

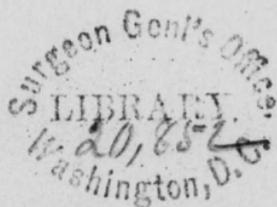
69
SHAKESPEARE'S

MEDICAL KNOWLEDGE.

BY

CHARLES W. STEARNS, M.D.

U. S. A. Med^e Staff 1841



NEW YORK:
D. APPLETON AND COMPANY,

443 & 445 BROADWAY.

1865.

WZ
330
S799s
1865

Film NO. 6225, no. 5

ENTERED according to Act of Congress, in the year 1864, by

D. APPLETON & COMPANY,

In the Clerk's Office of the District Court of the United States for the
Southern District of New York.

INDEX.

ANATOMY, 18, 73.

HYGIENE AND DIETETICS, 20, 24, 25, 26, 27, 33, 41, 45,
49, 50, 55, 57, 58.

INSANITY, 21, 23, 30, 32, 33, 34, 35, 36, 65, 66, 67, 68,
74.

MEDICAL JURISPRUDENCE, 32, 48.

MEDICAL ETHICS AND EMPIRICISM, 16, 17, 29, 40, 61,
64, 65.

OBSTETRICS, 20, 31, 35, 62, 67, 69.

PATHOLOGY AND MORBID ANATOMY, 24, 30, 38, 40, 42,
51, 52, 59, 66, 70, 75, 76.

PHARMACY AND MATERIA MEDICA, 38, 45, 60, 62, 69,
70, 71, 72, 73, 76, 77, 78.

PHYSIOLOGY, 26, 27, 32, 33, 35, 40, 43, 55, 57, 69, 74,
77.

PRACTICAL MEDICINE, 15, 16, 17, 21, 24, 25, 28, 31, 32,
33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 51,
52, 53, 54, 55, 56, 57, 59, 61, 64, 65, 66, 67, 69,
74, 77.

SURGERY, 15, 21, 22, 25, 28, 37, 38, 44, 48, 50, 51, 54,
55, 59, 65, 70, 74, 75, 76.

SHAKESPEARE'S MEDICAL KNOWLEDGE.

WHY should not we of the Healing Art claim our share in Glorious Will? Lord Chancellor Campbell has written a book, in which he claims that Shakespeare in his youth must have been at least an attorney's clerk, if not something more, for such is the familiarity with legal matters carelessly betrayed in the poet's writings. It may sound presumptuous to say that the Lord Chancellor, in his law argument, might easily "mend his instances;" but literature is a republic in which there are no privileged orders.

The obscurity of Shakespeare's youth, taken in connection with the universal knowl-

edge displayed in the productions of his mature years, have afforded scope for endless conjecture and argument, until all

“Is smothered in surmise, and nothing is
But what is not.”

Dryden said, “In him we find all arts and sciences—all moral and natural philosophy, without knowing that he ever studied them.” Not only are there allusions, more or less frequent, to every craft, business, and pursuit, but those following them have the thoughts and language proper to their station. Before Shakespeare’s “day of success,” in which, as the actor-poet, he became the companion of gentlemen, the teacher of a court, the delight of his sovereign, and “the darling of the nation,” what was he? Was he a butcher’s, a wool-dealer’s, or a glover’s boy? was he ever a ’prentice, operative, farm-laborer, poacher, or horse-boy? or was he a sailor or a soldier? or did he, perchance, “teach the young idea,” “engross” or “cull simples”?

We prefer to believe that he was born in a pleasant English home, and that he was

well taught at school. With a heart that had once been warmed by "sitting at good men's feasts," and an intellect once lighted by the Promethean flame of knowledge, he could then go forth into the world, and meet the ups and downs of life in no sullen spirit. No matter what his struggles may have been while yet a young man; if he got through with honor and health untouched, his early trials would but add to the enjoyment of life in after years. But if at setting out he chanced to be a little wild, he would all the more likely be made acquainted with a great variety of strange people, and get a near view of their characters and habits. If a young man has strength to keep himself erect until the lapse of time brings prosperity, he will in his mature years show something very different and opposite to that insipidity so often seen in those who are born to wealth and hedged about with exclusiveness. All men who achieve their own greatness have, in the outset of their career, spent a few years in threading the lanes and by-ways of life, before

emerging upon the broad and stately avenues where rank and wealth are congregated.

The author of "Shakespeare's Legal Acquirements," like his brothers in Shakespearian lore, makes too much question of that gap of six or eight years in the poet's life. There was also a gap of several years in Doctor Johnson's life, which even Boswell could not account for; and full twenty years of Rousseau's life would remain a blank to us, had he not chosen to fill it up by the most humiliating confessions. Such young men, while for a time hanging loose upon society, are sure to see and learn a great deal, but they do not ordinarily keep a diary of their experiences. At some period of their roving they are probably but little better than real Bohemians; and of the many that thus go forth, like Jean Jacques and Goldsmith, a few return again bringing their sheaves with them. During such a period of obscurity Shakespeare might spend a few weeks or months in different vocations, one after the other; and if domiciled with an attorney, an apothecary,

or one of any other calling, *he* would learn more of those arts in six months, than he ever found occasion in after years to put into his dramas.

Let us, therefore, intelligently admire Shakespeare's varied knowledge of the common affairs of life, by considering his vast capacity in connection with the fact, that this knowledge of his, at which we are so much astonished, is of that kind and degree that comes from observation, and not by special study or daily practice. Hence, though we are able to make up small volumes of extracts and quotations referring to law or to medicine, we are not, therefore, to conclude that he ever studied those professions, or had skill enough to practice them; more than we are bound to believe that he ever turned brass candlesticks, tempered "hair and lime" into "rough-cast," or that he "rough-hewed," and after "shaped the ends" of wooden skewers. Volumes may likewise be filled, severally, with husbandry, farming, gardening, and domestic economy; military and nautical affairs;

the fine arts ; trade, politics, and government ; divinity, philosophy, and ethics ; handicraft, horses, and field-sports ; and even the language and arts of thieves and rogues. And after all these have been extracted from his writings, there yet will remain the vast and durable edifice of his poetry.

Unless Shakespeare's hard fortune at some early period of his life had forced him to a close contact with the lower orders of society, he could never have given us with his pen those instantaneous views which convey to our minds more than canvas or colors can to the eye. For what painter would undertake to represent a gossiping tailor, "standing on slippers thrust upon contrary feet," telling his news to a smith, who in the hearing "lets his iron on the anvil cool" ? His servants and clowns are a compound of ignorance and wit, of dulness and sense, of kindness and selfishness, such as only nature ever formed, and only Shakespeare ever copied. He had found real wit under "plain statute caps," and his "true laborer" knew how to be

happy without the aid of philosophy or courtly arts.

Health and disease are questions of such importance, that it would be strange indeed if their phenomena had found no place in Shakespeare's world. Doctor Johnson said that the "practice of physic was a mean attendance on human misery." He also said some things just about as much worth minding, of "patriotism," "pensions," "oats," &c. So we can afford to forgive the noble old "hater" for his sounding libel on Medicine; as we find that in Shakespeare's plays physicians and their art are always spoken of with kindly consideration and respect—greater sometimes than, for ourselves, we should dare lay claim to.

