquainted with the terms of art.

Chancery Lane,
Sept. 25, 1780.

* Dr. *Sydenham* being upbraided for teaching the cure of the *Lues venerea*, maintained the necessity of it, on the principle of Christian charity, which is every where throughout the Scriptures strongly inculcated by divine precept and example. “*Tradam quæ in hoc morbo observavi atque expertus sum: non quo hominum animos deteriores efficiam, sed ut corpora (quod mihi negotii datum est) reddam saniora.*” *Sydenham* Epistola ii. responsoria.

An early application to medicine is particularly necessary in this disorder, which bears a striking resemblance, in many respects, to a *spark of fire*, which is more easily extinguished than a *flame* †. An ill timed bashfulness often prevents the having immediate relief.

Stultorum incurata pudor malus ulcera celat. Hor.

† — *teque his (ait) eripe flammis.* Virg.

The *Lues venerea* was unknown in this country till *Anno Domini* 1492, when it was brought from Spain by *Christopher Columbus*.

OF THE
SALIVARY GLANDS;

WITH AN

Explanation of the *Villi* of the Lips,
as represented in the Frontispiece.

" *P*AROTIS, or *maxillaris supe-*
" *rior*, is the largest of the
" salivary glands; it is situated be-
" hind the lower jaw, under the ear;
" its excretory duct passes over the
" upper part of the masseter muscle,
" and enters the mouth through the
" buccinator*. This gland has its
" saliva promoted by the motions of
" the lower jaw." CHESELDEN.

The *maxillaris inferior*, and the *sub-*
lingualis, have their excretory ducts;
the

* Near the second or third of the *dentes mola-*
res, at which perforation it discharges a very large
quantity of its proper fluid into the mouth. This
duct is about three fingers breadth long, and of
the thickness of a wheat straw.

the first enters the mouth under the tongue, near the *dentes incisarii*; the last, in several places near the *molares*, or *grinding teeth*.

The Plate shews the outside of the lips stripped of their cuticular coverings. The *villi* (or packets of elongated blood-vessels, *absorbents*, and nerves) are here exceedingly long.

“ The different vessels are there
 “ elongated into processes, which, to
 “ the naked eye, seem, like hairs or
 “ the pile of velvet, to project from
 “ this surface, and are therefore term-
 “ ed *villi* by the anatomists. Each
 “ *villus* has its little artery, vein,
 “ and *absorbent*; though we cannot
 “ demonstrate anatomically, yet the
 “ colic convinces us sufficiently, that
 “ they also have nerves. These ves-
 “ sels and nerves are connected by
 “ cellular membrane, and have also
 “ a kind of cuticular covering.”

Cruikshank, p. 52. 2d edition.

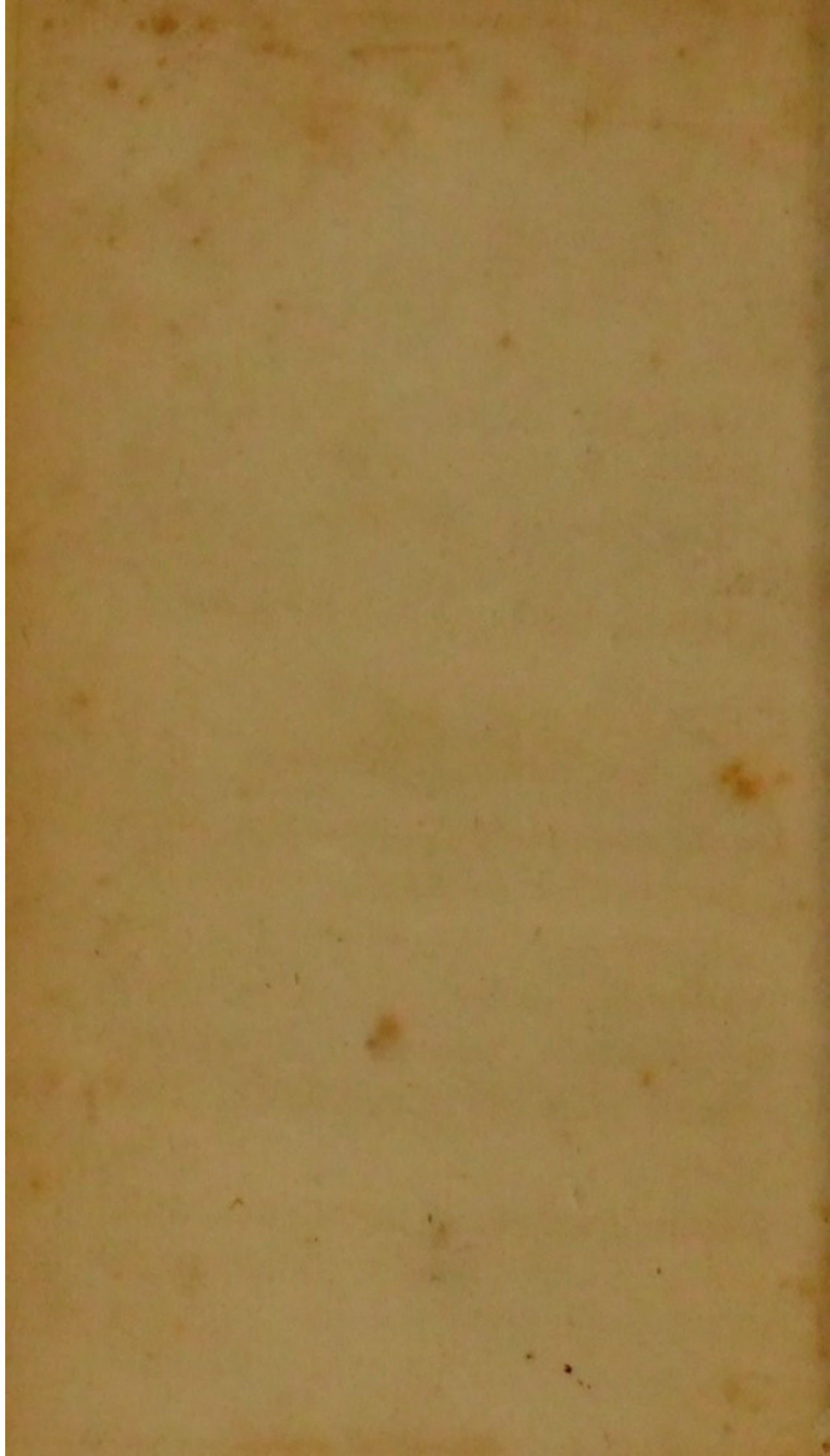
*A Microscopic View of the Villi or Packets
of the Arterial Vessels. — Page XXXII, Prof.*



From a Preparation in the Collection of W. Shelden.

1st Street Bell & Sons.

Published Nov 5th 1781, by W. W. Ryland in the Strand.



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A
NEW METHOD OF CURE
FOR THE
LUES VENEREA.

The Seat of this Disease.

IT is almost universally allowed that the *venereal Poison* is admitted into the blood, and circulates with the other fluids for some time, before it affects the solids: therefore, to eradicate this disease, we must introduce *Mercury* into the circulation, by which means, it is presumed, the poison is discharged by the Secretory and Excretory, Salivary or Urinary Glands, and by those of the Skin or Intestines;

A tines;

tines ; and in this way, it is probable, the venereal taint in the solids themselves is destroyed *.

Observation induces me to entertain the same opinion with many other surgeons, that this disease is in a fair way of cure, when there is a *salivary discharge or tenderness of the gums*, as this circumstance (which is considered by many surgeons as the only security) affords a convincing proof that a considerable quantity of the *Mercury* has been absorbed into
the

* Mr. Plenck says, “ All the Secretory System
“ possess a *specifick irritability*, by which means
“ they are *not* excited into *general action* by
“ *every stimulus*, but only by some *particular*
“ *ones*. This is proved by many observations,
“ and may be taken for a truth. Thus *Can-*
“ *tharides* more especially stimulates the *urinary*
“ parts and those of generation; *emetics* the
“ stomach; *purgatives*, although injected in the
“ veins of a dog, or externally applied to the
“ abdomen of a child, will stimulate the intes-
“ tines, and bring on a *Diarrhœa*.” See *Plenck*
on Mercury, translated by Dr. Saunders, p. 110.

the system, and that it has powerfully affected the glands †.

At this critical juncture the venereal symptoms, tumours, eruptions, or pains, begin to abate, and the Mercury having obtained a visible influence and superiority over the disease, the cure is in general soon accomplished. The first object therefore is to procure the admission of *Mercury* into the system, and the second is to keep it there.

O 1

† Dr. Fordyce says, “ Where there is a little
“ *soreness and heat in the gums, I should expect*
“ *a more speedy cure than where there is none*
“ *at all, or where there is a more copious saliva-*
“ *tion.*”—*Review of the Venereal Disease*, p. 100.

It has been generally asserted that *Mercury*, by its momentum, breaks the texture of the blood, and in so doing that it impoverishes the constitution. Dr. Cullen writes in support of the contrary opinion, p. 443, 4, and 5.

“ There is no alteration in the blood during a
“ *salivation, and its visciditv appears then as strong*
“ *as at any other time.*

A 2

“ — After

On the internal Use of Mercury.

SOME gentlemen of the profession prefer internal medicines, others external *mercurial* frictions in the form of ointment. Internal medicines are usually given in pill or bolus, forms invented for the purpose of concealing the nauseous taste of certain drugs. As some of my patients had great dislike to both, I gave them the
Mercurius

“ — After the operation of Mercury is over,
“ no taint appears in the blood, but on the contrary the person is in better health than before,
“ and gives marks of a firmer state of it.” p. 449.

Dr. *Boerrhaave* considered this disorder as seated in the *membrana adiposa*. His remedies of course tended to destroy *all* the *fat*; in which he and his followers were but too successful, their patients being often reduced to a hectic state by long and continued courses of violent purgatives and sudorifics; a practice too common at this day.

Dr. *Brookes*, in his General Practice of Physic, vol. ii. p. 110, says, — *Boerrhaave* supposes, “ that a salivation will be ineffectual if every drop of fat in the blood is not melted down into water and carried off, and the patient reduced to a death-like paleness.”

Mercurius dulcis in a few drops of syrup, which being diffused over the inside of their mouths and absorbed, these parts became soon affected by the Mercury, and their complaints were very expeditiously and effectually cured. This determined me to make choice in future of these surfaces rather than the more irritable ones of the stomach and intestines *.

I had

* Dr. Cullen, in his Lecture on the Operation of Mercury, says, " from its *stimulus* in the stomach " it proves *emetic*, and carried into the intestines, " it is *purgative* from the same quality ; into the " blood *diuretic* and *diaphoretic*, and in short, like " other evacuants, a *very general stimulus*." " In " the intestines the *stimulus* of the mercurial preparations is exerted with greater effect, but still " it is confined to the part, and Mercury acting " in this manner is carried off without any further effects on the system." p. 450.

" When we purge we commonly think we are " operating on the common sewer of the system : " but little advantage is to be found from Mercury employed in this way, as its virtues depend " chiefly on its operation on the body in general." p. 453.

The ingenious Mr. Cruikshank, in his Letter, p. 191, says, " Though mercurial prepara-

I had formerly given this medicine (Calomel) in pills; I give the same medicine now, but in a different, and, I trust, a much better mode. With the greatest deference to the candid of the Faculty I must beg leave to observe, there seemed to me no sufficient reason for the strong professional attachment which there has always been in favour of pills, which, how commodious soever on other occasions, do not seem well calculated for the

“ tions taken into the stomach and intestines.
 “ may frequently be absorbed from their internal surface as well as from any other, yet
 “ from the greater irritability of these surfaces,
 “ the *stimulus* of the Calomel, or of other preparations, is more likely to prove too great;
 “ to produce sickness, griping, and purging,
 “ and to occasion their being hurled out of the
 “ body before sufficient time has been allowed
 “ for their absorption. In this way the remedy
 “ runs a greater risk of being entirely lost, and
 “ of producing as little effect on the disease for
 “ which it was exhibited, as the *Peruvian Bark*
 “ would do on an intermittent, if, instead of
 “ staying in the stomach, it was constantly running off by stool.”

the conveyance of *Mercury*; since, in the first place, it must be very difficult, not to say impossible, so to distribute the *Mercury* that there shall not be some difference and uncertainty in the dose, when the mass is divided into a number of pills; and in the second place, there is the probability of their passing through the body undissolved *.

In this case the *Mercury* can take no effect. When the pills actually dissolve there, the *Mercury* vellicates and injures the stomach, an organ most essential to health †. — When the *Mercury* is mixed with *Opium* (a very

* “ Dr. Cullen and others have seen pills made of so stiff a consistence with balsams or gums, as to pass through the body undissolved and unaltered.” p. 443.

† “ The saline chrystals of the *Mercury* vellicate and twitch the sensible membranes of the stomach to that degree, as excites them to an excretion of their contents and glandular juices upwards or downwards, according as the force of irritation is greater or less.” *Meatl on Poisonous Minerals*, Essay iv. p. 109.

very common practice), it does not indeed vellicate the stomach, but the Opium injures that organ in particular, and the constitution in general*.

This

* “ How many, originally vigorous, justly
 “ deduce their present weak bowels and crazy
 “ constitutions from the mischief occasioned by
 “ the action of Mercury on the *primæ viæ*?”
 Cruikshank’s Letter, p. 189.

I am not unacquainted with the merits and admirable effects of *Opium* in many painful and desperate diseases, yet its strongest advocates will allow it is apt to produce the same mischievous effects on the habit as the drinking spirituous liquors, viz. *Tremors, Vertigo, Sickness, and Asthma*, which are great objections to its being used daily in practice in venereal cases. The design of joining *Opium* to *Mercury*, is to hinder the *Mercury* from passing off by stool; and every surgeon sees the necessity of preventing its purging, which is effected by the process here recommended, without the help of *Opium*, and the *Mercury* is kept (where it ought to be) in the system, there to act in full force on the disease.

Mr. *Cruikshank* observes, p. 189, head the 4th,
 “ There are however some preparations of *Mer-*
 “ *cury* which may be taken into the stomach with-
 “ out irritating too much, provided *Opium* is ex-
 “ hibited along with them; but there are many
 “ constitutions which will not bear *Opium*; and
 “ if

This well known fact has excited universal complaint and dread of the pernicious operation of *Mercury*; now *Mercury* being administered in this new method is so mild, that *Opium* is not wanted, and the objections above-mentioned are entirely obviated.

On the new Mode of introducing Mercury into the System through the absorbent Vessels on the Inside of the Mouth.

THERE have been so many instances observed by surgeons where the mouth has been *unexpectedly* made sore, and a salivation raised, by the application of red precipitate, and other *mercurial* powders, to a sore, (that is, to a part not covered with the

“ if Mercury cannot be exhibited properly without
 “ it, patients possessed of such constitutions must
 “ be extremely unfortunate, especially if to the
 “ former peculiarity of habit is joined another,
 “ *viz.* an antipathy in the skin to every thing
 “ oily.”

the external skin), that every surgeon must admit the absorption of mercurial powder into the blood; was it not then reasonable to suppose mercurial powder might be absorbed when applied *to the thin cuticular and inner surfaces of the body* *?