The number of passages going to show the poet's acquaintance with medicine and its collaterals which we are able to present, is probably much greater than most persons would have guessed could be found. And yet, as I did the work of hunting for them while cooped up in rail-cars and summer

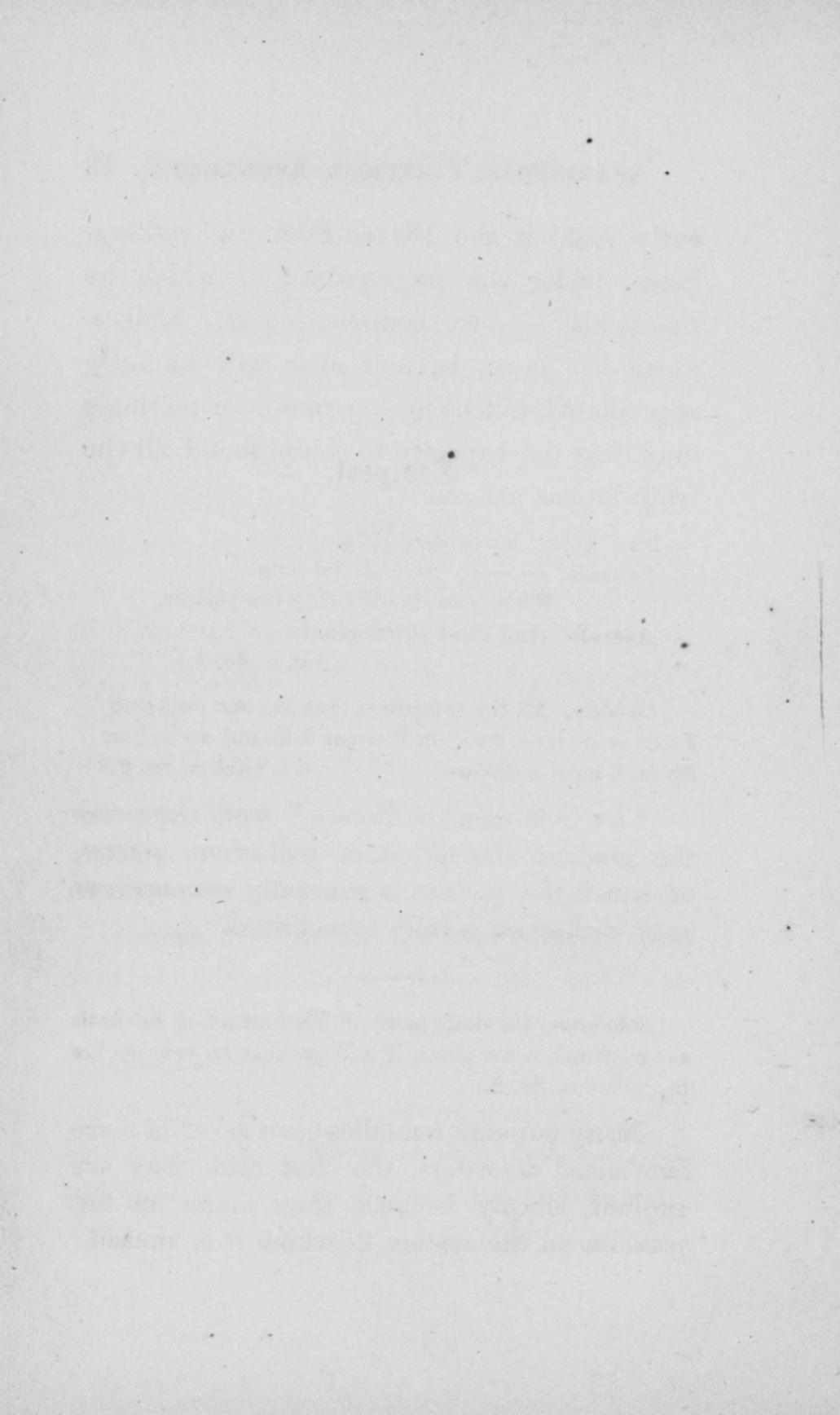
hotels, I cannot have been very thorough; often forgetting my task of "culling of simples," "amidst the seducing beauty of sentiment and language through which I had to pick my way."* I found it impracticable (as did also the author of "Shakespeare's Legal Acquirements") to classify the extracts, and so concluded to set them down in the order they occur in the plays. It was thought best not to disfigure the poet's lines with *italics*, which are not necessary for the medical reader, and but rarely for others. Most of the passages are, not comments on the condition of an actual patient, but are expressions drawn from medicine, and used figuratively to illustrate the ideas of the speaker.

It may be objected that the compiler has been somewhat too *profusus sui*, and that "striving to do better than well" he has made many observations that medical readers might better be left to make for themselves. But he is content to rest under this censure, if he can be cleared from the suspicion of irrever-

* Lord Campbell.

ently making the Divine Poet "a stalking-horse, under the presentation of which he shoots his" — own common-places. Shakespeare has been, is, and ever will be fully appreciated, but by no one man; for no single mind has the capacity to comprehend all the truth he has uttered.

NEW YORK, *September*, 1864.



Tempest.

Gonzalo. —— ; you rub the sore
When you should bring the plaster.
Antonio. And most chirurgically.
(Act II. Sc. 1.)

Caliban. All the infections that the sun sucks up
From bogs, fens, flats, on Prosper fall, and make him
By inch-meal a disease! (Act II. Sc. 2.)

“By inch-meal a disease” well expresses the gradual absorption of malarious poison, of which the patient is generally unconscious until cachæmia is fully established.

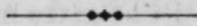
Stephano. He shall taste of my bottle: if he hath never drunk wine afore, it will go near to remove his fit. (Act II. Sc. 2.)

Many popular remedies give relief in mere functional disorders, the first time they are applied, simply because they make an impression on the system to which it is unused.

Gonzalo. Like poison given to work a great time after. (Act III. Sc. 3.)

This conveys a popular error that exists to some extent, even at the present day, among well-informed people outside the medical profession; that certain poisonous substances can be so administered as not immediately to affect the health, but which will operate with sudden and fatal force at some given time after; like a slow-match to a mine, or a candle in a box. Arsenic or Antimony in small doses must impair the functions of the stomach at the outset; nor could the cumulative effects of *Digitalis* be controlled so as to be depended upon. (See Barclay's *Diagnosis*.)

Slow poisoning is also spoken of at length in *Cymbeline*.



Merry Wives of Windsor.



"DOCTOR CAIUS, a *French Physician*," is an example of the universality of Shakespeare's genius, that medical men can especially appreciate. Here is the successful quack, just as we see him at the present day, pompous, vain, and bold, as only ignorance dares

to be. But he is overmatched by that irrepressible joker, mine Host of the Garter Inn, who, with a penetration peculiar to his class, could see through the "Doctor," and yokes him with the fighting parson, Sir Hugh Evans.

Host. What says my Esculapius? my Galen? my heart of elder? ha! is he dead, bully Stale? is he dead?

Dr. Caius. ———: by gar, I love you; and I shall procure—a you de good guest, de earl, de knight, de lords, de gentlemen, my patients. (Act II. Sc. 3.)

Evans. — master Caius, that calls himself *Doctor of Physic!* (Act III. Sc. 2.)

Page. And youthful still, in your doublet and hose, this raw rheumatic day? (Act III. Sc. 2.)

Host. Peace, I say;—soul-curer and body-curer. — Shall I lose my doctor? no, he gives me the potions and the motions. Shall I lose my parson, my priest, my Sir Hugh? no, he gives me the proverbs and the no-verbs. (Act III. Sc. 2.)

Mrs. Quickly. Nay, said I, will you cast away your child on a fool and a physician? (Act III. Sc. 3.)

"That foolish carrion mistress Quickly" humbugged her patron the quack, much after the same fashion he did *his* patrons. I chanced, while at Fortress Monroe as Surgeon of —th, New York Volunteers, to encounter one of these advertising Doctor Caiuses, and who

usually, I believe, keeps his state here in New-York; but he was then permitted by our politico-military authorities to range about at will on both sides, Union and Rebel. He came to me saying that he required the exclusive use of one of the hospital tents, and that the men should be called up to undergo his manipulations. I simply told him to go to the devil. With some threatening exclamations, he steered straight for the "Department Head Quarters." I was told, a day or two after, that I had done wrong in not complying with this man's demands, for he was, &c., &c. But I had not then got rid of some notions of military propriety that I had acquired nearly twenty years before, when short hair, clean faces, tight leather stocks, and many other things, both good and bad, existed in military life, but which are now rarely seen.

Twelfth Night.

Clown. —, one of thy kin hath a most weak *pia-mater*. (Act I. Sc. 5.)

The *pia-mater* may as well stand for the intellect as any other part of the Encephalon :

for our positive knowledge as to the true seat of the reasoning faculties is no better than Shakespeare's.

Viola. — : She never told her love,
But let concealment, like a worm i' the bud,
Feed on her damask cheek : she pin'd in thought ;
And with a green and yellow melancholy,
She sat like Patience on a monument
Smiling at grief. Was not this love, indeed ?

(Act II. Sc. 4.)

“Was not this love?” A plain matter-of-fact country doctor would say to himself, that it was commencing chlorosis. And, in truth, are there not many degrees from discontented maid-hood to combined amenorrhæa and anæmia? Gil Blas, in his more gross way, terms it “*fatigué du célibat.*” In this connection I must be permitted to transcribe one other well-known passage of our poet, from *Midsummer-Night's Dream* :

“Therefore, fair Hermia, question your desires,
Know of your youth, examine well your blood,
Whether, if you yield not to your father's choice,
You can endure the livery of a nun ;
For aye to be in shady cloister mew'd,
To live a barren sister all your life,
Chanting faint hymns to the cold fruitless moon.
Thrice blessed they, that master so their blood,
To undergo such maiden pilgrimage :

But earthlier happy is the rose distill'd,
 Than that which withering on the virgin thorn,
 Grows, lives and dies, in single blessedness.

Shakespeare, everywhere, recognizes the physical necessity of marriage to the well-being of woman. For the desire of maternity is just as natural, and therefore reasonable in woman, as is the impulse in man to make his way in the world—to get gain, credit, honor, or something else that may do him good. Hence, though our poet wrote in a gross age, yet neither his Viola, Olivia, Ophelia, Rosalind, or Juliet, who were all constant to one only object of attachment, should be thought of, as wanting in that degree of maidenly reserve which belongs to the manners of our present state of society. Virtuous sentiments are ever the same; but superstition in past ages, and calculation in this, has “helped to mar that which God has made.”

Sir Toby. Like aqua-vitæ with a midwife.

(Act II. Sc. 5.)

The exhausting duties of this class of practitioners are yet supposed to require the aid of stimulants to keep them up to their work.

Malvolio. This cross-gartering does make some obstruction in the blood. (Act III. Sc. 4.)

There seems to be an eternal war between fashion and physiology.

Sir Toby. We must deal gently with him;—this is not the way; do you not see you move him?—let me alone with him.

Fabian. Carry his water to the wise woman.

Maria. It shall be done to-morrow morning, if I live. (Act III. Sc. 4.)

Malvolio. I am no more mad than you are; make the trial of it in any constant question.

Clown. Nay, I'll ne'er believe a madman 'till I see his brains. I will fetch you light, and paper and ink. (Act IV. Sc. 2.)

Is there any other way to see a living man's brains than the one this clown proposes to try?

Duke. Or else the lady's mad; yet, if 'twere so, She could not sway her house, command her followers, Take, and give back affairs, and their dispatch, With such a smooth, discreet and stable bearing, As, I perceive, she does: (Act IV. Sc. 2.)

Sir Toby. —; he's hurt me, and there's an end on't.—Sot, did'st see Dick surgeon, sot?

Clown. O he's drunk, Sir Toby, an hour ago; his eyes were set at eight i' the morning.

Sir Toby. —; I hate a drunken rogue.

(Act V. Sc. 1.)

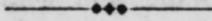
Sir Toby, though possessing other qualities and instincts, which in time would have made him perfect Falstaff, yet lacked some of his "discretion." He had, therefore, pitched into a fight where he was suddenly counted out, and in his distress calls for a surgeon. There was only one, a drunken one, to be had, and for that cause he objects to him. This reminds me of the deal of scrimble-scramble stuff we saw in the newspapers at the outset of our present war about drunken surgeons; as though the event depended not on the generals but on the surgeons. The volunteer medical officers whom I chanced to fall in with were much better prepared to perform their duties than the improvised majors, colonels, and brigadiers. For more about intemperate surgeons, see the latter part of Mr. Jeaffreson's entertaining "Book about Doctors."

Measure for Measure.

Clown. — ; that such a one, and such a one, were past cure of the things you wot of, unless they keep very good diet. (Act II. Sc. 1.)

Isabel. Hath yet a kind of medicine in itself,
That skins the vice o' the top: (Act II. Sc. 2.)

Duke. If she be mad (as I believe no other),
 Her madness hath the oddest frame of sense,
 Such dependency of thing on thing,
 As ever I heard in madness. (Act v. Sc. 1.)

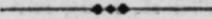


Much Ado about Nothing.



Friar. I have marked
 A thousand blushing apparitions start
 Into her face; a thousand innocent shames
 In angel whiteness bear away those blushes;
 And in her eye there hath appeared a fire,
 To burn the errors that these princes hold
 Against her maiden truth. (Act iv. Sc. 1.)

I have cited this, and some other similar passages, to show the poet's skill in noting *objective* symptoms.



Midsummer-Night's Dream.



Titania ———, have sucked up from the sea,
 Contagious fogs.

* * * * *
 * * * ———; and the green corn
 Hath rotted ere his youth attain'd a beard:

24 SHAKESPEARE'S MEDICAL KNOWLEDGE.

The fold stands empty in the drowned field,
And crows are fatted with the murrain flock:
The nine men's morris is filled up with mud;
And the quaint mazes in the wanton green,
For lack of tread, are undistinguishable:
The human mortals want their winter here;
That rheumatic diseases do abound:
And thorough this distemperature, we see
The seasons alter; hoary-headed frosts
Fall in the fresh lap of the crimson rose;
And on old Hyems' chin and icy crown,
An odorous chaplet of sweet summer buds,
Is, as in mockery, set: the spring, the summer,
The childing autumn, angry winter, change
Their wonted liveries. (Act II. Sc. 2.)

Here the accessories of a sickly season are poetically stated.

Demetrius. But, like in sickness, I did loathe this food:

But, as in health, come to my natural taste,
Now do I wish it, love it, long for it.
(Act IV. Sc. 1.)

Oberon. And the blots of nature's hand
Shall not in their issue stand;
Nor mole, hare-lip, nor scar,
Nor mark prodigious, such as are
Despised in nativity,
Shall upon their children be. (Act V. Sc. 2.)

Love's Labour's Lost.

King. (Reads.) — ; I did commend the black oppressing humour to the most wholesome physic of thy health-giving air ;—— (Act i. Sc. 1.)

Costard. ——, no salve, sir, but a plain plantain ! (Act III. Sc. 1.)

Costard's hurt was a slight one, and he objects to any formidable surgical dressing ; as only a domestic remedy, like the plantain, was required for his case. It is in these slight ailments that domestic remedies, and those who apply them, gain the credit of bringing about a cure :—the difference between *post hoc* and *propter hoc* not being marked ;—as must likewise happens sometimes to the best practitioners.