My

* It is now generally allowed that every surface in the body, every cell, absorbs. Water lodged in the cellular membrane (fat) of the body, in dropical patients, is frequently absorbed. So is blood, when extravasated into the same cells. An *Ecchymosis* (or what is commonly called, a bruised or a black eye) affords a very familiar instance of absorption.—The skin of the eyelids at first appears very black; as the absorption takes place, this becomes gradually yellow, and at length totally disappears.

The rubbing the body with a wet towel allays thirst, and the linen soon becomes dry from the absorption produced by the friction.—*Glysters* are well known to be absorbed.—An hospital patient, who had cut her throat, and wounded both the *trachea arteria* and *œsophagus*, so that the food came out at the wound, was nourished more than a fortnight by *glysters*, the nutritious parts being absorbed into the blood by the lacteals, the absorbent vessels of the intestines. She committed violence on the wound, notwithstanding the utmost care was taken, and she died.

My experience tells me that absorption here takes place, since the proper and powerful effects of *Mercury* on the mouth have been produced, and the *Lues venerea* cured, by my patients rubbing, with their finger moistened with *saliva*, three or four grains of *calomel*, at intervals in the course of the day, (a grain at a time), on the inside of the cheek, on and around that place, where the *parotid* (*salivary*) *duct* opens into the mouth.

In order to prevent the inconvenience that might arise from swallowing the powder, I have directed patients to apply the *calomel* principally to the lips, parts well able to bear gentle friction, as are also the external surfaces of the *gums*; little or none of the *Mercury* can then be swallowed, but the whole will be absorbed in the first instance.

Should

Should practitioners think that the mere surface of the lips is too small to admit the absorption of a sufficient quantity, the inside of the mouth may be also employed. The frequent rubbing of a little calomel on a small surface, answers better than a greater quantity at once on a larger; this may be repeated as often as the urgency of the case requires, and until the mouth feels the influence of the *Mercury*.

It may be applied by half a grain or one grain at intervals. The patient should always swallow, or spit out, the saliva before he begins to make use of the powder, otherwise the friction may cause too great an accumulation of that fluid. He should also abstain from drinking half an hour or longer after this operation, that the powder may not be conveyed into the stomach, and that proper

per time may be allowed for its absorption *.

It may perhaps be said, that the mercurial powder passes into the stomach, and, without any absorption from the mouth, effects the cure in the usual way. Even if this was the case, *the patient would more certainly be cured, than if he took this medicine in pills*, since these may pass through the body undissolved; but those who

* Mr. Cruikshank observes, " that the absorbents take up solids as well as fluids. From *Du Hamel's* experiments in feeding animals with *madder* it appears, that such parts of the cartilages as were then ossifying became red: this powder is at first absorbed from the intestines by the *lacteals*, and afterwards deposited in the bones by the *arteries*. From the same experiments it appears, that on leaving off the use of the *madder*, the bones of those birds which had been fed with it, and which hitherto appeared as red as scarlet, even through the living skin, in a few months became perfectly white again. From this circumstance we must infer that the earth of bones is absorbed, and that the bones themselves are perpetually changing."

P. 37.

B

use

use the powder in the manner here recommended, refrain from swallowing the saliva *till the absorption is effected*. The saliva mixing with the *Calomel* corrects its stimulating quality, and six or eight grains of this preparation will often produce less purgative effect than two grains in a pill; a fortunate circumstance surely for many patients *.

The

* Mr. *Plenck* says, “ A simple *mucilage* (or *saliva*) destroys the *specific stimulus of Mercury*; while at the same time its *antivenereal virtues* are preserved.—*Mercury* extinguished by *mucus* passes more easily into the blood (either by the *primæ viæ*, or when externally applied) than *crude Mercury* not extinguished.”

“ *Mercury* has less affinity with *fat* than with *mucus*. Hence frequently when *Mercury* is united with *fat* † it makes its escape from it in the body, and takes its course to the *glands* of the throat, or other *glands*. p. 118. On the other hand, when *Mercury* is extinguished by *mucus*; it readily mixes with all the fluids of our body, and therefore safely circulates with
“ them

† As in the mercurial ointment.

The reader must not suppose that I mean in general to raise a *salivation*, or that the *venereal virus* passes off more speedily from the increased flow of saliva, than from an affection of the other ‡ secretions; yet the quantity

“ them through all the vascular system, and is
 “ equally distributed over the whole. p. 119.
 “ How *Mercury* acts on the *venereal virus* in de-
 “ stroying it, no person can determine, unless the
 “ nature of this *virus* was perfectly known.”
 p. 120.

Though neither the *virus* nor its antidote are discoverable in the blood when analysed, yet we have the greatest reason to believe, from certain effects, that they are both conveyed thither.

I shall conclude this extract with adopting the words and sentiments of Mr. *Plenck*, who says,
 “ What I have advanced concerning the theory
 “ of salivation, I mean to be submitted to the
 “ judgment of eminent men as hypothetical;
 “ and it will afford me pleasure, if any one will
 “ find out and demonstrate a better theory con-
 “ cerning the wonderful action of *Mercury*,”
 p. 120;—to which I may add, and a more salu-
 tary and better mode of practice.

‡ I have known the other secretions, as well as the salivary, often and greatly affected by this process. The *Mercury* acts powerfully as a diaphoretic and a diuretic, which circumstance brought

tity of *Mercury*, which appears to me to be necessary to stop the progress of the disease, and to facilitate the cure, in many constitutions will have this effect. The *salivation*, however, (when it does happen) is so gentle, that patients have seldom been put to much inconvenience, or necessarily confined to the house; and it was hardly to be discovered, when they were careful to conceal it. Many took the *Mercury* in very large quantities without being *salivated* at all, and were equally well cured. It is better, however,

to my mind what Dr. *Hunter* has asserted in his Lecture on the Circulation of the Blood. “ Make
 “ an orifice, and inject a fluid of a purgative qua-
 “ lity, a diuretic, or any other, and it shall affect
 “ the particular gland accordingly; that is, purge,
 “ vomit, salivate, go off by urine, &c. according
 “ to its nature.”

Having been informed that these experiments were made by Mr. *John Hunter*, I take occasion to mention it in this place, as I should be sorry even to be suspected of omitting intentionally the recital of any thing redounding to the credit of this celebrated surgeon.

however, upon the whole, to run the risk of a slight *ptyalism*, or a tenderness of the gums, (which equally shews the *Mercury* to be in the system), than not to throw in a sufficient quantity of the medicine. The rapidity with which venereal sores usually mend when the mouth and gums become inflamed, even in a slight degree, confirm me in this safe and necessary practice; and the continuing the mouth tender till the sores are entirely healed, and all *hardness of the skin* (the true criterion of *virus*) is removed, is, in my opinion, the only effectual method to prevent the venereal fire from rekindling.—In no one instance where I raised a salivation, was there any thing more than an inflammation, or sometimes excoriation, on the inside of the mouth; but none of those deep ulcers so common in other salivations. One or

two grains of Calomel applied behind the *preputium*, or to the *labia*, will sometimes occasion the fetid breath and a slight salivary evacuation, and, joined to the other process, will greatly advance the cure, not as a topical application, but by absorption into the * system.

On

* It may be used twice or thrice a day, a little at a time, scattered thinly on the part, or moistened with saliva. It will act also as a preservative against venereal infection, perhaps better than some nostrums advertised for this purpose.

“ It is now generally allowed that salivation is
 “ not necessary to the cure of the venereal dis-
 “ ease, that the constitution is frequently impair-
 “ ed by it, that it exposes the patients to many
 “ inconveniencies, and that it limits us in em-
 “ ploying the necessary quantity of Mercury,
 “ which is evacuated too early, and before the
 “ cure can be effected: besides, instances occur
 “ every day in practice, where the disease has
 “ been successfully treated by an alterative course
 “ of Mercury, after repeated salivations had
 “ proved ineffectual. In my opinion, we may
 “ with equal propriety say, that *blisters* cannot
 “ prove useful in the cure of *fevers*, or topical
 “ inflammations, without producing a *strangury*,

“ as

On the Modus Operandi of Absorption,
taken from Mr. Cruikshank's Letter,
p. 133.

HE says, " I think it not impro-
" bable that *Absorption* may
" begin somewhat in the following
" way :

" as to say *Mercury* cannot cure the venereal disease
" without producing *salivation* ; and the free use
" of gum arabic, and other mucilages, corrects
" the inflammatory acrimony of both upon the
" same principles." See Dr. Saunders's Appendix
to *Plenck*, p. 133, 4.

The same author says, " from pathology we
" learn, that *five postulata* are required before the
" venereal *virus* can be perfectly destroyed by
" *Mercury*. 1st, That so much *Mercury* be
" taken into the body, as is necessary for over-
" coming and destroying the venereal *virus* that
" exists in it. 2dly, That the *Mercury* flows
" freely through all the small vessels of our sys-
" tem. 3dly, That it impregnates every parti-
" cle of our fluids. 4thly, That it remains united
" with our fluids for some length of time, and
" frequently circulates with them. 5thly, That
" at last the *virus* along with the *Mercury* be
" conveniently evacuated by natural excretions."
The same author observes, that " a *salivation* is
very

“ way : The absorbents have fibrous
 “ coats, are irritable and muscular :
 “ muscular

very inconvenient, is dangerous, does not give a certain cure, is not critical, nor can it be excited in every subject, nor is it necessary in any. Its inconveniencies are obvious, its danger evident, for, as Astruc attests, violent *Fevers*, *Diarrhæas*, *Dysentery*, *Hæmoptoe*, &c. &c. often supervene; nor is it necessary for the cure, as many people who have been violently disordered have been cured thoroughly without salivation. And *Mercury*, together with the venereal virus, may be more conveniently and easily evacuated by the ordinary excretions of *sweat*, *stool*, and *urine*.”
 p. 101.

Dr. Fordyce observes, p. 100, “ Formerly physicians were exceedingly solicitous to raise the *salivation* to the utmost height, lest they should not be certain of the cure without it; of late they have been contented with sweating or plentiful discharges of urine. Now many are satisfied, if they use a given quantity, whether it affects the *salivary* glands, or goes off either by *perspiration* or *urine*. I am disposed to be of the last number, with this difference, that *where there is a little soreness and heat in the gums*, I should expect a more speedy cure, than where there is none at all, or where there is a more copious salivation.”

Mr. Cruikshank says, “ I have seldom found
 “ that patients were perfectly safe from a relapse,
 “ who were cured without some considerable
 “ affection of the mouth.” p. 229.

Dr. Smith

“ muscular parts in general stimu-
 “ lated contract, and having con-
 “ tracted, if in a sound state, must
 “ from their own nature be presently
 “ relaxed : whatever is to be absorb-
 “ ed, is applied to the absorbing sur-
 “ faces, either by the pressure of the
 “ external atmosphere ; by the peris-
 “ taltic motion of the stomach and
 “ intestines ; by the motions of res-
 “ piration, pulsation of neighbouring
 “ arteries, or, in short, by the con-
 “ traction of muscular parts in ge-
 “ neral.

“ This matter coming into contact
 “ with the orifice of an absorbent,
 “ stimulates

Dr. *Smith* says, “ In a second infection or pox,
 “ Mercury and its preparations are the medicines
 “ that are most to be depended upon. It has been
 “ the general practice to prescribe mercurials in
 “ such a manner as to excite a salivation ; but
 “ from experience it has been found, that a sali-
 “ vation is by no means necessary to the cure of
 “ venereal symptoms ; as many very bad cases
 “ have been relieved by mercurials given as alte-
 “ ratives, when the mouth has not been at all
 “ affected.” *Formulae Medicamentorum*, p. 139.

“ stimulates it; the first effect of
 “ this stimulus is to make it con-
 “ tract; it of course takes up less
 “ space, and the fluid, or whatever it
 “ is, rushes forward; the absorbent
 “ orifice now dilating, forms a va-
 “ cuum, the fluid must therefore rush
 “ in, and stimulating it a second time,
 “ obliges it to contract. This con-
 “ traction not only propels what has
 “ entered the absorbent, but makes
 “ room for a fresh quantity to come
 “ forward; and in this way, perhaps,
 “ is the matter to be absorbed taken
 “ up from surfaces.

“ Mr. *Hunter* is disposed to consider
 “ the absorbent vessel in the light of a
 “ living animal, and thinks it may
 “ take up fluids or solids as a leech,
 “ for example, or a caterpillar, take
 “ up their food.”

Mr. *Cruikshank* says,
 1st, “ That *Calomel* rubbed on the
 “ inside of the mouth may be ab-
 “ sorbed,

“ forbed, appears probable from ana-
 “ logy.

2dly, “ The surface on which you
 “ propose the *Calomel* shall be rubbed,
 “ is in its own nature a better ab-
 “ sorbing surface than perhaps any
 “ other accessible to friction in the
 “ body.

3dly, “ The absorption of *Calomel*
 “ from the inside of the mouth, in
 “ your method, appears, from the
 “ testimony of many of your pa-
 “ tients, undeniable *.

4thly, “ If

* “ If your patients rub three grains of Ca-
 “ lomel every day on the inside of the mouth,
 “ and it does not gripe or purge; and if the
 “ common effect of three grains, taken into the
 “ stomach, is, that it certainly gripes and purges;
 “ then we must conclude that the three grains
 “ given in your way, have not gone into the
 “ stomach; whilst their producing evident effects
 “ on the disease, for which they were exhibited,
 “ shews that they have certainly got into the
 “ habit; or, in other words, that they have
 “ been absorbed by the surface to which they
 “ have been applied.”—A patient of mine told
 Mr. *Cruikshank* he had taken eight grains at a dose
 repeatedly,

4thly, “ If *Calomel* can be absorbed
 “ in your way, it must be the most
 “ eligible method, because it is less
 “ apt to irritate the stomach and
 “ intestines, and by purging to de-
 “ stroy its proper effect, than it
 “ would be if its first action was to
 “ be immediately on these parts †.

5thly,

repeatedly, without being sick, griped, or purged.
 — “ On what other supposition,” adds Mr.
Cruikshank, “ shall we be able to say, why these
 “ eight grains did not purge, &c. but that being
 “ absorbed from the mouth they became milder
 “ in their operation, in the same way as we know
 “ the divided quicksilver becomes milder when
 “ absorbed by the skin.” p. 187, 8.

Mr. *Cruikshank*, for experiment's sake, took three
 grains of *Calomel* in a pill, with conserve of hips,
 and swallowed it at once. In six hours after it
 griped him severely and purged. He rubbed three
 grains on the inside of his mouth, and repeated it
 three different times. After waiting twenty-eight
 hours, he found not the least inconvenience from
 the friction, but only a glow on his gums and
 cheeks, and a brassy taste in his mouth. *Cruik-*
shank's Letter to Clare, p. 231.

† “ The *Calomel* will here be mixed with the
 “ saliva during the friction, will be diffused over
 “ the whole mouth, and absorbed from the inside
 “ of

5thly, “ Your friction of *calomel*
 “ is a less tedious, less laborious pro-
 “ cess than the common one of rub-
 “ bing mercurial ointment.

6thly, “ Your method also recom-
 “ mends itself as a neater and more
 “ convenient one than the rubbing
 “ mercurial ointment.

7thly, “ Your method is better, *cæte-*
 “ *ris paribus*, than the common modes
 “ of exhibiting *Mercury* internally,
 “ inasmuch as it employs friction.

8thly, “ Your method appears pre-
 “ ferable to the rubbing mercurial
 “ ointment, inasmuch as watery flu-
 “ ids may be presumed to be more
 “ readily absorbed than oils, have not
 “ some of the disagreeable qualities

“ of the lips, surfaces of the tongue, roof of the
 “ mouth and fauces, as well as of the cheeks ;
 “ thus its first effects will not be in the way of
 “ stimulus on the *primæ viæ*, but it will be
 “ gradually and equally applied to the general
 “ system.” *Cruikshank's Letter*, p. 192.

“ of oils, and that there are some
 “ reasons to believe that *Saliva* and
 “ *Mercury* make a more efficacious
 “ compound than *Mercury* and *Oil*.

9thly, “ Your method of rubbing
 “ *Calomel* looks as if it would be a
 “ more expeditious way of giving
 “ the mercurial stimulus to the sys-
 “ tem, and of eradicating the vene-
 “ real *virus*.

10thly, “ My experiments, as far
 “ as they go, confirm your practice.”

Further Remarks of Mr. Cruikshank.

“ *The particles of the blood* seen in
 “ the simple microscope are ten times
 “ larger than those of *levigated Calo-*
 “ *mel*, yet I have had many opportu-
 “ nities of seeing the *Absorbents* tur-
 “ gid with red blood. *The particles*
 “ *of Quicksilver* in the best prepared
 “ mercurial ointment are in the same
 “ microscope as distinct as the parti-
 “ cles

“cles of the blood; and we all know
 “they are very readily taken up by
 “the *absorbents* of the skin. A por-
 “ter, for example, is engaged for
 “two or three days in rubbing down
 “quicksilver with hog’s lard in a mor-
 “tar; he works the pestle, the upper
 “end is every now and then smeared
 “with a little of the ointment; he
 “gets *fetid breath* and *sore gums*, (the
 “ordinary effect of mercurial fric-
 “tion), which shews that absorption
 “from the extraordinary *stimulus* had
 “taken place from one of the thickest
 “cuticular surfaces, the palms of his
 “hands. Though absorption may
 “thus take place from such a sur-
 “face, yet in general the thinner the
 “cuticular surface is, the closer will
 “the matter to be absorbed be ap-
 “plied to the mouths and coats of
 “the absorbents, and stimulating
 “them more readily, will be sooner

“ absorbed. Thus *venereal matter*
 “ applied under the *prepuce* in men,
 “ or on the inside of the *labium* in
 “ women, gets sooner into the *ingui-*
 “ *nal* glands, sooner into the habit,
 “ than if it had been applied to the
 “ outside of either parts.” p. 184.
 2d Edition.

“ If the *poison* makes its way more
 “ quickly from an inside or thin cu-
 “ ticular surface, why should not its
 “ *antidote* do the same thing? why
 “ should not *Mercury* get sooner into
 “ the habit from the *inside* of the
 “ *mouth*, than from the *outside* of the
 “ *thigh*?” p. 186. 2d Edition.

“ A little child, in her maid’s arms,
 “ received a kiss from a girl of the
 “ town, who accidentally passed by.
 “ *The cuticular covering is remarkably*
 “ *thin on the edge of the lips*, and
 “ allowing the blood to appear more
 “ readily through it, gives them their
 “ greater

*The Lips as in the Living Subject, supposing
them to be stripped of the Scurf-skin.*



*The Cuticular Covering is remarkably Thin on
the Edge of the Lips. — page XXVIII.*



“ greater redness. A *chancre* on the
 “ projecting part of the under lip
 “ was the consequence of this salute,
 “ which in a few days made its ap-
 “ pearance, and resisted every appli-
 “ cation for a fortnight or more. At
 “ last it yielded to *Mercury*; and
 “ thus shewing itself to be venereal,
 “ recalled the circumstance of the
 “ kiss, which but for this had passed
 “ unnoticed. Had the venereal mat-
 “ ter been applied to the cheek ex-
 “ ternally, it is probable, from what
 “ we see daily, that it might have
 “ lain some time without producing
 “ any effect, and at last have been
 “ wiped off; or at least that it would
 “ not have produced a *chancre* sooner
 “ than in a fortnight, or perhaps six
 “ weeks.” p. 184.

On the Orifices of the Absorbents,
by Mr. CRUIKSHANK.

“ HAVING set out with the idea that *the human Absorbents* took up *Mercury* in the form of a *fine powder*, some account of their *orifices* will also be expected. This unavoidably leads me into a very curious and extensive field. Almost all the anatomists hitherto have been persuaded, that these orifices were too minute to be visible even in the microscope; that this minuteness of their orifices answered a very good purpose, and served as a guard on the constitution, to prevent any thing coarse from entering the blood. Whoever sets out in search of these orifices, will most naturally be led to the internal surface of the intestines. He must perceive that his probability of success will be greater on that surface than any where else in the body. The different

rent vessels are there elongated into processes, which to the naked eye seem, like hairs, or the pile of velvet, to project from this surface, and are therefore termed *villi* by the anatomists. *Each villus* has its little *artery*, *vein*, and *absorbent*; though we cannot demonstrate anatomically, yet the colic convinces us sufficiently, that they also have *nerves*. These vessels and nerves are connected by cellular membrane, and have also a kind of cuticular covering.

“ Though I had frequently looked for them, I never saw any thing like *the orifices of the lacteals*. At last, about a year and half ago, a very favourable opportunity of investigating these orifices presented itself. A woman had died suddenly about four in the morning, after having been in pretty good health on the preceding evening. Her relations wished to
know

know the cause of so sudden death, and the body was opened. *The lacteals*, on the outside of the intestines, and along the *mesentery*, were more turgid with a firm coagulated *chyle* than I had ever seen them. They were also in proportion more numerous, and gave an idea of their being at least equal in number to either arteries or veins. The mesenteric glands, instead of putting on their usual reddish appearance, were, from the quantity of *chyle* they contained, perfectly white. When the intestine was opened, there appeared a number of white points up and down its internal surface; in some places they were crowded together, but in general scattered. These points, on closer inspection, would have made one suppose that each villus was a vesicle turgid with *chyle*. The arteries and veins were so compressed from the distension

distension of the extremity of the *lacteal* by the *chyle*, that the whole *villus* seemed to belong to the *lacteal*. Though other *villi* were not equally white or distended, I afterwards found they all contained *chyle*. In a portion of this intestine subjected to the microscope in a strong light, I saw distinctly a number of pores on the tops and sides of those *villi*. I was convinced they were *the absorbent orifices of the lacteals*. They appeared to be in a kind of bulbous extremities of those vessels, and their diameters, as I had often supposed *à priori*, were in reality several times larger than those of the particles of the blood, seen under the same microscope. I had a drawing made of some of the more distinct turgid *villi*, and of *these absorbent orifices*. Dr. Hunter, Dr. John Jebb, and several of my anatomical friends, were occasionally present,

present, saw their appearances, and appeared to be satisfied; nor can I suppose that I was deceived. The reason probably of my success here was, that the *chyle* coagulates in the dead body, and gives that erection or distension to the *villi* which they had when under the *stimulus of absorbing*. Without this they collapse, particularly in the dead body, and the orifices become invisible." Letter, p. 55.

On the external Use of Mercury in the Form of Ointment, called Ungt. Mercur. Cærul.

IT is hardly necessary to point out the disagreeable circumstances attending the application of this remedy. It is not only dirty, but exceedingly offensive by reason of its smell, and very uncertain and mischievous in its effects *. The exter-

* Dr. Cullen observes, that "purging is never
" excited by any means without spasms of the
" intestines,

nal skin is a surface by no means calculated for absorption, since it is dense,
and

“ intestines, which, when the operation is continued, are apt to end in durable spasm and inflammation: these are attended with very dangerous consequences.” On *Mercury*, p. 453.—The Doctor adds, “ Neither does the method of *purging by unction* answer much better, (although perhaps more effectual) because it is attended with very great pain.” To which may be added, that bloody, dysenteric and *fatal* fluxes are sometimes the consequences of mercurial ointment too liberally employed.

Dr. *Mead*, p. 104, says, “ he remembers to have once found some *Mercury in the perinæum* of a subject taken from the gallows for a dissection, (whose rotten bones discovered what disease had required the use of it, and that, I suppose, by *unction*) without any marks of corrosion of the part where it was collected.”

As it has been a question much agitated of late, how long Mercury is supposed to continue in the system after a salivation, the reader is presented with the sentiments of Dr. *Mead* on that head.—“ Experience has convinced us that repeated doses of crude *Mercury* have in some cases, even a considerable time after they have been taken, exerted their force, and thrown the body into unexpected disorders.

“ I remember two accidents of this kind, (and one of them proved fatal), in which, when
“ small

and consequently often impenetrable.
This ointment generally inflames the
skin,

“ small quantities had been given for many days
“ together, a violent salivation ensued more than
“ two months after the use of it had been left
“ off.

“ And not long since I saw a young lady, who
“ having swallowed about six drachms every
“ morning, three successive days, was salivated
“ three weeks. The flux then ceased, but re-
“ turned after six months, and held a month;
“ and once more came on, in the same manner,
“ two months after. The breath was each time
“ strongly affected, as is usual in mercurial spit-
“ tings. So surprisingly active is this mineral,
“ even simple and uncompounded.” Dr. *Mead*,
Essay iv. on poisonous Minerals, p. 106.

A celebrated anatomist remarked in his lectures, that he has seen mercurial globules on the internal surface of the intestines: this, he says, will account for those unexpected returns of salivations at distant periods.—The quicksilver being put into motion by any accidental irritation, no wonder it should be reabsorbed, and stimulate the salivary system afresh.

Dr. *Fordyce* says, p. 103. “ I know at this mo-
“ ment an old patient of mine who has returns
“ of the salivation, that last for weeks together,
“ accompanied with a *brassy taste in his mouth*, as
“ if he was under a course of Mercury, though
“ it

skin, and occasions delay by a temporary discontinuance on that account; sometimes it will affect the mouth, sometimes it will not; nor, indeed, (as far as we can discover) any of the other secretions; for which reason no certain dependance can be placed upon it.

Mr. *Cruikshank* observes, p. 202.

“ That the friction of Calomel is a
 “ less tedious, less laborious process,
 “ than the common one of rubbing mercurial ointment.”——He adds; “ To be obliged to rub with
 “ their own hands half a dram of
 “ mercurial ointment, for half an
 “ hour every night, is a labour

“ it is now above twelve years since he has used
 “ any in whatever shape.”

In general it must be admitted that Mercury being very *loco-motive*, escapes soon from the system, sometimes indeed sooner than, for the security of our patients, we could wish.—It is a fact, that constitutions broken down by dram-drinking, or other excesses, are immediately and violently affected by very small quantities of Mercury.

“ only to be conceived by those who
 “ have experienced it. Nothing is
 “ more universally complained of.
 “ What must it be when half an
 “ ounce, or even an whole ounce, is
 “ rubbed? The process, in short, fre-
 “ quently tires the patient so much
 “ that he gives it over before it is
 “ half performed, and sometimes
 “ omits it when it ought to have
 “ been done. It requires considerable
 “ force; and if the patient is very
 “ weak, will, to him, be labour in
 “ vain. I am persuaded that patients
 “ frequently fail of being cured from
 “ these very circumstances. Let us
 “ suppose fifteen grains of mercurial
 “ ointment equal in effect to one
 “ grain of Calomel. This calcula-
 “ tion, I presume, will not be thought
 “ unfair by those who have given
 “ both quantities on different occa-
 “ sions to venereal patients; and have
 “ observed

“ observed that they could go on with
 “ the Calomel for twelve or fifteen
 “ days, sensibly gaining on the dis-
 “ ease; whereas, when the ointment
 “ was employed, it became necessary,
 “ long before the end of this period,
 “ to increase the dose, in order to
 “ keep up the first effects. If a pa-
 “ tient then must either rub fifteen
 “ grains of common mercurial oint-
 “ ment, or rub a grain of Calomel,
 “ and is allowed, after trying both
 “ ways, to choose for himself, there
 “ will be little doubt with respect to
 “ his choice. For though all surfaces
 “ absorb, and any surface may be sti-
 “ mulated to absorb more than it
 “ commonly does; yet, in general,
 “ surfaces seem to tire, (if one might
 “ say so), and, like muscles, having
 “ performed a certain quantity of
 “ work, refuse to do more. At least
 “ we find by experience, that mercu-

“ rial ointment is taken up more
 “ quickly by the absorbents from
 “ diffusing it over a large surface, or
 “ by changing surfaces. Mercurial
 “ ointment of course being more
 “ bulky and more viscid than Calo-
 “ mel and saliva, will require a larger
 “ surface and a longer time before it
 “ can be sufficiently rubbed, or, in
 “ the common style, before it can be
 “ rubbed in. Now if, according to
 “ my calculation, three grains of Ca-
 “ lomel have as great an effect on the
 “ venereal *virus* as forty-five grains
 “ of mercurial ointment, and if it
 “ would require half an hour’s strong
 “ friction to make these forty-five
 “ grains be absorbed from the
 “ whole inside of the thigh, while
 “ three grains of Calomel gently
 “ rubbed on the inside of the mouth
 “ may be absorbed in half an hour,
 “ or, though it should not be ab-
 “ sorbed

“ forbed in twelve hours, still, if it
 “ is attended with no trouble to the
 “ patient, who does not perceive the
 “ advantage of employing Calomel
 “ rather than mercurial ointment.

“ The friction of mercurial oint-
 “ ment on the thighs or arms, is to
 “ many people one of the most disa-
 “ greeable things in the world. Its
 “ leaden colour, contrasted with the
 “ skin, makes it look dirty. It has a
 “ particularly offensive smell, inde-
 “ pendent of that of the turpentine
 “ or balsam of sulphur, which may
 “ have been employed in extinguish-
 “ ing the quicksilver. From the cir-
 “ cumstance that half an hour's fric-
 “ tion, or even a whole hour's fric-
 “ tion, if ever so well performed,
 “ will not commonly effect a total
 “ absorption of the ointment, the skin
 “ is generally left a little smeared
 “ with it, after the process is over;

“ as it is oily, it does not evaporate,
 “ or dry readily, and will easily stick
 “ to whatever it touches. Patients
 “ are obliged to sleep in flannel draw-
 “ ers to prevent the ointment from
 “ getting through, and daubing the
 “ bed clothes. They must be fre-
 “ quently changing these drawers;
 “ constantly washing the skin; or, as
 “ washing off the ointment would re-
 “ tard rather than forward the cure,
 “ they must remain dirty for six
 “ weeks, or perhaps three months to-
 “ gether; and if by accident any part
 “ of the ointment gets upon their
 “ linen, from its colour it is very apt
 “ to give the alarm in families, and
 “ lead to disagreeable discoveries.”