Biron. A fever in your blood, why then, incision Would let her out in saucers ;——

Biron. Say, can you fast ? your stomachs are too young ;
And abstinence engenders maladies.

* * * * *

Why universal plodding prisons up
The nimble spirits in the arteries. (Act iv. Sc. 3.)

See, *Brutus* to *Portia*, in *Julius Cæsar*, and also a passage in *Hamlet*, in connection with this.

Armado. ———; and with his royal finger, thus,
dally with my excrement, with my mustachio :

(Act v. Sc. 1.)

Shakspeare uses the word *excrement*, for the hair in some four or five other places, which will be quoted in their order. There must be many well-informed persons outside of the profession who do not know that the hair is reckoned an excrementitious substance.



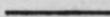
Merchant of Venice.



Gratiano. ———? and creep into the jaundice
By being peevish ?

(Act i. Sc. 1.)

An attack of jaundice is perhaps oftener brought on by mental anxiety and labor, than by any other cause.



Bassanio. And these assume but valour's excrement,
To render them redoubted.

(Act III. Sc. 2.)

Shylock. Some men there are love not a gaping pig ;
Some, that are mad, if they behold a cat ;
And others, when the bag-pipe sings i' the nose,
Cannot contain their urine ; For affection,

Mistress of the passion, sways it to the mood
 Of what it likes or loathes. Now, for your answer:
 As there is no firm reason to be render'd,
 Why he cannot abide a gaping pig;
 Why he, a harmless necessary cat;
 Why he a woollen bag-pipe; but of force
 Must yield to such inevitable shame
 As to offend himself being offended;

(Act iv. Sc. 1.)

Shylock's illustration of the law of Antipathies or Idiosyncrasies is as good as need be sought for. The bag-pipe has lost none of its diuretic properties on persons of English descent, even on this side of the ocean.

As You Like It.

Adam. Though I look old, yet I am strong and
 lusty:

For in my youth I never did apply
 Hot and rebellious liquors in my blood;
 Nor did not, with unbashful forehead, woo
 The means of weakness and debility.
 Therefore my age is as a lusty winter,
 Frosty but kindly:

(Act ii. Sc. 2.)

Here are a few rules for health and long life "rendered you in music."

Rosalind. ———, for he seems to have the quotidian of love upon him. (Act III. Sc. 3.)

Touchstone. If any man doubt that, let him put me to my purgation. (Act V. Sc. 4.)

The figurative use of the word purge, and its derivatives, is frequent in Shakspeare. *Touchstone* uses it in its legal or ecclesiastical sense; in both which it continues to this day to have almost as much force as it literally has in medicine.

All's Well That Ends Well.

Bertram. What is it my good lord, the King languishes of?

Lafeu. A fistula, my lord. (Act I. Sc. 1.)

The King's cure, is the foundation of the plot of this play. The poet selected a disease, which was at once painful and almost incurable; and which yet admitted of the patient's going about without much apparent disability. It is a disease that, more than any other, might make the greatest monarch feel (as it did Louis XIV. half a century after Shakspeare's time) that he too was but a man.

King. ———; the rest have worn me out
 With several applications:—nature and sickness
 Debate it at their leisure. (Act I. Sc. 2.)

Helena. You know my father left me some prescriptions
 Of rare and proved effects, such as his reading
 And manifest experience had collected. (Act I. Sc. 3.)

King. But may not be so credulous of cure,—
 When our most learned doctors leave us; and
 The congregated college have concluded
 That laboring art can never ransom nature
 From her inaidable estate; I say we must not
 So strain our judgment, or corrupt our hope,
 To prostitute our past cure to malady
 To empirics; or to dissever so
 Our great self and our credit, to esteem
 A senseless help, when help past sense we deem. (Act II. Sc. 1.)

The royal patient bears his sufferings with a dignity that shows him more than a king;—he is a brave man, a philosopher and a gentleman. He is not driven by a fretful impatience to place himself in the hands of any vulgar pretender who promises him relief; as we are often astonished to see highly respectable people do, from mere lack of courage to bear their trials. Clarendon tells us that Charles II., getting mortally tired of his long

exile, was advised to turn Calvinist, and marry one of Cromwell's daughters (though Cromwell, as Burnet tells us, would not have him for a son-in-law); but the king himself decided that Calvinism was no religion for a gentleman.

King. Sweet practiser, thy physic I will try.
(Act II. Sc. 1.)

Lafeu. To be relinquished of all the learned authentic fellows!

Parolles. So I say; both of Galen and Paracelsus!

King. Sit, my preserver, by thy patient's side.

King. Where great additions swell and virtue none,
It is a dropsied honour. (Act II. Sc. 3.)

A 'dropsied' or puffy roundness of surface is not to be mistaken for normal, healthy tissue.

Taming of the Shrew.

Page. For your physicians have expressly charg'd,
In peril to incur your former malady,
That I should yet absent me from your bed.

INDUCTION.

Winter's Tale.

Camillo. I cannot name the disease ; and it is caught
Of you that are well.

Polixenes. A sickness caught of me, and yet I well!
(Act II. Sc. 2.)

The poet's ingenuity of illustration is here seen. He makes the hesitating Camillo express himself by a figure, that we can readily conceive of, and yet which, from the nature of things, cannot exist.

Emilia. ———: On her frights and griefs,
(Which never tender lady hath borne greater,)
She is, something before her time, deliver'd.

(Act II. Sc. 2.)

Paulina. I come to bring him sleep. 'Tis such as
you,—
That creep like shadows by him, and do sigh
At each his needless heavings,—such as you
Nourish the cause of his awaking. (Act II. Sc. 3.)

An officious attendance upon the sick does more harm than good. Shakspeare's common-sense as far transcends that of ordinary men, as his poetry excels that of other poets. This often appears in his medical observations. So that if he himself had been obliged to do something in a case of sudden emergency, where

no professional aid was at hand, it is probable he would not have made matters worse than he found them.

Paulina. I say, she's dead; I'll swear 't, if word
nor oath

Prevail not, go and see: if you can bring
Tincture, or lustre, in her lip, her eye,
Heat outwardly, or breath within,——

(Act III. Sc. 3.)

We are to understand from this passage, taken in connection with what occurs in the after progress of the play, that the queen had fallen into a cataleptic state, brought on by combined physical and mental suffering. Catalepsy is one of the rarest of all diseases.

Polixenes. Is not your father grown incapable
Of reasonable affairs? is he not stupid
With age and altering rheums? Can he speak? hear?
Know man from man? dispute his own estate?
Lies he not bed-rid? and again does nothing,
But what he did being childish? (Act IV. Sc. 3.)

Here are stated the points of a medico-legal case, *de lunatico inquirendo*. Was not this passage worth Lord Campbell's comments?

Autolycus. Let me pocket up my pedler's excrement.

[Takes off his false beard.]

(Act IV. Sc. 3.)

Comedy of Errors.

Antipholus of S. ——— hair being, as it is, so plentiful an excrement. (Act II. Sc. 2.)

Abess. It seems his sleeps were hinder'd by thy railing;
 And therefore comes it that his head is light;
 Thou say'st his meat was sauced by thy upbraidings:
 Unquiet meals make ill-digestions,
 Thereof the raging fire of fever bred;
 And what's a fever, but a fit of madness?
 Thou say'st his sports were hinder'd by thy brawls;
 Sweet recreation barr'd, what doth ensue
 But moody and dull melancholy,
 (Kinsman to grief and comfortless despair.)
 And at her heels a huge infectious troop
 Of pale distemperatures and foes to life?
 In food, in sport, and life preserving rest,
 To be disturbed would mad or man or beast.
 (Act V. Sc. 1.)