Mr. *Cruikshank* says, p. 144. “ It
 “ had been doubted, *whether the ab-*
 “ *sorbents would take up salts*, or very
 “ stimulating substances; we find,
 “ however, they certainly do.

“ If

“ If *corrosive sublimate*, thrown into
 “ the stomach, with a view to cure
 “ the venereal disease, was not *ab-*
 “ *sorbed* by the *lacteals*, how should it
 “ produce a *salivation*? The change
 “ it afterwards undergoes in the
 “ body, in becoming *quicksilver*, is
 “ most probably produced in the blood
 “ vessels.

“ Dr. *Hunter* gives a remarkable
 “ case of some workmen employed to
 “ clean a mineral water well. They
 “ had for this purpose thrown off
 “ their shoes and stockings, and gone
 “ into the well. The salts in the
 “ water were absorbed by the absorb-
 “ ents of the feet, and purged them
 “ all violently. I know this has been
 “ attributed to the coldness of the
 “ well. Cold applied to the feet may
 “ have this effect; but it is difficult
 “ to suppose, that a number of work-
 “ men accustomed to such employ-
 “ ments,

“ ments, should in this instance be
 “ violently purged merely from the
 “ coldness of the well.” Mr. *Cruik-*
shank's Letter to Mr. *Clare*, p. 144.

The reader is presented with the following extract respecting absorption, from Captain *Kennedy's* Narrative of his voyage and distresses at sea, published in *Dodsley's* Annual Register, for the year 1769. 2d edit. p. 191.

The captain says, “ On the fifth
 “ day after our arrival at *Ambergris*,
 “ we happily discovered a small vessel
 “ at some distance, under sail, which
 “ we made for; in the evening got
 “ on board her, and in a few hours,
 “ being the 10th of *January*, we
 “ arrived on *St. George's* quay, in a
 “ very languid state. I cannot con-
 “ clude without making mention of
 “ the great advantage I received from
 “ soaking my clothes twice a day in
 “ salt water, and putting them on
 “ without

“ without wringing. It was a con-
 “ siderable time before I could make
 “ the people comply with this mea-
 “ sure, though, from seeing the good
 “ effects it produced, they, of their
 “ own accord, practised it twice a
 “ day. To this discovery I may with
 “ justice impute the preservation of
 “ my own life, and that of six other
 “ persons, who must have perished
 “ but for its being put in use. The
 “ hint was first communicated to me
 “ from the perusal of a treatise writ-
 “ ten by Dr. *Lind*, and which, I
 “ think, ought to be commonly un-
 “ derstood, and recommended to all
 “ seafaring people. There is one very
 “ remarkable circumstance, and wor-
 “ thy of notice, which was, that we
 “ daily made *the same quantity of urine*
 “ *as if we had drank moderately of*
 “ *any liquid*, which must be owing to
 “ a body of water being *absorbed*
 “ through

“ through the pores of the skin. *The*
 “ *saline particles remaining in our*
 “ *clothing became encrusted by the heat*
 “ *of our bodies and that of the sun,*
 “ which cut and wounded our poste-
 “ riors, and, from the intense pain,
 “ rendered sitting very disagreeable.
 “ But we found, upon washing out
 “ the saline particles, and frequently
 “ wetting our clothes without wring-
 “ ing, which we practised twice a day,
 “ the skin became well in a short
 “ time; and so very great advantage
 “ did we derive from this practice,
 “ that the violent drought went off,
 “ the parched tongue was cured in a
 “ few minutes after bathing and
 “ washing our clothes; at the same
 “ time we found ourselves as much
 “ refreshed as if we had received
 “ some actual nourishment.”

The writer adds the following
 query, “ Whether bathing in salt wa-
 “ ter

“ter would not be of infinite service
 “in hot burning fevers, and break
 “the too great adhesion of the blood,
 “which is the cause of inflammatory
 “fevers. It is to be remarked, that the
 “four persons who died in the boat
 “drank large quantities of salt water,
 “and they all died delirious; but
 “those who avoided drinking it had
 “no such symptoms *.”

VENEREAL CASES

Cured by this new Process of Absorption.

CASE the FIRST.

A. B. came to me with a large
 chancre upon the prepuce, which had
 been there almost two months; he
 had also a bubo in each groin, one of
 which

* Whether salt is absorbed or not by the ab-
 sorbents of the external skin, is left to the con-
 sideration and decision of the profession; and if
 the latter account is true, it conveys a very im-
 portant information to the navy, which for their
 sakes cannot be made too public.

which was in a state of *suppuration*, the other indurated. I gave him the *Calomel*, three grains every night, and two in the morning; it neither griped nor purged; the third day his mouth became sore; in four or five days after employing this mercurial friction, the sore put on a fine florid aspect, and had a white edge; the buboes began rapidly to disperse*. I continued the *Calomel* in smaller doses, so as to keep up the tenderness of the mouth for three weeks, by which time the chancre was completely healed. I should now have desisted from the *Mercury*, being perfectly satisfied with what I had done; but Dr. *Hunter*, who was consulted upon this case, advised

* It was not my design to disperse a bubo in a state of *suppuration*, but the *Mercury*, which it was necessary to administer, to check the spreading state of the chancre, occasioned the swelling to disappear. Some, however, (Dr. *Astruc* among the rest) do not discourage the practice of repelling buboes.

advised the continuing *Mercury* a fortnight longer, lest he should relapse. I continued it at intervals for this period *. He has remained well ever since. Mr. *Maxwell* the apothecary also frequently saw this patient while he was under cure, and knows the circumstances to be as they are now related.

CASE the SECOND.

C. D. came to me with a sore upon his forehead, about the size of a sixpence, with thick callous edges. He had chancres about a month before, and had given over the use of *Mercury* too soon. I had no doubt of the sore's being venereal, and gave him the *Calomel*; he took two grains twice a

* This should always be done after the chancre is healed, particularly when there is any hardness left in the skin, which is as dangerous as an open chancre, and shews that the poison lurks within.

day, rubbed only upon the lips; this he continued to do for three weeks; the sore was quite healed in that time. I continued the *Mercury*, two grains every day, for a fortnight longer: he had glandular swellings of the neck, which also, during this process, went away. Mr. *Cruikshank* frequently saw this patient during his cure, and heard him declare he was neither griped nor purged by the process.

CASE the THIRD.

E. F. had a hoarseness and pain in her bones, the remains of a *lues* supposed to be cured two years before; she had also chancres of a recent date. She took three grains of *Calomel* in my method twice a day. Upon the third day she began to spit gently; had no griping or purging: a profuse sweat came on at this time, and the hoarseness

hoarseness and pain in her bones almost immediately left her. The salivation continued for a fortnight or more without any addition of *Mercury*, and the chancres were cured. She appeared perfectly well, and I thought I had done enough, as I am by no means convinced that much Mercury, but the method of employing it, is the chief circumstance in curing this disease. About three weeks after she returned, and appeared to be in a very poor way; she now informed me of a complaint she had formerly supposed to be the *piles*, but which I found was a venereal *fungus*; had I known of this I would not have interrupted the mercurial process. I was now obliged to give her the *Calomel* again in the same way, which again made her mouth sore, and had the same effects as before: as she got well I continued the *Calo-*

mel in smaller doses for some little time; she was cured in a few weeks, and has continued so ever since.

CASE the FOURTH.

G. H. about thirty years of age, had a small *chancre* upon the prepuce; he had also a *gonorrhœa*, and uneasy sensations in the inguinal glands. I gave him two grains of the *Calomel* twice a day, which were rubbed upon the surface of the lips only; upon the fourth and fifth day his breath was become fœtid, and his mouth tender, and by the seventh day the chancre was entirely healed. There was not the least remains of uneasiness in the inguinal glands, and the *gonorrhœa* was much better, though not then perfectly removed.

CASE the FIFTH.

I. K. had chancres upon the *glans penis*, with *phimosis*. Through neglect, the chancres had made a very rapid progress. I thought it necessary to affect the mouth as soon as possible, and to throw in a very large quantity of the *Calomel*; accordingly the first day he took three grains twice, but the two next days the *Mercury* was increased to six grains twice in the day. The second day he felt his mouth tender and inflamed, upon the third the salivation came on, and continued pretty smart for a fortnight; the progress of the disease was checked the instant his mouth became sore; the symptomatic fever (which often attends a chancre) left him, and he gradually got well, and at the end of a month was completely cured. He

was not purged by the Mercury. Mr. *Savage* (apothecary) saw this patient frequently during his illness.

CASE the SIXTH.

L. M. applied to me with a deep-seated venereal ulcer in the integuments of the *abdomen* below the navel, near the size of a shilling in circumference; in depth the sore would have contained two kidney-beans. This patient suffered extreme pain for several days before she came to me. I directed her to rub two grains of *Calomel* on the inside of the mouth twice a day for three or four days, at the expiration of which time she complained of her mouth being very tender and painful, and her breath affected. The sore immediately became easy, wore a kind aspect, granulated well, and was entirely healed within a month. I continued

continued the *Calomel* some time longer, in smaller doses, to prevent a relapse: she has remained perfectly well ever since. The wound was dressed with oil and a soft cerate. She was not purged with the medicine, looked healthy and florid in her countenance, and had remarkable good spirits while under cure. She was not confined a day at home on this account, and came to me twice or thrice every week.

The REMARKS of Dr. Hunter on Mr. Clare's New Method of introducing Mercury into the circulation.

“ AS the *external* surface of the body (says the Doctor) is every where bibulous, so is the *internal*. There can be no doubt of absorption taking place on the inside of the mouth, of the *præputium*, of the *labia*,
(lips,)

(lips,) &c. and any fine powder, capable of being absorbed there, will, no doubt, be more readily absorbed when mixed with a watery fluid. When mixed with oil, and applied to wet surfaces, it may be presumed that it will be kept at some distance. It is likewise very probable, that, when the *Calomel* is rubbed upon the surfaces of the mouth, what gets into the stomach is carried down so gradually, and diffused over so great a surface, that it will stimulate the *primæ viæ* much less; and people with very tender bowels may therefore bear it much better than when given in pills, boluses, &c. And it is reasonable to suppose, that watery fluids will, in general, be more readily absorbed, perhaps even when applied to the outward surface."

Answers to some Objections, which have been made to this New Mercurial Process, and were communicated to me by a worthy Friend.*

IT has been said, that “Mercury
 “employed in the method recom-
 “mended by me, stimulates the sali-
 “vary glands, (as acrid, aromatic,
 “and other substances do), and only
 “excites a momentary salivation, and
 “that the *Calomel* does not properly
 “and fairly enter into the system.”

In answer to this, *E. F.* case the 3d, was as completely salivated and cured, as she could possibly have been by any mercurial course.—Dr. *Hunter* saw this patient whilst in a salivary state, and acknowledged to me in writing, that he found her *spitting most kindly*.—She had not swallowed any of the *Calomel*, and had *no loose stool*,

* Dr. John Jebb.

stool, and her breath was foetid. Her salivation continued copiously for more than a fortnight, which would not have been the case, if the *Mercury* had stimulated the glands locally, without having penetrated the system; nor would her disorder, which was very inveterate, have been cured, unless this had been the case. All the cures which are related, alike prove that the *Mercury* was effectually introduced into the system*.

It has been urged that “ the rubbing *Calomel* on the surfaces of the mouth, renders the teeth black.”

This seems to be mere conjecture, not founded on fact, and urged to prejudice the minds of patients against this

* Mr. *Cruikshank* observes, that “ the *Calomel* producing evident effects on the disease for which it was exhibited, shews that it has certainly got into the habit, or, in other words, that it has been absorbed by the surface to which it was applied.” Letter, p. 187, head the 3d.

this practice. During a long continued mercurial course of any sort, the teeth will become black and dirty; but whether this is owing to the *Mercury* alone, or to the neglect of cleaning the teeth, (an operation which at these times is always forbidden), I will not pretend to say. I am fully persuaded that *Calomel* rubbed on the surfaces of the mouth and gums, does not render the teeth black by local application; and none of my patients have complained at any time of this circumstance.

It has been remarked that "the
Calomel leaves a disagreeable and
 "brassy taste in the mouth."

It is not often that patients complain of this; there occurs, indeed, a method of obviating this objection, by applying *the Calomel* in form of a *suppository* to the internal villous surface of the *rectum*, which is esteem-
 ed

ed *the best absorbing surface of the body*. It cannot be doubted but that this (though I confess I never tried it) would prove a very efficacious and safe (though not a delicate) mode of administering a mercurial remedy.

It must be remarked that *Mercury*, in whatever form administered, will impart *the brassy taste* when it is admitted into the circulation: in my method, indeed, the disagreeable taste is perceived at the first; so is that of *the bark*, and other valuable medicines; which circumstance does not at all prevent their general use.

It is said, “How can a glandular, “secreting surface, a surface constantly pouring out, and which of course may be presumed to wash off every thing laid on it, be a good absorbing surface *?”

In

* “Whatever force this reasoning may seem to have, when applied to dead surfaces, it
“ must

In short, there is no plan or proposal to which objections may not be raised, either real or plausible: I only wish the advantages and disadvantages in the present case to be candidly and maturely weighed, and the merits to be determined accordingly. Truth is the solid foundation on which this process rests; and I have no doubt of its gaining additional strength, and more extensive influence every day; since Time, that great destroyer of all other things, adds permanency and force to Truth.

“ Truth ought to be the only aim
 “ in every controversy, and if that is
 “ on my side, I regard not censure.

“ must lose its weight with those who reflect,
 “ that the surface under consideration is a living
 “ one. For, if it is a good objection against the
 “ fitness for absorbing in a surface, that it is a
 “ secreting one; the very same objection lies
 “ against most surfaces, and may be urged against
 “ the best absorbing surface of the body, the in-
 “ ternal surface of the intestines.” *Cruikshank's*
 Letter, p. 186.

F

“ I have

“ I have been always careful never
 “ to arrogate to myself what I learn-
 “ ed from others, but candidly owned
 “ to whom I have been obliged ; a
 “ practice not very common at this
 “ day. Do we not see many treatises
 “ filled up as it were with what their
 “ authors have stolen from others
 “ without naming them ; claiming
 “ discoveries they never made, and
 “ pluming themselves with borrowed
 “ feathers ?” See Dr. *Hope's* Appen-
 dix to *Alston's* Lectures on the *Ma-*
teria Medica, vol. ii. p. 584.





A N

E S S A Y

O N

A B S C E S S E S,
&c.

*On the Nature and Formation of
Abscesses.*

AN abscess is a collection of matter commonly seated in the adipose or cellular membrane, the immediate connecting substance betwixt the muscles and skin, and which connects the fibres of muscles themselves. The formation and advancement to suppuration is usually attended with great pain, fever, and *rigors*; which last seem to be the symptoms of a constitution

F 2

tution

tution labouring under some morbid attack*.

Abcesses generally make their way by degrees from within towards the skin, the external surface of the body. Nature here indicates to the surgeon what line of conduct he ought to pursue; whether to make an aperture and discharge the matter, or leave it to her, which she will effect sooner or later,

* When the contents of a tumour are doubtful, and suspected to be matter, it is usual to make enquiry if there have been any *shiverings*, since matter is seldom formed without that previous notice; yet this is not a certain rule. Dr. *Hugh Smith* puts the following question;—"Have we any rules to judge when an inflammation verges to suppuration, or when there may ensue a disposition to gangrene? It has been supposed that we may judge of the suppuration of an inflammatory tumour, by the frequent and involuntary shiverings the patient shall be attacked with: but if a mortification should have supervened, the pulse will immediately sink, and become scarce perceptible, cold sweats and a general languor will succeed, the preludes to an approaching dissolution and inevitable death." *Essays Physiological and Practical*, p. 123.

later, according to the state and circumstances of the constitution. How very improper then must it be to endeavour to repel abscesses, and oppose such salutary attempts made by the constitution !

On Suppuration.

EVERY abscess is attended with inflammation, but every inflammation does not terminate in *suppuration* : now an abscess, being usually the crisis of some internal disorder, ought by all means to be encouraged ; but a simple inflammation, arising from an external cause, often is and may be dispersed with the utmost safety and propriety.

The constitution is in some measure assisted in its purpose of *suppuration*, by emollient cataplasms and anodyne fomentations, which, by their

relaxing qualities, when the skin is tense and inflamed, give considerable ease *. Where the pain and tension is not great, a warm plaister is as proper, and more convenient. When the fever is high, *suppuration* commonly makes rapid advances, which are assisted by a free and generous regimen; evacuations therefore, which obstruct its progress, are condemned as improper and dangerous in all critical abscesses.—Mr. *Sharp* indeed, in

* The ingredients of a poultice should be boiled till it leaves the sides of the vessel, and becoming stiff, adheres to the spoon.—It should have an unctuous, oily surface, and be applied warm.

Fomentations are of peculiar service, as their subtle vapours penetrate the pores of the skin, the orifices of which being very minute, often refuse the admission of oil or water, wherefore fomentations give relief when other applications fail.—The stupes should be wrung as dry as possible, and applied comfortably warm. Emollient ointments and liniments relax and cool the skin, yet, unless they are rendered *anodyne*, have little or no effect beyond the external surface.—*Opiates* internally administered assuage the pain, and assist maturation.

in his Introduction to a Treatise on the Operations of Surgery, p. 11, has observed, “ that bleeding, when the suppuration has not kindly advanced, has sometimes quickened it exceedingly, but, however, that this practice is to be followed with caution *.”

If the inflammation is very great, there is danger of a mortification: blood-letting, by moderating this inflammation, may promote suppuration, and do good †. We should not be

* Mr. *Sharp* adds,—“ Physicians do now acknowledge that *bleeding* on certain occasions in the small pox, is not only no impediment to the maturation, but even promotes it; so in the formation of abscesses also, when the vessels have been clogged.”—“ Purges are, no doubt, improper at this time; yet if the patient be constive, he must be assisted with gentle clysters every two or three days.”

† Dr. *Hugh Smith* observes, in his *Essays Physiological, &c.* that “ if the fever should run too high, with great heat and a pulse full and strong, a moderate blood-letting will prove rather useful than disserviceable to promote the suppuration.” p. 103.

be satisfied with a partial collection of matter, lest there should be a second gathering, but should wait till the whole is completely formed, which is known by a palpable fluctuation on compressing it, and by the protuberance and thinness of the skin. Vesications of the cuticle often appear at this time, and indicate an approaching aperture: this is the critical season for making it, unless it should be deemed more adviseable to leave the opening to be effected by the exertions of nature and the constitution.

As there is no rule without an exception, so we must not in every case wait till the tumour is fully suppurated; and if we find it *receding*, and the patient's health affected by the absorption of the peccant humours into the habit, we are fairly warranted in making an earlier opening.

Of opening Abscesses.

WHEN an abscess breaks of itself, there is usually a small orifice, which does not prove sufficient to discharge the contained matter properly, and heals in general before it has produced the desired effect; which circumstance has induced the profession to make larger openings, that there might be no confinement of the matter within the skin *.—For this purpose

* It must be owned notwithstanding, that small apertures sometimes effect a cure;—for there have been instances of female patients, urged by their fears, having had frequent expostulations with their surgeons concerning the knife, and of their having refused to admit the exercise of it in abscesses of the breast in particular. Regardless of the different opinion of the profession, they had recourse to poultices, the repetitions of which have occasioned one or more openings; these continuing unclosed, by means of gentle and frequent pressure have effected sound and perfect cures, and the success has induced many surgeons to adopt the practice, from which they also have experienced the same happy event.

purpose some practitioners prefer the knife, others the caustic. The advocates for the former dwell much, and with some reason, on the utility of preserving the skin as much as possible, which is done by a simple division of it, when it recedes only for a time, resuming its former state as the wound heals, and frequently without losing many of its fibres. This is the great and perhaps only advantage of the knife. When we make the opening by caustic, in most cases the circumjacent skin will at last be drawn in, will cover the greatest part of the sore, and very little new skin will be wanted.

On the Application of the Caustic.

T H E R E is no better caustic than the paste of the London Dispensatory. “ * Let an orifice be cut in a piece of sticking-plaister, nearly as big as you mean to make the eschar, which being applied to the part, the caustic must be laid on the opening, and preserved in its situation by a few slips of plaister placed round its edges, and a large piece over the whole ;” a bandage is likewise necessary, notwithstanding which the caustic usually spreads one third beyond the limits prescribed by the plaister.

The caustic being placed on the tumour, and continued there three or four hours, causes death in, or a mortification of, a certain portion of the skin and integuments. This operation

* See Mr. Sharp's Introduction, &c.

ration is attended with different degrees of pain, according to the condition of the skin, which, in a cool and uninflamed state, bears the caustic much better than when in a contrary one; for at that time the slightest pressure of the finger hurts exceedingly; it may be necessary even in such a situation however to employ the caustic, but surgeons now frequently mix it with opium.--Caustics, it is evident, sometimes give but little pain, for, having been applied as common plaisters, and represented as such to the patient, he has not known that he had undergone this operation*.

A great

* Mr. *Else* says, " Within this last twelve-month only, we have mixed *opium* with our caustic, and we have reason to think it greatly lessens the pain, insomuch that several patients have fallen asleep during its operation, and all have owned that it was very easy to bear; nor does the *opium* appear in the least to destroy
" the

A great advantage of the caustic is the room it makes for a free and complete discharge; and this treatment is very rarely followed by *sinuses*, jagged lips, and callous or inverted edges, which so often appear after the use of the knife, even in good habits of body*.

“the virtue of the caustic.” *Essay on the Cure of the Hydrocele*, p. 33; where he recommends the Caustic in preference to Incision.

That I may not be misunderstood by those readers who are not of the profession, it must be observed, that *the opening abscesses by caustic* is here recommended rather than *by incision*; but so far from being an advocate for *caustic* and corroding applications to sores, I entirely disapprove of them, having seen much mischief arise from their use.

* A sinus is presumed whenever the discharge is greater than might be expected from the size of the sore. It is cured by compress and bandage, especially when assisted by proper medicines. When these fail, recourse is had to incision. Mr. Sharp and Mr. Pott have recommended the knife in preference to the scissars, which, happily for mankind, are falling into general disrepute, and which these gentlemen condemn in the strongest terms, on account of their pinching at the same time that they cut; besides, the lips of wounds so divided, tumify, are generally painful for several days, and indisposed for healing. Mr. Pott says, G “that

On the Cure of Abscesses by Caustic.

WHEN the caustic is removed, the matter sometimes bursts forth; when it does not, it may be set at liberty by the introduction of the lancet, which is now not felt at all, if the caustic has duly performed it's office. The eschar commonly separates in five or six days. Some surgeons apply hot terebinthinate dressings, imagining them to draw, and

“ that scissars are an instrument that may assist
 “ an awkward or unsteady hand, but are more
 “ fit for a farrier than a surgeon.” *Fistula in Ano*, p. 49.

Counter, and particularly depending openings, judiciously made, preserve skin, and cure many sinuses. There cannot be a more absurd or cruel practice than to cut away an oval, circular, or indeed any piece of the sound skin of an abscess, after making a longitudinal incision. Excision of the skin is recommended by Mr. Sharp where there is much of it *discoloured*; but, as skin, greatly discoloured, will often recover its complexion, and when much diseased will perish of itself, this practice can seldom be necessary.

and help the separation mechanically; when in truth this event is produced by the rising granulations underneath throwing out the eschar; which shews it to be the act of nature and the constitution, external dressings availing little; but internal medicines, which add vigour and impulse to the circulation, are certainly of use on that principle.

Incised wounds are not so easily dressed, on account of their lips, as those by *caustic*; and some practitioners have observed, that much mischief is done by the improper mode of dressing wounds made by *incision*, either by distending them with large and hard dossils, or by dressing them too superficially; but the sore from a *caustic* is liable neither to one nor the other of these evils, since the cure advances of itself, requiring the least assistance imaginable. This surely is a strong

circumstance in favour of the latter. Another of as great importance is, that a *caustic*, of the size of a fixpence, laid on a depending part, will effect a cure as completely as an incision of several inches of the skin, which I have known frequently, and others of the profession have observed the same, particularly in large abscesses near the *rectum*, called sometimes *Incomplete Fistulæ*; as well as in other parts*.

Mr. *Sharp* says, “ When issues are
 “ made, or bones exposed, the eschar
 “ should be cut out immediately, or
 “ the next day.” — This operation
 must

* Daily experience evinces the little necessity there is in general for openings either by the knife or caustic in these kinds of abscesses. When they become really fistulous the case is altered, and a division of the sinus becomes necessary.—Restoratives to amend the constitution ought however to be given previous to incision, there having been repeated instances where such remedies alone have effected a cure.

Caustics are never applied to abscesses about the face, for an obvious reason.

must give great pain to the patient, and some to the surgeon also, if he possesses those tender feelings, for which Mr. *Sharp* was always esteemed, as well as for his judgement and singular dexterity in the operative parts of surgery.—The eschar, it is certain, need not be cut out.—One or more kidney or French beans, with a proper compress and bandage, will adapt themselves, immediately after the separation of the eschar, with very little pain; and, on account of their form, are preferable to peas, which penetrate so deep into wounds, as not only to be painful, but injurious.

CHirurgical writers describe wounds and ulcers as going through three stages in the course of their cure,—*Digestion, Incarnation, and Cicatrization.*

Of Digestion.

IN the first stage, that of *digestion*, (which is the formation of a certain quantity of *good pus* * upon the surface of a sore), oily dressings are most in use, and these may be applied warm, but not hot; it being an established position, to the honour of modern surgery, that the most mild and easy applications answer this purpose best. It is perhaps doubtful whether there are any applications which actually promote *digestion*; but these may be considered in effect *digestives*, as giving no interruption to Nature in this great and important business, whilst painful dressings, consisting of hard dossils, and loaded with corrosive powders, (falsely called *Digestives*), defeat the very aim and purpose

* *Pus laudabile,*

pose they were intended to promote. *Digestion is an act of the constitution*; and when the latter is in a good state, the former advances properly. When the *vis vitæ* is defective, internal medicine and a nutritious regimen are required, and do infinitely more good than any external applications whatsoever.

Of Incarnation.

THE second stage is that of *incarnation*, in which the wound fills up with *granulations of flesh*, and, when healthy, has a florid aspect, which is an excellent symptom. When these granulations are luxuriant, and rise above the edges of the wound, it has been usual to call such an appearance a *Fungus*, and to apply corroding medicines to reduce it to a level

level with the skin; but these commonly give great pain, and protract the cure. Happily they are now laid aside in a great measure, authors and practitioners of the greatest abilities declaring, that dry lint with moderate pressure is generally sufficient to restrain such luxuriance.

Mr. *Sharp* observes, with regard to the *fungus* in a wound made by a sharp instrument, where there is no indisposition of body, “ that dry lint only is generally the best dressing: at first, it stops the blood with less injury than any styptic powders or waters; and afterwards, by absorbing the matter, which in the beginning of *suppuration* is thin and acrimonious, it becomes, in effect, a *digestive*. During *incarnation* it is the softest medium that can be applied betwixt the roller and tender *granulations*; and, at the same time, is an
easy

easy compress upon the sprouting *fungus*."—This is perfectly lenient and sensible, and comprises no small part of the process of healing sores in few words.

Mr. *Freke*, in his *Essay on the Art of Healing*, published in the year 1748, was the first writer who opposed the application of caustic and corroding dressings to fungous ulcers, and recommended warm poultices to promote perspiration in the parts affected; remarking, that *callous edges* were best subdued by relaxing means: in this mild doctrine he is supported by many modern practitioners, who have laboured to establish it for the greater immediate ease, as well as future benefit of their fellow-creatures. Formerly surgeons pared away *callous edges* with the knife; and what was the consequence? After the most excruciating pain, *the callosities* re-
turned;

turned; the cause, namely the bad habit, remaining, and an irritation being kept up inimical to *healing*, which, on the contrary, is best advanced by the perfect tranquillity (and, when the ulcers are in the legs, by the *horizontal position* also) of the part affected.

Mr. *Freke* further observes, page 107, that “ all writers on this subject have agreed to subdue *funguses* only by drying *vitriolic* or caustical applications; whereas my method is quite contrary to what is universally laid down; which is, that greasy or mucilaginous relaxing medicines do ever create *funguses*. I readily own the proposition to be true, for which reason I make use of a mucilaginous cataplasm to relax these schirrous diseased parts, and thereby make them discharge their enemy. And
“ in

“ in these cases I let the *fungus* in-
 “ crease as much as it will.”

Again, page 110, “ I never think
 “ of destroying it by *vitriol* or the
 “ like, but rather choose to give a
 “ full loose to the parts, finding
 “ them healing faster from the edges
 “ when the strangulation has been
 “ taken off, by sweating out that
 “ which occupied spaces which did
 “ not belong to it, rather than by
 “ art, cropping off the top of the
 “ *fungus* by *vitriol*, &c. and thereby
 “ forcing it to heal, whilst it remains
 “ callous and diseased.”