Macbeth.

Malcolm. ———. Comes the king forth,
 I pray you?

Doctor. Ay, sir: there are a crew of wretched souls,
 That stay his cure: their malady convinces

34 SHAKESPEARE'S MEDICAL KNOWLEDGE.

The great assay of art ; but at his touch,
Such sanctity hath heaven given his hand,
They presently amend.

Malcolm. I thank you, doctor,

Macduff. What's the disease he means ?

Malcolm. 'Tis called the evil :

————— strangely visited people
All swoln and ulcerous, pitiful to the eye,
The mere despair of surgery, he cures.

(Act iv. Sc. 3.)

The reader will remember that this practice, for scrofulous persons to be touched by the sovereign, continued in England as late as Queen Anne's reign, in Doctor Johnson's young days. But a medical man can hardly conceive how it is possible for the imagination to aid in the cure of any disease, in which an alteration of tissue has taken place.

—————
Doctor. You see her eyes are open.

Gentlewoman. Ay, but their sense is shut.

Doctor. What a sigh is there ! The heart is sorely charged.

This disease is beyond my practice.

More needs she the divine than the physician.

(Act v. Sc. 1.)

Macbeth. How does your patient, doctor ?

Doctor. Not so sick, my lord,
As she is troubled with thick-coming fancies
That keep her from her rest.

Macbeth. Cure her of that.

Canst thou not minister to a mind diseased ;
 Pluck from the memory a rooted sorrow ;
 Raze out the written troubles of the brain ;
 And, with some sweet oblivious antidote,
 Cleanse the stuff'd bosom of that perilous stuff,
 Which weighs upon the heart?

Doctor. Therein the patient
 Must minister to himself.

Macbeth. Throw physic to the dogs, I'll none of it.
 (Act v. Sc. 3.)

This last, and often repeated line, is merely a petulant reply to the doctor, who honestly confessed he could not repair the disorders brought on by a bad life. "*Cure her of that*" should, I think, be pronounced with a prolonged stress on the first word; as, both imploring and fondly trusting to what Macbeth supposed the skilled physician might do, if he would but earnestly apply the resources of his art.

Macduff. ———, Macduff was from his mother's
 womb
 Untimely ripp'd. (Act v. Sc. 7.)

King John.

Bastard. Madam, I was not old Sir Robert's son ;
 Sir Robert might have eat his part in me
 Upon Good Friday, and ne'er broke his fast :

Could he get me? Sir Robert could not do it;
 We know his handy-work:—Therefore, good mother,
 To whom am I beholden for these limbs?
 Sir Robert never help to make this leg.

(Act II. Sc. 1.)

Constance. For I am sick, and capable of fears.

(Act III. Sc. 1.)

Constance. If I were mad I should forget my son,
 Or madly think a babe of clouts were he:
 I am not mad; too well, too well I feel
 The different plague of each calamity.

* * * * *

But now will canker sorrow eat my bud,
 And chase the native beauty from his cheek,
 And he will look as hollow as a ghost,
 As dim and meagre as an ague's fit;
 And so he 'll die;—

* * * * *

Grief fills the room up of my absent child.

Pandulph. Before the curing of a strong disease,
 Even in the instant of repair and health,
 The fit is strongest.

(Act III. Sc. 2.)

Prince Henry. It is too late; the life of all his
 blood
 Is touched corruptibly; and his pure brain
 (Which some suppose the soul's frail dwelling-house)
 Doth, by the idle comments that it makes,
 Foretell the ending of mortality.

Pembroke. He is more patient
 Than when you left him; even now he sung.

Prince Henry. O vanity of sickness! fierce extremes,
 In their continuance, will not feel themselves.

Death having preyed upon the outward parts,
Leaves them insensible; and his siege is now
Against the mind.

King John. [*Brought in*] Poisoned,—ill fare; dead,
forsook, cast off;
And none of you will bid the winter come,
To thrust his icy fingers in my maw;
Nor let my kingdom's rivers take their course
Through my burn'd bosom; nor entreat the north
To make his bleak winds kiss my parched lips,
And comfort me with cold. (Act v. Sc. 6.)

These are the symptoms of *corrosive* poisoning.

King Richard the Second.

King Richard. Let's purge this choler without
letting blood;
This we prescribe, though no physician;
Deep malice makes too deep incision. (Act I. Sc. 1.)

York. This fester'd joint cut off, the rest rests sound,
This let alone, will all the rest confound.
(Act v. Sc. 3.)

King Henry the Fourth.

PART I.

Hotspur. I then, all smarting, with my wounds
being cold,
To be so pestered with a popinjay

Out of my grief, and my impatience,
 Answered neglectingly, I know not what.

* * * * *

And telling me the sovereign'st thing on earth
 Was parmaceti, for an inward bruise. (Act i. Sc. 3.)

The Army of the Potomac has been visited by scores of these popinjays. Our Hotspurs have felt the same discomfort and impatience from even slight wounds, which have had time to stiffen; until the clots were softened, so as to admit of the removal of foreign substances and adjustment of the wounded edges. Then comes along your curious civilian, and remembering himself of some pleasant smelling parmaceti like preparation his grandam might have applied to his infant fingers, he straight recommends that, as good for a soldier's hurts.

Falstaff. ——— though the camomile, the more it
 is trodden on, the faster it grows.

(Act ii. Sc. 4.)

Hotspur. ———: oft the teeming earth
 Is with a kind of colic pinch'd and vex'd,
 By the imprisoning of unruly wind.

(Act iii. Sc. 1.)

Hotspur. ———; worse than the sun in March,
 This praise doth nourish agues. (Act iv. Sc. 3.)

Falstaff. ———, for I'll purge, and live cleanly, as a
 nobleman should do. (Act v. Sc. 5.)

The custom for people to dose themselves with purgatives at certain seasons of the year, was once practiced by all classes, and yet continues to some extent among the laboring class. It is not generally known that one of the months of the year derives its name from this custom ;—*februum* being the old Latin or Sabine word for purgative ; and the administration was joined with religious rites of lustration, as were also many of the ancient Jewish sanitary observances.

King Henry the Fourth.

PART II.

Northumberland. In poison there is physic ; and
these news,

Having been well, that would have made me sick,
Being sick, have in some measure made me well ;
And as the wretch, whose fever-weaken'd joints,
Like strengthless hinges, buckle under life,
Impatient of his fit, breaks like a fire
Out of his keeper's arms ; even so my limbs,
Weaken'd with grief, being now enrag'd with grief,
Are thrice themselves : hence, therefore thou nice
crutch. (Act I. Sc. 1.)

Falstaff. Sirrah, you giant, what said the doctor to
my water ?

Page. He said, sir, the water itself was a good healthy water ; but for the party that owed it, he might have more diseases than he knew for.

(Act i. Sc. 2.)

Shakspeare several times refers to urinary examinations, much in vogue in his time ; but here, we suspect, he designed to satirize the cautious ambiguity of professional opinions.

Falstaff. I heard say, your lordship was sick,—I hope your lordship goes abroad by advice—I hear moreover, his highness is fallen into this same whore-son apoplexy.—This apoplexy is, as I take it, a kind of lethargy,—a kind of sleeping of the blood.—It hath its original from much grief ; from study and perturbation of the brain ; I have read the cause of its effects in Galen, * * * * *

I am as poor as Job, my lord, but not so patient ; your lordship may minister the potion of imprisonment to me in respect to poverty ; but how I should be your patient to follow your prescriptions, the wise may make some dram of a scruple, or, indeed, a scruple itself.