These observations, and many
 others, the result of long experience
 in St. Bartholomew's Hospital, as
 well as an extensive practice else-
 where, shew Mr. *Freke* to have been
 a man of a penetrating genius, and
 sound judgement, with great know-
 ledge of the healing art. They are
 his

his own original ideas, and form the basis of the modern mild approved practice, which, without doubt, will stand the test of future ages.

Recent bland oil, either in its liquid form, or modified with wax or diachylon, is an universal and proper dressing for sores.

The healing of a sore is the act of the constitution, and depends on internal impulse, not on the specific quality of unguents. These, when of a lenient quality and fresh made, do good, by keeping the part moist, and defending it from the air; when rancid they do mischief, though composed at first of ingredients perfectly mild and innocent. Oil is artificial *pus*, which last, when of good quality and consistence, protects and comforts the tender wound; when acrid, it causes pain and mischief; in which case recent oil, mixing with the matter,

matter, and correcting its pernicious quality, gives ease. When the *pus* is mild, yet too redundant, dry lint absorbs it, renders the sore clean and comfortable, and may be continued till the discharge becomes so small as not to moisten the lint sufficiently to prevent its adhesion. This should be laid light and thin on the middle, and not cover the edges of the sore*.

* Some may be induced to remark, that the doctrine here laid down, with regard to what are called healing ointments, *viz.* that they are so simple, ought not to be divulged, as it may encourage improper persons to interfere in cases of Surgery, to the injury of the public and the professors of the art of healing. In my opinion, the making our art plain and intelligible is the only way to prevent mankind from being imposed on by empirical pretenders. Surgeons have no objections to their patients understanding the nature of the disorder or of the remedies, wishing to convince their reason and judgement, and not, like empirics, to deprive them of both. In matters of physic and surgery, the merit consists as much, and perhaps more, in the judicious application of remedies, than in the remedies themselves.

We cannot adduce a greater proof of *Nature's strong propensity to heal*, than the instance of the difficulty with which a pea is retained in an issue, or a tent in a wound; where, notwithstanding the utmost exertions from pressure and bandage, Nature oft prevails, throws out the offensive extraneous body, and heals the orifice.

In like manner will wounds *incarnate* in defiance of mal-practice. Nature one day puts forth her granulations of flesh, which are *the proper and only materials* for filling up a sore; the next, perhaps corrosive medicines are applied to destroy these luxuriant granulations, too often falsely called *Fungi*, or proud flesh; and thus is the constitution counteracted in its salutary endeavours *. The absurdity of
of

* Mr. Freke says, p. 126, "A surgeon is but a
" scavenger to Nature; for, if the various parts
" of the blood did not supply the many losses
" of

of such treatment is evident to every unprejudiced observer*.

What the antients endeavoured to effect by painful escharotics externally applied, the wisest of the modern professors accomplish by internal, invigorating medicines, assisting Nature and correcting the habit; knowing that to be the only rational method of *healing* which takes away the preventing cause, whatever it be.

Cicatrization.

CICATRIZATION is the last stage, and completes the cure.

Sores are covered over, first, by the elongation of the surrounding old
H 2 skin,

“ of the body, what could the surgeon’s art do
“ for his patient ? ”

* A little dry lint, or lint spread with a mild cerate, or poultice which imbibes the *pus* and keeps the sore clean, is all that is here required.

skin, which is drawn in towards the centre of the fore ; then, by the formation of the new ; and sometimes from different small points (like islands) in the wound, which in this case *cicatrizes* fast.

An even *cicatrix* is much to be wished, and (except in cases of burns and scalds) is often easily obtained by proper bandage. In common incised wounds, where the habit of body is good, the *cicatrix* is formed without any trouble ; whilst in ulcers of long standing this latter part of the cure takes up much time, and requires some deliberation. In these cases, desiccative topical applications are generally condemned, fatal consequences * having arisen from the sudden stoppage of habitual discharges. The general sense of the profession, and indeed of mankind at large, is, that

* Apoplexies, Asthma's, &c.

that Nature should take her own time to effect this her last act in the cure of every wound; the presumption will then be, that such sores will not break out again. Some think it is owing to the application of drying powders and ointments, commonly used to expedite the cure, that newly-healed wounds sometimes open again; an accident which the surgeon attributes to a very common, though, it is presumed, not always the true cause, the bad constitution of the patient*.

To prevent the return of sores, especially old habitual ones, issues near the part affected are usually and strongly recommended: I have often known them made without any advantage; for all the art of surgery

H 3

could

* Several extraordinary and well authenticated cures of habitual ulcers performed by the *Malvern* waters, are related by Dr. *Hall* in a late publication, which contains a great deal of very useful information on the subject of the healing art.

could not keep them open any length of time, but the constitution would have recourse to its old drain; happily indeed for the patient, if we are to form our judgement from common sense, reason, and experience.—

Ab extrâ intûs redire, malum est.

An equal bandage, which just properly supports the parts, especially when the sores are in the lower limbs, seems to be the best security against a relapse.

*On the Inosculation of Wounds; or
healing by the First Intention*.*

IF there needed any further proof how unnecessary a multiplicity of healing ointments are in good constitutions,

* When the lips of fresh wounds are brought into immediate contact, and unite at once without passing through the different stages common to other sores, those of *Digestion*, *Incarnation*, and *Cicatrization*, they are then said to heal by the *first Intention*, by *Inosculation*.

tutions, we might instance the case of fresh wounds, where there is a simple division of the skin and integuments, the lips of which being brought into contact with each other, and so retained by plaister or other bandage, will heal in a few hours by *the first intention*. The blood alone is here esteemed the best medicine, sufficient without ointment, and preferable to all the solutions of gums in spirits, called Balsams, which many people apply; they appear to me only to give the patient pain, without rendering him any benefit in return. Mr. *Freke* indeed recommends the use of balsams to lacerated wounds, “as a varnish to cover such small filaments, or lacerated parts of the wound, as the air without it would immediately take hold of and mortify.” p. 128.

Instances

Instances of union by the first intention are seen every day, and often very striking ones. I shall mention a very singular one.—During my apprenticeship, a youth, about twelve or thirteen, living at the Dog Tavern, *Garlick-hill*, had the misfortune to fall upon the edge of a case knife, which penetrated the left lobe of the lungs, the air from which nearly extinguished the flame of a candle. The hæmorrhage from the wound was considerable, till Mr. *Pott* placed the lad on his back, when the bleeding stopped. It was dressed lightly with dry lint; but fearing it might bleed internally, he made an unfavourable prognostic, and was most agreeably surprised to find his patient had no bad symptoms. He recovered in less than a fortnight; whence it was concluded the balsamic quality of his blood, uniting the wound by the first intention,

intention, had effected the cure. He was bled at first, to guard against the symptomatic fever.

Several instances of the remarkable inosculation of sores, are to be met with in Dr. *Kirkland's* Treatise on Fractures, lately published.

On SUTURES.

OF all the modern improvements in surgery, none pleases me more than the general disuse of needles and ligatures in fresh wounds; they generally did a great deal of mischief. There still are cases, however, where one suture or more are absolutely necessary; as in wounds of the lip, throat, scalp, and other parts*.

Where

* When there is a division of the skin of the throat and *trachea arteria*, it is absolutely necessary to make use of the suture to the external wound, but not to stitch the windpipe, as wounds of that part heal well in a short time, and much better without the needle than with it.

Where the lips of wounds can be brought nearly or quite into contact with each other, adhesive plaister and retentive bandage (absurdly called *the dry future*) are quite sufficient, and save the patient an infinite deal of pain and trouble, attendant on the true future with needle and ligature.

It is well known, that futures are only temporary, and that the threads cut their way out, as the fore digests; that they are introduced with much pain, exciting inflammation, and sometimes fever, whereby the cure of wounds is greatly protracted. But it must also be admitted, that they are often useful, particularly where *the dry future* cannot be employed in such manner as to secure immoveably the divided parts.

The operation for the bare-lip may be performed without needles, by means of adhesive plaister and a bandage,

dage, the threads of which intersect each other, drawing in opposite directions, bringing the divided edges into approximation, and retaining them in that state. The incised lips are best kept in their due position, first by a slip of *gummy Court plaister*, and finally secured by this sort of bandage, which Dr. *Hunter* used to exhibit in his lectures.

*Observations on the Use and Abuse of
the Bougie.*

A Young person labouring under a continual diarrhoea, which had reduced him to the last stage of *anæsthetic*, sent for me at the request of the medical gentlemen who attended him.

The water which passed by the urethra being in very small quantity, led us to suspect a communicating aperture

aperture betwixt the urethra and the rectum. Having satisfied ourselves in this particular, and proved beyond a doubt that it was so, we passed *the silver flexible catheter*, and drew off a considerable quantity of urine. As it was necessary an instrument should be left in the passage to bring away the water as it was collecting, we substituted *the hollow bougie*, smeared first (as is usual) with oil, which gave no pain, and afforded nature an opportunity of healing the wound, by taking away the preventing cause, the incessant irritation from the salt urine. He was cured in a month, and recovered his former health and vigour.

The bougie here, as in many other cases, was highly beneficial. This operation requires in general the cautious hand of a surgeon, as bad consequences have arisen from passing bougies, particularly on aged persons.—

Two

Two singular cases have come within my knowledge; one was that of a person of thirty years of age, who, instead of the surgeon's bougie, made use of a common wax * taper, (an article in which he dealt,) and this excited pain and inflammation. He desisted, however, from the practice, before he had done himself any considerable mischief. The other was a gentleman of threescore, who thought to effect the removal of his complaint by violence, (poor mistaken man!) instead of gradual dilatation, without

* “ The old surgeons employed upon these occasions a small wax candle (bougie); but the wax often melting in the urethra, and the wick sometimes breaking in the extraction, and a part of it remaining in the passage, the danger of this accident has for many years brought it into disuse, and the bougie is now made of cloth dipt in wax or plaister, and then rolled up into the proper form. These bougies are of all sizes, from that of a knitting needle to the size of a large catheter.” Mr. *Sharp's* Critical Inquiry, &c. p. 148. — Surgeons formerly used leaden and whale-bone bougies. *Ibid.*

irritation or pain, which is the only rational, safe, and efficacious method of using the bougie. A mortification of the urinary passage and bladder presently ensued, and he died the following day.

Much has been said and written concerning *the specific quality of bougies*. Monfr. *Daran*, who introduced them into general use, certainly merits great praise on that account, as the disorders of the urethra and bladder, *strictures and suppressions of urine*, which are dreadful to bear, have been and are daily and happily relieved by their means. Wishing, however, to monopolize their sale, Monfr. *Daran* insisted vehemently on the *specific, suppurative, balsamic, detergent*, and other excellencies of his particular bougie. Many surgeons finding their experiments very successful, have imagined that they had discovered

Daran's

Daran's own composition, not giving themselves leave to think there might be a variety of compositions capable of producing nearly the same effects. Their bougies were made of *a proper consistence and mild quality*, in which, it is now universally allowed, doth consist their principal and indeed their only excellence.

This ingenious foreigner had the address to persuade patients, that his bougies brought on a suppuration, and extracted the latent poison. They knew not that any bougie would cause some discharge, when introduced into the urinary passage even of one who never had any disorder in those parts; for want of which piece of necessary information, they were easily deceived by his specious and very plausible doctrine.

After introducing the bougie, he used to leave it in the *urethra* for

five or six hours, when he would return to his patient and extract it, and finding it covered with *mucus* of course, he called this *the suppuration arising from the medicinal virtues of his bougie*.

Many surgeons do not retain the *bougie* in the urethra of their patients more than a minute or two, and find it succeeds best when not continued there. Others, where the stricture is obstinate, or of considerable standing, keep it in the passage a much longer time; and when it gives no pain there, we may fairly conclude it does no mischief, but probably the contrary*.

A bougie

* When it is to remain long in the urinary canal, the bougie should be secured with thread from slipping into the bladder. Dr. Hunter attended such an accident once, in consultation with Sir *Cæsar Hawkins*. The bougie insinuated itself into the bladder in the night. They tried all means, and, amongst the rest, they put the patient into the warm bath, made him keep his urine, which at last forced the bougie out of the urethra

A bougie of a tolerable size, that of a crow's quill, will generally be introduced with more ease than a very small one, the extremity of which becoming a sharp point, is apt to insinuate itself into the *lacunæ* of the urethra, and cause a pricking pain. Yet when the urinary passage is very much contracted in its diameter from the thickness of its membranous coat, a very small bougie may at least for some time be absolutely requisite.

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Obfer-

urethra in three or four folds, the plaister being melted away, and the bougie reduced to its pristine state, that of a rag or slip of cloth. The patient narrowly escaped an operation by the knife.

*Observations on the Stone in the Kidneys
and Bladder.*

THESE are very common and dreadful complaints of the urinary passage. When the stone has been generated in the kidney, and is endeavouring to descend through the *ureters* into the bladder, the pain is most excruciating and hardly to be borne, owing to the stones sudden and great distension of those small nervous tubes the *ureters*, the diameters of whose canals are so very small as to convey the urine, only drop by drop, into the bladder. To facilitate the descent of the stone, some have recommended strong *diuretic* medicines, and other forcing liquors, not generally approved of by the more judicious practitioner, who will commonly substitute oily relaxing anodynes, warm bath, and lubricating medicines,

medicines, in their stead, allowing time for the flow and gradual dilatation of this narrow passage *.

When

* “ When calculous concretions are actually formed in the kidneys, and are to be brought away by the ureters, the case requires very prudent management. It is a very common error in practice, to give strong, forcing diuretics, with an imaginary view of driving out the gravel with the urine: whereas this intention is answered with greater safety in most cases, by relaxing and lubricating medicines; especially if, in case of violent pain, bleeding be premised, and anodynes interspersed. For a stone is never forced out while the patient is in great torture, though, when the pain ceases, it sometimes comes away unexpectedly, and almost of its own accord, with the urine. And the reason of this is, that pain constringes the fibres of the parts, which resume their natural state, and perform their functions properly, when the troublesome sensation is over. Wherefore three or four grains of *opium*, dissolved in five or six ounces of the common decoction, may be given by way of glyster, which will greatly relieve the pain, and sometimes procure greater advantages. However, there are conjunctures, after the pain is abated, when powerful diuretics may be administered; but with this precaution, that as soon as they have had their effect, they are no longer to be continued.