Chief Justice. Do you set down your name in the scroll of youth, that are written down old with all the characters of age ? Have you not a moist eye ? a dry hand ? a yellow cheek ? a white beard ? a decreasing leg ? an increasing belly ? Is not your voice broken ? your wind short ? your chin double ? your wit single ? and every part about you blasted with antiquity ? and will you yet call yourself young ? (Act i. Sc. 2.)

The first of these two long extracts is given,

because it contains so many medical terms ; the last has always been admired as a striking picture of caducity.

Falstaff. A man can no more separate age and covetousness, than he can part young limbs and lechery ; but the gout galls the one, and the pox pinches the other.
(Act I. Sc. 2.)

Falstaff. I can get no remedy against this consumption of the purse : borrowing only lingers and lingers it out, but the disease is incurable * * * * *
A pox of this gout ! or, a gout of this pox ! for the one, or the other plays the rogue with my great toe. It is no matter if I do halt ; I have the wars for my colour, and my pension shall seem the more reasonable. A good wit will make use of any thing ; I will turn diseases to commodity.
(Act I. Sc. 2.)

These reflections may afford a useful hint to our army surgeons, attached to the Pension Bureau.

Falstaff. If the cook help to make the gluttony, you help to make the diseases, Doll : we catch of you, Doll, we catch of you.

Doll. Ay, marry ; our chains and our jewels.

Falstaff. Your brooches, pearls, and owches.

(Act II. Sc. 4.)

“Falstaff gives these splendid names to something very different from gems and orna-

ments—as we still use carbuncle. The passage, Dr. Johnson says, is not deserving of further illustration.” The great moralist possibly learned a good deal of his “wisdom” from “the streets” when he travelled about London in company with Savage. For Solomon and Falstaff both say that Wisdom teaches in the streets.

King Henry. Then you perceive the body of our kingdom,
How foul it is; what rank diseases grow,
And with what danger, near the heart of it.

Warwick. It is but as a body, yet distempered,
Which to his former strength may be restored
With good advice and little medicine.

(Act III. Sc. 1.)

The important distinction between functional and organic disease seems to be here understood and expressed by the poet.

Bull-calf. [*A recruit.*] O lord, sir! I am a diseased man.

Falstaff. What disease hast thou?

Bull-calf. A whoreson cold, sir; a cough, sir; which I caught with ringing in the king's affairs upon his coronation day, sir.

Falstaff. Come, thou shalt go to the wars in a gown; we will have away thy cold.

(Act III. Sc. 2.)

Falstaff, though no surgeon, was yet en-

abled by his experience in military life and his knowledge of mankind, to give a wiser decision in Bull-calf's case, than some very young medical graduate with his stethoscope might have done ; while his attention was distracted by the recruit's professions of loyalty, mixed up with the statement of his disabling symptoms. This whole scene is very instructive to officers in the United States Provost-Marshal's Department.

Falstaff. Will you tell me, master Shallow, how to chose a man? Care I for the limb, the thewes, the stature, bulk and big assemblance of a man! Give me the spirit, master Shallow.—Here's Wart;—you see what a ragged appearance it is: he shall charge you and discharge you with the motion of a pewterer's hammer; come off, and on, swifter than he that gibbets-on the brewer's bucket. And this same half-faced fellow, Shadow,——give me this man; he presents no mark to the enemy; the foeman may with as great aim, level at the edge of a penknife. And for a retreat, how swiftly will this Feeble, the woman's tailor, run off. O give me the spare men, and spare me the great ones.

(Act III. Sc. 2.)

Small men are found to make the most spirited soldiers; while large, heavy men, if in the cavalry, break down their horses, and if in the infantry, they generally give out sooner than spare men.

Archbishop of York. ——— : We are all diseas'd ;
 And, with our surfeiting and wanton hours,
 Have brought ourselves into a burning fever,
 And we must bleed for it : of which disease,
 Our late King Richard, being infected, died.
 But my most noble lord of Westmoreland,
 I take not on me here as a physician ;
 Nor do I, as an enemy to peace,
 Troop in the throngs of military men :
 But rather show awhile like fearful war,
 To diet rank minds, sick of happiness ;
 And purge the obstructions, which begin to stop
 The very veins of life. (Act iv. Sc. 1.)

For *King Richard*, read *Union*, and you have a statement of our nation's case. This commercial age, underrating all else but industrial interests, and contemning much of what is generous and manly, as the errors of heroic times that are happily passed away, it has been the strife of the present day to provide for physical comforts, and to excel in debilitating luxury and ostentation. Hence neuralgia, dyspepsia, albumenuria, and the whole cohort of uterine complaints. O for the days of *Cincinnatus* and *Phocion* !

Archbishop. Our peace will, like a broken limb
 united,
 Grow stronger for the breaking. (Act iv. Sc. 1.)

Falstaff. There's never any of these demure boys come to any proof: for thin drink doth so over-cool their blood, and making many fish-meals, that they fall into a kind of male green-sickness; and then, when they marry, they get wenches; they are generally fools and cowards;—

* * * * *

If I had a thousand sons, the first human principle I would teach them should be,—to forswear thin potations. (Act iv. Sc. 3.)

I have not room for the whole of Falstaff's ingenious theory of the "two-fold operation" of sherris-sack, in drying the brain and warming the heart. But in this, as in much else that he utters, there may be a spice of truth. If our civil war has developed any Falstaffs, they would probably substitute the word Bourbon Whiskey, for sherris-sack, in this long panegyric on hard drinking.

King Henry. ———, though it do work as strong
As aconitum.——— (Act iv. Sc. 4.)

Warwick. Be patient princes; you do know these
fits
Are with his highness very ordinary,
Stand from him, give him air; he'll straight be well.
(Act iv. Sc. 4.)

Prince Henry. If he be sick
With joy, he will recover without physic.
(Act iv. Sc. 4.)

King Henry the Fifth.

Pistol. No; to the spital go,
And from the powdering-tub of infamy
Fetch forth the lazar kite of Cressid's kind,
Doll Tear-sheet she by name, and her espouse.

(Act II. Sc. 1.)

It has seemed necessary to extract but two or three of the numerous passages in these plays which refer to syphilis. The 'powdering tub' is also mentioned in "Measure for Measure." Pistol's verse well becomes the theme.

Mrs Quickly. As ever you came of women, come in quickly to Sir John: ah, poor heart! he is so shaken of a burning, quotidian-tertian, that it is most lamentable to behold.

Pistol. His heart is fractured and corroborate.

(Act II. Sc. 1.)

Mrs. Quickly. 'A made a finer end, and went away an it had been any christom child; 'a parted even just between twelve and one, e'en at turning o' the tide; for after I saw him fumble with the sheets, and play with flowers, and smile upon his fingers' ends, I knew there was but one way; for his nose was as sharp as a pen, and 'a babbled of green fields.

* * * * *

So 'a bade me lay more clothes on his feet; I put my hand into the bed and felt them, and they were as

cold as any stone ; and I then I felt to his knees, and so upward and upward, and all was as cold as any stone.

(Act II. Sc. 3.)

Comment on this well-known passage would be impertinent in an essay intended for medical readers. But is it not wonderful, past all expression ! Here Shakspeare, with one pen-full of ink, gives us what amounts to a whole class lecture, or a dozen pages of an ordinary medical text-book. Compare this death scene of Falstaff, with that of Cardinal Beaufort. How strongly are they contrasted, and yet how true are both !

King Henry the Sixth.

PART II.

Gloster. A subil knave ! but yet it shall not serve.—
Let me see thine eyes : wink now ;—now open them :
In my opinion, yet thou see'st not well.

(Act II. Sc. 1.)