“ All

When the stone is arrived at the bladder, there are many specific remedies

“ All this time the body should be constantly kept open ; wherefore in case of costiveness, it will be expedient to give a turpentine glyster, and sometimes to purge gently with infusion of senna and manna ; but strong cathartics are to be avoided. Of the lubricating medicines above-mentioned, the chief are oil of sweet almonds, syrup of marshmallows, emulsions made with almonds, and the like ; to which may be added, the use of the warm bath : but among the powerful diuretics, turpentine and soap are the best. Such is the course to be pursued in the paroxysm of the disease. But, out of it, the patient should use bodily exercise, especially riding every day, but so as not to fatigue : his food should be mild, and of easy digestion ; and his drink either small wine and water, or new soft ale, which will be rendered better and wholesomer if ground-ivy leaves be infused in it while it is working. Mead is likewise a proper drink ; for honey is an excellent diuretic. A spoonful also of honey in a glass or two of the infusion of marshmallow roots is an admirable cleanser of the kidneys, if used for a constancy. The wines ought to be the softest and smoothest that can be had, and the lightest ; clearest river or running water is preferable to all other. For, as *Pliny* says, those springs are particularly condemned, the waters of which line the vessels in which they are boiled with thick crusts.” *Mead's Medical Works*, vol. iii. chap. x. p. 95.

medies recommended by empirics, as capable of dissolving it. Such of them as have acquired any great degree of reputation, have accomplished it by *soap lees*, a medicine of a strong caustic quality, and consequently very prejudicial to the nervous tender coats of the stomach. Therefore some, who even in this way are not so destitute of sense and humanity as others of them are, administer the lees in broth, which, sheathing its lixivial salts, takes off its *stimulus* in a great measure; and even when thus medicated with all their care, it has still the pernicious effects of drams, and in time gives their patients a certain *quietus*. When this medicine is in the regular hands of the profession, they are more tender of their patients, and of their own reputation, than to put either to the hazard; and if they find themselves

selves under a necessity of prescribing the lixivium, they adapt the dose with judgement, and every prudent, necessary caution; but they generally try other medicines first, which are not exceptionable, and yet conduce as much, perhaps more, to the relief of their afflicted patients.

The object of the faculty has ever been to discover an effectual yet safe remedy for this disorder: their experiments have been endless. They have found many solvents for the stone, some which caused it's solution presently, others which required a longer time. They have experienced several attempts to impose on their understandings. One empirical pretender had almost succeeded, by a feat of legerdemain. A party being assembled on this occasion, he told them, he had a small phial in his pocket containing a liquid which would certainly dissolve a
stone

stone in the bladder ; and he declared at the same time that it was perfectly innocent, and might be given with safety to a child. The gentlemen present saw the liquor poured into a vessel upon a stone, and perceiving it dissolve almost immediately, were much pleased ; however they determined to put the man to his test that very instant. He had said he would swallow the liquor, to convince the spectators of the innocence of his *specific*. He drank off the fluid in their presence, to their great astonishment ; but, on an immediate search, a phial apparently filled with the same liquor was found upon him ; the contents of this they then challenged him to drink ; which he refused. He therefore was dismissed their presence with disgrace. —It is much to be lamented that we know not of any medicine capable of dissolving the stone, and which can at
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the same time be conveyed with safety into the bladder, either by the stomach and kidneys, or the urethra, without exciting pain, and consequent inflammation of the parts through which it is obliged to pass. Several years ago, the parliament offered a large reward for the discovery of an effectual *lithontriptic*. The reward was afterwards claimed and paid *. One of the patients appointed for

* “ I cannot avoid observing, though I am extremely sorry for the occasion, that some gentlemen of the faculty, a few years since, acted a part much beneath their character, first in suffering themselves to be imposed on, and then in encouraging the legislature to purchase an old woman’s medicine at an exorbitant price; by vouching that it was capable of breaking the stone in the bladder, and bringing away the fragments with the urine. This medicine is a composition of soap and lime made of different shells, which every body knows to be highly caustic. And while the scheme was carrying on, some stones cut out of the bladders of patients who had used the medicine, were very industriously handed about, as a testimony of its lithontriptic quality; because

for trial of this celebrated remedy,
was examined in the usual way by the
faculty,

because these stones had inequalities and holes here and there in their surface, which were asserted to be erosions made by the medicine. But those gentlemen ought to have known that stones are sometimes naturally formed in the bladder with such inequalities and pits on their surface, as may be mistaken for real erosions: several examples of which have fallen under my own observation. So great is Nature's variety in forming calculous concretions, &c.

“ Now whereas such vast encomiums were bestowed on this new medicine, as it was then called; it is no way strange that our legislature should desire to purchase the manner of making it almost at any price, in order to publish it for the benefit of the commonwealth. And indeed the purchase redounds as much to their honour, as it does to the discredit of their advisers, who ought to have known, that things endued with such a corrosive quality as to be able to dissolve the stone, could not lodge in the bladder without injuring that organ.

“ As nothing ought to be disguised, no truth concealed in a matter of such moment, I must take notice of the experiments made by Dr. *Whytt* of *Edinburgh* on this subject. That gentleman, after seriously considering the inconveniencies, and sometimes the mischiefs also of this celebrated specific, resolved to omit the soap, and try what virtues lime-water might have in dissolv-

faculty, and the stone was distinctly heard when touched by the instrument. The gentlemen unanimously agreed that this was a very fair case for the experiment. The course of medicines was immediately entered upon and continued for many months, when the patient found himself relieved of his pains, and *apparently* cured. The faculty again met, and re-examining him in the same manner, candidly

ing the calculus. His first experiments were made on several fragments of calculi with lime-water from common quick-lime; and afterwards resolving to try the power of animal-lime, he repeated them with lime-water made with oyster-shells and cockle-shells well calcined, by pouring seven or eight pints of water on one pound of the fresh calcined shells. The experiments succeeded with both sorts; but he soon found, that the oyster and cockle-shell lime-water possessed a much greater power of dissolving the calculus than that of stone-lime. The quantity he recommends, is four pints every day for adults, and for children less in proportion; and he concludes with instances of the happy effects of this method.—His whole dissertation is very well worth the perusal.” *Mead’s Medical Works*, vol. iii, chap. x. p. 95.

candidly owned they could not perceive the *calculus*. One of them indeed said, Though it was true he could not feel the stone, yet he did not believe the medicine could possibly have dissolved it. The fact being so well proved, he was thought obstinate. This patient dying soon after, the bladder was laid open, and no *calculus* could be found. The incredulous gentleman however, taking hold of the *fundus* of the bladder, shook it, when a clattering noise, such as arises from a collision of stones, was distinctly heard; "I thought," said he, "there were stones; and," with an emphasis, "here they are!"
 ——— In short, it appeared that several stones had, by their weight and pressure on the inner membranous coat of the bladder, formed themselves cysts or pouches, and lay there secure and fixed; through which fortu-

nate circumstance (*it is presumed*) his pains immediately left him. A most happy event, from whatever cause. Dr. *Hunter* exhibits the *calculi* in their respective cysts, at his lectures, giving an account of them, which I have taken the liberty to relate briefly, and as well as I could from memory.

A particular friend of mine has voided, within these twelve months, some small stones, which (in the opinion of Dr. *Hunter* and Mr. *Cruikshank*) had been generated in the kidneys. He passed much gravel every day in his urine, which was high coloured, and often bloody. Constitutionally troubled with this disorder, he had increased it by too frequently drinking pump water. By taking honey several times every day, in tea or otherwise, to the amount of a pound in a week, by abstain-
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ing from water, and drinking mild porter twice every day, he has been free from any actual *calculi* for some months past; but he daily voids of late great quantities of a *loose sabulous matter*, which appears to be the effect of this process, since what passed before that time was of a more firm and calculous texture*.

* The account given of the stone by Dr. *Smith* is very concise and pertinent: 'The intentions of cure in the stone are twofold; radical and palliative. The radical will consist in taking away or dissolving the stone. The palliative in the relief of the most urgent symptoms.

'The stone may be taken away by the operation of *Lithotomy*; or under some circumstances may be dissolved by the preparations of lime. The *Sapo amygdalin.* or *Sapo venet.* may be taken from ʒij. to ʒss. or ʒvi. morning and evening; and lime water mixed with a fourth part of milk may be drank from a quart to three pints every day. The symptoms are best palliated by opiates, by the mouth and glysterwise, with gentle laxatives, and the mucilaginous relaxing medicines.' *Formulae Medicamentorum*, p. 135.

On *Herniæ*.

AN *Hernia* (*Rupture* or *Descent*) is a disease much more common than is generally imagined, being oft times hereditary, and kept of course very secret, none being willing to expose their own bodily or family infirmities to the world.—When the intestine has been some time in a state of *incarceration*, so that the *fæces* cannot obtain a passage, and the intestine cannot be returned into the *abdomen*, the operation * with the knife then becomes

* This is an operation in itself very dangerous, and becomes much more so by being commonly delayed too long. It demands a very minute and accurate knowledge of the anatomical structure of the diseased parts, and a very dexterous and steady hand. The critical time for operating is a subject of great consideration, and requires a sound and discriminating judgement.

When a *crepitus* is perceptible on handling the tumour, we may be assured the knife has
been

becomes absolutely requisite; it is therefore much to be wished that this was rendered less frequently, or not at all necessary.

The *clyisma fumosum* (tobacco glyster) has been sometimes employed of late in these cases with success*; and perhaps

been deferred too long, and now would only bring disgrace upon the operator; this *emphysema* being an infallible symptom of actual mortification.

* The particular machines for conveying the tobacco are either a pair of bellows with a worm tube, or large syringe, by which means great quantities of the smoke of this powerfully stimulating plant are thrown into the inflamed but torpid intestines, frequently procuring a copious evacuation of their indurated contents, and a return of the *hernia*, when all other means had been tried without success.

Some surgeons prefer the infusion of the tobacco to the fumes, which are injected glysterwise, and with equal success. — The infusion is made by pouring one pint of boiling water on one drachm of tobacco. — Mr. Pott, in his *Chirurgical Observations*, p. 117, “ recommends the application of cold discutients, (which Mr. Sharp thinks have a dangerous tendency) rather than warm relaxants, such as poultices, which having no effect beyond the skin, cannot remove the stricture

perhaps would succeed much oftener if the application of it was at the beginning of the strangulation, instead of being deferred almost to the last.

It behoves every patient who has a returnable *hernia*, to have a *proper*

stricture made by the tendon. Practitioners also are here cautioned against handling *herniæ* too much in endeavouring to return them, such attempts being very hazardous when the intestine is highly inflamed, and may probably bring on a gangrene."

It is not meant to discourage every gentle method of effecting the *manual reduction* by the advantage of a decumbent position of body, and by advising the patient to draw in his breath, &c. which efforts are to be continued so long only as there is any reasonable prospect of success. Blood-letting (*usque ad deliquium animi*) even till he faints, by inducing a general relaxation of the body, has often promoted the reduction so ardently desired.

Mr. Sharp says,—“ The reduction by the hand should be performed with great caution ; and in the *Bubonocèle* we should always endeavour to push the parts towards the *ilium*, that being the direction in which the *Hernia* lies : we must not compress too rudely, nor must we soon desist from the attempt, for by long handling it we frequently at length succeed.” *Critical Enquiry*, &c. page 22.

per truss immediately *, to prevent a descent of the parts; and it should be constantly worn; since, without such security, he would be in hourly danger of his life †.—This caution is
of

* The *Bubonocoele*, (rupture in the groin) Mr. *Sharp* observes, ' is a frequent complaint; but much the greater part of these *Hernia's* are recovered by the mere strength of nature, for as they advance from their infant state, the muscles of the abdomen and the tendons of the rings become more rigid, and resist to the future falling of the *viscera*. When the disorder happens to children of about two years of age, the proper bandages to support the *Hernia* within the abdomen are more necessary; not but that nature overcomes the illness in every part of youth, though the older the patient is, the more necessary it will be to call in the assistance of art; but still it must be remembered that, even in the most tender infancy, a *truss* is useful, if it can be applied without galling the child.' *Critical Enquiry*, &c. p. 9.

† Many years ago, a celebrated practitioner in *rupture curing*, whose abilities and cures had been often called in question, undertook to produce a number of patients (whom he pretended to have radically cured), to undergo an inspection.—They were introduced with their bandages on, and supposed themselves to be perfectly well.
Being

of so much importance, that it cannot be too often repeated. The greatest care must likewise be taken that the gut does not slip down under the truss,

Being directed to take off their trusses, they were convinced of their mistake by the *immediate* descent of their ruptures.

There are two other instances on record of the imposition of *rupture curers*. One of the injured parties told me how ill he had been used; but I was no stranger to the affair. It had been argued in *Westminster Hall*. An empiric brought an action some years since against this man, for a very exorbitant sum, for the cure of a rupture; when it appeared in court, that the complaint had *not* been a rupture, but an *abscess*. This he had opened with a lancet, which he would not have done (as it would have been immediately mortal), if he had not known what the disorder really was. He was cast of course. — The other is a late and a similar transaction; and this empiric was also defeated, in a court of justice. — It is notorious that these people sometimes add murder to their other crimes: they have wantonly and daringly performed this very dangerous operation (which is only justifiable where life is at stake) on patients who made no other complaint than of the weight and incumbrance of their Ruptures.

————— *Quid non mortalia pectora cogis,
Auri sacra fames?*

truss, the pressure of which would give great pain, and might produce the worst of consequences: this must be particularly noticed by the parents of children; grown people would be directed by their own feelings to remove so great an evil. Youth may expect a perfect and *radical* cure of ruptures from an early application to bandage, which often produces an union and consolidation of the apertures or rings of the abdomen. In advanced life these implements are generally *palliative*, yet always a preservative from any fatal mischief. Internal remedies, unless merely to prevent constipation of the belly, are idle and trifling, or meant to deceive, and are administered only by empirics. When the contents of a rupture are not returnable, and at the same time not strangulated, a *suspensory* affords great accommodation and relief.

Observations on the treatment of Fractures called Compound.

FRACTURES are called *compound*, when there is a wound in the external integuments made by the fractured extremities of the bone: when the fracture is attended with a wound not made by a protrusion of the bone, it is called *complicated*; a case by no means so dangerous in general as the *compound* fracture. The hazard is judged to arise principally from the admission of *air* into the injured part; the modern method of cure is therefore to exclude it as much as possible, and by this method to reduce the *compound* to the state of a *simple* fracture. This is Mr. *Freke's* opinion, page 129. “ It is owing to
 “ the *air* that a *compound fracture*
 “ differs so greatly from a simple
 “ one: for, though the bones in a
 “ *simple*

“ *simple fracture* be ever so much
 “ lacerated, it seldom or never, with
 “ proper care, fails of doing well;
 “ but if the skin be broken ever so
 “ little, if the air be admitted to
 “ some extravasated blood, it makes
 “ a terrible difference betwixt one
 “ *fracture* and the other, which every
 “ knowing practitioner finds there
 “ is, from the causes before given.”

The external remedies in these cases
 have commonly been oily relaxing
 liniments and poultices, which requir-
 ing frequent renewal expose the sore
 to the bad influence of the air, and
 encourage too copious a discharge.
 This circumstance reduces the pa-
 tient's strength exceedingly, so that
 the bark, and other restorative cor-
 dial, given with the greatest pro-
 priety and most liberal use, are not
 able to prevent the patient from
 sinking.

Sensible of this circumstance, both *English* and *French* surgeons have, for some years past, adopted astringent and spirituous embrocations in compound fractures, moistening the dressings and bandage frequently with these, and forbearing to renew them as long as possible, that the external air might not gain admission; they had seen, no doubt, the ill consequence of such practice, and how much the patient's safety depended on the former precaution. Sinuses, so common in these cases, have been hereby prevented, as well as long confinement and delay: for it is certain that the *Callus*, whereby the fractured extremities of bones are united, cannot form whilst the matter lodges, and causes a continual interruption to Nature in her important work.

It has been generally remarked, that the cure of compound fractures
does

does not succeed so well in the *London* hospitals as in the country, where the air is more pure and conducive to health. On this account, the *London* surgeons recommend *amputation*, the country practitioners dissuade us from it; which difference of opinion gave rise to the following remarks. “It
 “ is very possible, however, that the
 “ attempt to save the limb in one
 “ case, and its speedy removal in the
 “ other, may be both equally right;
 “ since the difference between the air
 “ of a crowded city hospital and that
 “ of a private chamber in the country,
 “ will give room to expect a very different event in similar accidents *.”

Instead of the speedy removal of the limb in the latter case, suppose we were to remove the patient into the country, (which might easily be done by means of those splints recom-

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mended

* *Monthly Review* for last *March*, p. 243.

mended by Mr. *William Sharp*, which so commodiously bring gentlemen to town who are so unfortunate to break their legs in the country) there could be no doubt but the humanity of the governors of the city hospitals would readily induce them to provide for any expence thereby incurred, which should be the means of saving the lives or limbs of our fellow creatures.—There is another, and which appears to me a very probable reason of the ill success of compound fractures in the *London* hospitals, the free and intemperate way of life of the lower classes of the people in this metropolis, who, by indulging themselves greatly in spirituous liquors, impair their constitutions, insomuch that when an accident befalls them, their blood is too much vitiated and impoverished to admit of a cure: hence a mortification

fication ensues, and even the bark, that sovereign remedy, fails in its wonted relief.

Several years ago Mr. *Pott* unfortunately met with a compound fracture of his leg by a fall from his horse, at the time of my living with him, and of course I was a witness to the proceedings in the cure. The accident was treated like a simple fracture, and the air excluded.

His age was betwixt forty and fifty, and his constitution good; the wound healed without any sinus, and the callus was completely formed in eight or ten weeks. If relaxing means had been used, such as poultices, which are here improper for the reasons before mentioned, it is a question if this gentleman's many subsequent services would not have been lost to the community*.

* Previous to his own accident, Mr. *Pott* had treated cases of this kind in the hospital with

I was some time ago favoured with the case of a compound fracture of the fore-finger of a smith's apprentice, in the parish of *St. Clement Dane* in the *Strand*. The bone was broken obliquely, so that the two extremities

great success; amongst which was that of a boy of eight or ten years of age, who had a fracture of the radius, which protruded through the skin. It was bound up as a simple fracture, and the wound was healed in a fortnight.

Two other cases in private practice have since fallen under my care, and were successfully treated in this way. One of them was a gentleman of the Stamp Office, forty years of age, temperate, and of a spare habit. His leg was fractured, and did well in eight weeks without any bad symptoms. The other was a gentlewoman of fifty, and of a gross habit, who recovered in twelve weeks by the free use of bark and opiates. Here the symptomatic fever ran very high at first.

These patients were laid on their side with the knee bent, the position recommended by Mr. *Pott*, and Mr. *William Sharp*, by which the muscles are in a state of relaxation; in the old position these were always extended and in a state of action, which occasioned frequent and sudden spasms, attended with pain and lassitude, to the great distress of the patient, and the delay of his cure.

extremities formed sharp points. The divided part was suspended only by a very small portion of the skin; and being instantly replaced in a proper position by an eminent surgeon in the neighbourhood, defended by plaister, splints, &c. by the exclusion of the air, and the happiness of a good constitution, the use of the finger was in a great measure restored in a few weeks. There being at first, all but an entire solution of continuity of the skin, this case would have been despaired of by some who have less faith, because they have less knowledge, in Nature's healing powers, than the gentleman to whom this boy fortunately applied for relief.

I have known an accident, in most respects similar to the above, where a child's finger, which had been fractured, was evidently lost by the application of a poultice immediately to
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the fore, which prevented it healing by *the first intention*, and was injurious also on account of its weight *.

* The introduction of the following case shews that Dr. *Hunter's* advice has been, to treat the *compound* in the same manner as the *simple* fracture, and I believe no one will deny that improvement to be his. If it should be hereafter disputed, the Doctor's numerous pupils can prove this, as clearly as they have his right to many other important medical improvements and anatomical discoveries.

This case is a well-known fact; and though some have said it had the appearance of a fable, yet all agree that the moral is excellent.

Dr. *Kirkland* having had remarkably good success in the treatment of compound fractures, the reader is referred to his late publication, which displays the man of feeling as well as ability and extensive experience.

*The Case of a Compound Fracture,
related by Dr. HUNTER at his
Lectures.*

SPEAKING of the nature and cure of *simple* and *compound* fractures, Dr. Hunter observed, in his lectures, that, in treating the *compound*, many surgeons did mischief, and irritated the wound, by their officious and artificial manner of dressing it. Instead of that practice, he recommended treating the *compound*, as much as possible, in the same way as the *simple* fracture: and in confirmation of that practice, used to relate the following singular case, which was always heard with great attention, because the instruction was conveyed in the way of pleasantry.

“ A maniacal patient, Mr. G——, who was confined in the Infirmary at
Edin-

Edinburgh," (he says it was about thirty years ago), "seeming to have recovered a calm and rational state of mind, was allowed to take an airing in the garden by himself. Here he took the resolution of making his escape; and got over the garden wall. In dropping himself from the wall, which was very high, he pulled a large cape-stone along with him, and suffered a very bad *compound* fracture in his leg. He was carried round, and lodged again in the Infirmary, in this unhappy condition; and the surgeon, who was presently brought to him, set the leg, dressed the wound, applied the eighteen-tailed bandage, &c. in the usual way. After all this, the patient appearing to be very calm, the surgeon gave some proper directions, went away, and the patient was left alone to get some rest, which was thought proper, and seemed to be his own

own desire. His madness now took a singularly whimsical turn: he knew very well that he had got a miserable broken leg; but his crazy imagination made him believe, that the surgeon had mistaken the leg, had bestowed all his cunning upon the sound leg which required no attention, and had left the shattered limb to shift for itself. Under this firm persuasion, convinced that his surgeon was too ignorant to perceive his blunder, too conceited to be set right, and too proud to suffer such humiliation, he thought it would be most prudent, in his present state of subjection, for the cure of his broken leg, to make the best use he could, of the judgment and dexterity which God had given him. He removed the whole *apparatus* from the broken leg, with great attention, that he might be able to apply it to the other leg,

so

so exactly in the same manner, that the surgeon should not be able to discover the alteration; and, lest any suspicion should arise, and lead to an inquiry and discovery, he thought he should be still more secure, by secreting or hiding the other leg, that it might not be found, and appear in evidence against him. He therefore tore a large hole in the sheet and featherbed, and buried the wounded leg among the feathers.

“ The next day, when the surgeon visited him, he said, that for a while he had been in pain, but that by a fortunate and accidental motion of the foot, the pain went off, as by a charm; that he had continued perfectly easy ever since; and therefore was resolved to keep it as steadily as possible in the same situation. The surgeon finding him easy, the pulse quiet, and no symptom whatever of fever,

fever, went to the foot of the bed, and lifting up the clothes, said, Let us just see how the foot and leg look. The patient seemed much alarmed with the proposal, and entreated him, for mercy's sake, to desist; because, he said, the least motion in the world would disturb it, and bring all his pains back again. The surgeon assured him that the bed-clothes touched nothing but the cradle, and that the lifting of them up could not in the least move either the leg or foot; and then, observing to the students that the appearance of the foot was as favourable as he could wish, he expressed his satisfaction, and went away. Every day's visit, after this, turned out equally satisfactory, both to the surgeon and patient, till the fifth or sixth day, when the surgeon grew very anxious to see the wound, lest any lurking mischief should be

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concealed,

concealed, and was determined to remove the dressings. This the patient resisted, first with prayers, and then with imprecations and rage; but at last he was obliged to submit. The surgeon, with a cautious and tender hand, removed the bandages, and, as he went on, expressed the pleasure which he felt on seeing the skin, both above and below the wound, in so natural a condition. At length he lifted up the dressings, which he found were quite loose, and, seeing a leg now perfectly sound, which, a few days before, he had seen in such a lamentable state, you can better conceive than I can tell how he looked. After a short pause, he passed his fingers along the *tibia*, and then said, I only know that a fracture and wound there certainly was, and now there is certainly neither. Presently he recovered himself enough to recollect that it

was

was the other leg which he had set and dressed ; and said, Where is the other leg ? turning off the bed-clothes at the same time. Lunatics are quick in resources, not easily put out of countenance, and imagine that no body can doubt what they assert. Mr. G——, sensible now that the leg would be discovered, drew it out from among the feathers, saying, with great expression of resentment and rage, that he would now expose the surgeon's ignorance to the whole world ; that he always knew surgeons to be a set of ignorant fellows, though they wore large wigs ; and now he would prove it, by a shocking instance, to the satisfaction of all present. This leg, said he, holding out the broken leg, with a great cake of blood and feathers crusted over and round the wound, this leg, thank God ! is as sound as any man's :—

there, pointing to the other, is the broken leg,—you see what a desperate condition it is in;—and that fellow, being called, did nothing for it:—he was called to set a broken leg; but he did not know a broken leg, and bound up this. After venting some more of his indignation and rage in sarcastic and coarse language, he begged that some of the young surgeons would bind up his broken leg again (meaning the sound one), for that it was in great pain, was much disturbed with this impertinent examination, and, if not taken care of, would make him a miserable object, at best a cripple for life. The surgeon seeing his patient's imagination so strongly perverted, and being convinced, by the agitation which that misapprehension had raised, that it would be, upon the whole, safer to indulge him in his wild conceit, with

humanity

humanity as well as good sense, desired the young men to humour him, by putting the *apparatus* on the sound leg. From that time he was calm, and, in all other things, reasonable. The cure went on with perfect success;—the scab of feathers at last dropped off;—the wound was then found to be healed, and the callus compleated: A memorable lesson for surgeons, and a striking instance of the weakness of human reason, of the imperfection of our boasted art, and of the power of Nature ! *

* Having seen many instances of the absurd practice described by Mr. Pott, relative to the *rising ends of broken bones, particularly in simple fractures of the clavicle*, and having often wished to see this very great error properly censured, a passage is here inserted from Mr. Pott's works, which sets that matter in a clear and sensible point of view. ' He will, for example, know
' (says Mr. Pott) that the prominent part of a
' broken clavicle, that part of it which is next
' to the *Sternum*, is just where it should be,
' and that the inferior part, that which is connected with the *Scapula*, is out of it's place,

' by being drawn down by the weight of the
 ' arm; and therefore, instead of loading, as is
 ' usual, the prominent part with quantities of
 ' compresses, which never can do any service, he,
 ' by a proper elevation of the arm, will bring the
 ' lower end upward into contact with the other,
 ' and thereby with very little trouble accomplish
 ' what he never can do in any other manner,
 ' however operose. The same thing will happen
 ' from the same principles in the leg and thigh,
 ' &c.' Vide Chirurgical Observations, p. 71.

A

G L O S S A R Y

O F T H E

T E R M S o f A R T.

A

- A* B D O M E N, the belly.
- Abscess*, a gathering of matter.
- Absorbs*, licks up.
- Acrimonious*, acrid, sharp.
- Adhesion*, sticking.
- Amputation*, the cutting off.
- Aperture*, opening.
- Approximation*, the bringing parts together.

B

- Eubonocoele*, rupture in the groin.

C

- Calculous*, stony.
- Callous*, hard.

- Callosities*, hardnesses.
Callus, what knits a broken bone.
Cataplasms, poultices.
Catheter, an instrument to draw off urine.
Caustic, a burning substance.
Cellular membrane, fat.
Cicatrization, skinning over.
Constipation, costiveness.
Contact, touch.
Corroding, eating.
Crisis, the height or point.
Cuticle, scarf-skin.
Cuticular, of very thin skin.

D

- Decumbent*, lying down.
Depascent, spreading.
Desiccative, drying.
Diarrhœa, a flux.
Digestion, good discharge.
Diuretic, which provokes urine.
Dysentery, bloody flux.

E

- Elongation*, lengthening out.
Embrocation, a lotion or wash.
Emollient, softening.
Eschar, a slough or mortification.
Escharotic, eating, burning.
Excrescence, fungous diseased flesh, or wart.
Exfoliation, casting off of the bone.
Extirpation, taking off by the roots.

Extraneous, foreign.

Extravasated, forced out of its proper vessels.

F

Fæces, excrement.

Florid, rosy, red.

Fungus, loose spongy flesh.

G

Gonorrhæa, a virulent discharge from the urethra.

Granulations, small dots or points of flesh in any wound.

H

Hæmorrhage, flux of blood.

Hæmoptoe, spitting of blood.

Hernia, rupture.

Hydrocele, a cyst or bag of water.

Hydraulic, conveying water through pipes and conduits.

I

Incarnation, filling up with flesh.

Incarceration, confinement.

Incised wounds, cuts.

Inguinal, belonging to the groin.

Inosculation, union of the lips of wounds by contact.

Intestines, the bowels.

Integument, the covering or skin of the body.

Irritation, pain.

L

Lacunæ, flits or nooks.

Liniment, soft ointment.

Lithontriptic, medicines which dissolve the stone.

Longitudinal, lengthways.

Lubricating, softening, smooth, slippery.

Lues, a confirmed venereal disease.

Luxuriancy, plenty.

M

Manual, by the hand.

To masticate, to chew.

Maturation, ripening.

Membrana adiposa, the cellular membrane, or fat.

Morbid, diseased.

Mucilaginous, slimy.

Mucus, slime, a compound of a mueilage and water.

O

Orifice, an opening.

Oesophagus, gullet.

P

Peccant, bad, hurtful.

Phagedenic, eating, spreading.

Præputium, prepuce, foreskin of the penis.

Primæ viæ, the first passages of an animal body, stomach, &c.

Protuberance, swelling.

Pus, matter from a sore.

R

Rectum, fundament.

Rigors, shiverings.

S

Sabulous, sandy.

Saliva, spittle or mucilaginous fluid.

Sinuses, hollow places in ulcers.

Solution of continuity, separation of parts.

Suppuration, formation of matter.

Suspensory, truss.

Suture, sewing.

T

Therapeutic, which teaches the healing of diseases.

Topical, applied to some particular part.

Trachea arteria, wind-pipe.

Tumify, swell.

U

Vesications, blisterings, or separations of the cuticle or scarf skin.

Virus, poison.

Vis vitæ, the constitution.

Unctuous, greasy.

Unguent, ointment.