Can we suppose Gloster to be watching for equal or unequal dilatation and contraction of the pupils, in this case of imposture which he had undertaken to decide upon ?

Warwick. See how the blood is settled in his face!
 Oft have I seen a timely parted ghost, [corse?]
 Of ashy semblance, meagre, pale and bloodless,
 Being all descended to the laboring heart;
 Who, in the conflict it holds with death,
 Attracts the same for aidance 'gainst the enemy,
 Which with the heart there cools, and ne'er returneth
 To blush and beautify the cheek again.
 But, see, his face is black, and full of blood;
 His eyeballs further out than when he liv'd,
 Staring full ghastly like a strangled man:
 His hair uprear'd, his nostrils stretched with struggling;
 His hands abroad displayed, as one that grasp'd
 And tugg'd for life, and was by strength subdu'd.
 Look, on the sheets, his hair you see, is sticking:
 His well proportioned beard made rough and ragged,
 Like to summer's corn by tempest lodg'd.
 It cannot be, but he was murder'd here;
 The least of all these signs were probable.

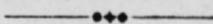
(Act III. Sc. 2.)

Modern text-books on Legal Medicine have added but few other external appearances that require to be noted in those cases of sudden death, where no wound or bruise is seen, and poison is out of the question.

Queen Margaret. Away! though parting be a fretful corrosive,
 It is applied to a deathful wound. (Act II. Sc. 2.)

From these two lines the poet appears to

have known that corrosive or caustic applications are indicated for wounds that have taken on an unhealthy action—either the sloughing or ulcerative process. His most august personages often make use of similes borrowed from medicine.



King Henry the Sixth.

PART III.



King Edward. Lords, give us leave; I'll try this widow's wit.

Gloster. Ay, good leave have you; for you will have leave,

'Till youth take leave, and leave you to the crutch,

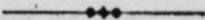
* * * * *

Ay, Edward will use women honorably.

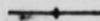
Would he were wasted, marrow, bones, and all,

That from his loins no hopeful branch may spring.

(Act III. Sc. 2.)



King Richard the Third.



Hastings. The king is sickly, weak and melancholy,
And his physicians fear him mightily.

Gloster. O he hath kept an evil diet long,
And over-much consum'd his royal person;

(Act I. Sc. 1.)

Buckingham. But lately, splinted, knit, and joined
together,
Must gently be preserved, cherished and kept;
* * * * * lest
The new-healed wound of malice should break out;
Which would be so much the more dangerous,
By how much the estate is green,— (Act II. Sc. 2.)

King Henry the Eighth.

Cardinal Wolsey. For holy offices I have a time;
a time
To think upon the part of business, which
I bear i' the state; and nature does require
Her times of preservation, which, perforce
I, her frail son, amongst my brethren mortal
Must give my tendance to. (Act III. Sc. 2.)

In this play, Doctor Butts, the king's physician, is represented as being the trusted friend of his royal master.

Troilus and Cressida.

Hector. ———, the tent that searches
To the bottom of the worst, (Act II. Sc. 2.)

Thersites. After this, vengeance on the whole camp!

or rather the bone-ache! for that methinks is the curse dependant on those that war for a placket.

(Act II. Sc. 3.)

Patroclus. ———, like an ague, subtly taints,
Even then, when we sit idly in the sun.

(Act III. Sc. 3.)

Patroclus. Who keeps the tent now?

Thersites. The surgeon's box, or the patient's wound.

* * * * *

Now the rotten diseases of the south, the guts-gripping ruptures, catarrhs, load of gravel i' the back, lethargies, cold palsies, raw eyes, dirt-rotten livers, wheezing lungs, bladders full of imposthume, sciaticas, lime-kilns i' the palm, incurable bone-ache, and the rivelled fee-simple of the tetter, take and take again such preposterous discoveries. (Act V. Sc. 1.)

In other passages of this play, Thersites, in his characteristic railing and cursing, draws on surgery and medicine pretty freely,—enough indeed, to offend the senses of a hospital attendant. Note, in this passage, the mention of chronic cystitis, and the pathology of 'gravel.'

Timon of Athens.

Timon, [to Alcibiades.] Be as a planetary-plague,
when Jove
Will o'er some high-vic'd city hang his poison

In the sick air,

* * * * *

[To his mistresses, Phrynia and Timandra.]

——— : Yet may your pains, six months,

Be quite contrary ; ——

* * * * *

Consumptions sow

In hollow bones of man ; strike their sharp shins,

And mar men's spurring. Crack the lawyer's voice,

That he may never more false titles plead,

Nor sound his quillets shrilly : hoarse the flamen,

——— : down with the nose,

Down with it flat ; take the bridge quite away.

——— : make curl'd-pate ruffians bald ;

And let the unscarred braggarts of the war

Derive some pain from you : Plague all ;

That your activity may defeat, and quell

The source of all erection.

(Act iv. Sc. 3.)

In this extract, the lines to Alcibiades are sublime. In those following, to his mistresses Phrynia and Timandra, the double meaning of the word—pains, did not occur to me until reading Steevens' note, (who, by the way, is the best annotator yet.) *Pains* here means, first the pains a harlot causes those of the other sex ; and also the bodily pains she herself suffers while, for half the year, she is prevented from following her vocation, by the very diseases incident to it.

Timon. ———. Plagues incident to men,
 Your potent and infectious fevers heap
 On Athens, ripe for stroke! thou cold sciatica
 Cripple our senators, that their limbs may halt
 As lamely as their manners! lust and liberty
 Creep in the minds and marrows of our youth.
 That 'gainst the stream of virtue they may strive,
 And drown themselves in riot! itches, blains,
 Sow all Athenian bosoms; and their crop
 Be general leprosy! breath infect breath;
 That their society, as their friendship, may
 Be merely poison! (Act. iv. Sc. 1.)

Timon, like Thersites, draws on medicine for a full moiety of the woes he would call down on his hated fellow-men. Shakespeare's memory is as ready to supply him with ills for curses, selected from those that flesh is heir to, as his imagination is, to suggest frightful materials for his witches' cauldron. Compared with his, Goethe's "hell-broth" is but a weak compound. Victor Hugo's efforts at procreating grotesque, half-human shapes are hardly more successful;—albeit, his Quasimodo is a creature not unworthy the genius of his own admired Shakespeare. It is only those things of which we have no certain knowledge, that the imagination is able to invest with fictitious qualities—physical or metaphysical.

Coriolanus.

Menenius. Where is he wounded?

Volumnia. I' the shoulder, and i' the left arm.
There will be large cicatrices to show the people, when
he shall stand for his place. (Act II. Sc. 1.)

Volumnia here uses a technical Latin word not known to every one, instead of the common word—scar;—and in prose, where there is no metre to be filled. If we did not know the great poet to have been absolutely without vanity, we might suspect that he was a little vain of his medical knowledge. He uses the word excrement, for hair, in some five or six places.

Coriolanus. To pump [*i. e.*, to try] a body with a
a dangerous physic,
That's sure of death without it.

Brutus. Sir, these cold ways,
That seem like prudent help, are very poisonous
When the disease is violent: ———.

(Act III. Sc. 1.)

Take notice of this saying of the tribune Brutus, ye “expectant” practitioners, and anodyne giving M.D's.

Sicinius. He's a disease that must be cut away.

Menenius. O, he's a limb, that has but a disease ;
Mortal, to cut it off ; to cure it, easy.

Menenius. The service of the foot,
Being once gangren'd, is not then respected
For what before it was. (Act III. Sc. 1.)

Menenius. He was not taken well ; he had not din'd :
Our veins unfill'd, our blood is cold, and then
We pout upon the morning ; are unapt
To give or forgive ; but when we have stuff'd
These pipes and these conveyances of our blood
With wine and feeding, we have suppler souls
Than in our priest-like fasts ; therefore I'll watch him
'Till he be dieted to my request,
And then I'll set upon him. (Act V. Sc. 1.)

Menenius has here described the post-prandial temper of a person in robust health. The opposite state is probably true of those laboring under chronic difficulties.

Julius Cæsar.

Cassius. He had a fever when he was in Spain,
And when the fit was on him, I did mark
How he did shake : 'tis true this god did shake :
His coward lips did from their colour fly ;
And that same eye, whose bend doth awe the world,

Did lose his lustre; I did hear him groan :
 Ay, and that tongue of his, that bade the Romans
 Mark him, and write his speeches in their books,
 Alas! it cried, *Give me some drink*, Titinius ;
 As a sick girl. (Act 1. Sc. 2.)

When great men, or captivating women,
 chance to need physicians or nurses, they
 should have discreet ones. To the French say-
 ing—"that no man is a hero in the eyes of
 his valet," may be added, with greater truth
 —or his physician.

Cassius. What! did Cæsar swoon?

Casca. He fell down in the market-place, and foamed
 at mouth, and was speechless.

Brutus. 'Tis very like: he hath the falling sickness.
 (Act 1. Sc. 2.)

It is, I believe, historically true that Cæsar
 was epileptic. And yet it seems incredible
 that a man who was not less great nor more
 successful than Cromwell or Napoleon, should
 have labored under such a disabling infirmity,
 and one liable to come on at those very mo-
 ments in his career, when he most needed the
 use of all his faculties.

Brutus. Portia, what mean you? Wherefore rise
 you now?

It is not for your health, thus to commit

Your weak condition to the raw-cold morning.

* * * * *

Portia. Is Brutus sick? and is it physical
To walk unbraced, and suck up the humors
Of the dank morning? What, is Brutus sick,
And will he steal out of his wholesome bed,
To dare the vile contagion of the night?
And tempt the rheumy unpurged air
To add unto his sickness?

* * * * *

Brutus. You are my true and honourable wife;
As dear to me as are the ruddy drops
That visit my sad heart. (Act II. Sc. 1.)

These last lines, I am told, are cited as part of the proof in support of a whimsical notion that Shakespeare had anticipated Harvey. What means then the expression "and prisons up the nimble *spirits* of the arteries" already quoted? The word, artery, is again used in Hamlet, and there it is associated with the nerves.

Has the language of Portia ever been quoted by those who would have us believe that the poet himself "had swam in a gondola"—had, at some time, travelled in Italy, and there "sucked up the humors of a dank morning"? My own experiences are, that for a true and pure malaria, nothing excels the Roman.

Antony and Cleopatra.

Charmian. Nay, if an oily palm be not a fruitful prognostication, ———.

(Act I. Sc. 2.)

In Othello (Act III. Sc. 4), the same physiological idea is expressed more at length;— and it is also briefly referred to in several other passages.

S. Pompeius. But all the charms of love,
Salt Cleopatra, soften thy wan'd lip!
Let witchcraft join with beauty, lust with both!
Tie up the libertine in a field of feasts,
Keep his brain fuming: Epicurean cooks
Sharpen with cloyless sauce his appetite;
That sleep and feeding may prorogue his honour,
Even till a lethe'd dullness. (Act II. Sc. 1.)

This passage conveys at once the teachings of the moralist and the physiologist. How the natural sources of happiness may be spoiled by sensual indulgence is here expressed in a few sentences that sound like a demonstration. “*Salt Cleopatra* ;” “*wan'd lip* ;” “*a morsel cold upon dead Cæsar's trencher*,” are words that may be said to have

more than a logical,—they have a pathological force.

Scarus. On our side, like the token'd pestilence
When death is sure. (Act III. Sc. 8.)

That is, as in the plague, after abscesses
have begun to form.

Antony. What, girl? though gray
Do something mingle with our younger brown; yet
have we
A brain that nourishes our nerves, and can
Get goal for goal of youth. (Act IV. Sc. 9.)

Cæsar. ———; But we do lance
Diseases in our bodies. (Act V. Sc. 1.)

Cæsar. The manner of their deaths?
I do not see them bleed.
If they had swallowed poison, 'twould appear
By external swelling; but she looks like sleep.

Dolabella. Here on her breast
There is a vent of blood, and something blown;

Guard. This is an aspic's trail.

Cæsar. Most probably
That so she died; for her physician tells me
She hath pursu'd conclusions infinite
Of easy ways to die. (Act V. Sc. 2.)

Cymbeline.

Cornelius. But I beseech your grace, (without offence ;

My conscience bids me ask ;) wherefore you have
Commanded of me those most poisonous compounds,
Which are the movers of a languishing death ;
But, though slow, deadly.

Queen. I do wonder, doctor,
Thou ask'st me such a question : Have I not been
Thy pupil long : Hast thou not learn'd me how
To make perfumes ? distil ? preserve ? yea, so
That our great king himself doth woe me oft
For my confections ? Having thus far proceeded,
(Unless thou think'st me devilish) is't not meet
That I did amplify my judgment in
Other conclusions ? I will try the forces
Of these, my compounds, on such creatures as
We count not worth the hanging (but none human)
To try the vigor of them, and apply
Allayments to their act ; and by them gather
Their several virtues and effects.

Cornelius. Your highness
Shall from this practice but make hard your heart :
Besides, the seeing these effects will be
Both noisome and infectious.

[*Aside.*] I do not like her. She doth think she has
Strange lingering poisons :

Those she has
Will stupefy and dull the sense awhile ;
Which first, perchance, she'll prove on cats and dogs ;

Then afterwards higher up : but there is
 No danger in what show of death it makes,
 More than the locking up the spirits a time,
 To be more fresh reviving. (Act I. Sc. 6.)

This passage serves Doctor Johnson for an indignant note and a fierce quotation from the Georgics ; and which was doubtless aimed at the Monroes and the Hunters, his contemporaries. Edwards and Majendie have since gone far beyond the physiologists of that day. Had not bigotry and superstition compelled the medical men of antiquity to depend for what they knew, upon dissections of the lower animals, or a hurried inspection of the wounded and killed in battle, Anatomy and Physiology might have been learned two or three thousand years earlier.

Imogene. I am ill ; but your being by me
 Cannot amend me : Society is no comfort
 To one not sociable : I'm not very sick
 Since I can reason of it. (Act IV. Sc. 1.)

Song. The sceptre, learning, phisic must
 All follow this and come to dust.
 (Act IV. Sc. 2.)

The physician is here honored by Shakespeare with a place next to the scholar and the king.

Mother. Lucina lent me not her aid,
 But took me in my throes,
 That from me was Posthumus rip'd,
 Came crying 'mongst his foes.

(Act v. Sc. 4.)

Posthumus, like Macduff, was indebted to the surgeon and not the midwife.

Cornelius. She did confess she had
 For you a mortal mineral; which, being took
 Should by the minute feed on life, and ling'ring
 By inches waste you

* * * * *

The queen, sir, very often importun'd me
 To temper poisons for her; still pretending
 The satisfaction of her knowledge, only
 In killing creatures vile, as cats and dogs
 Of no esteem: I, dreading that her purpose
 Was of more danger, did compound for her
 A certain stuff, which, being ta'en, would cease
 The present power of life: but, in short time
 All offices of nature should again
 Do their due functions.

(Act v. Sc. 5.)

It continued somewhat the fashion, long after Shakespeare's time, for persons of the higher class to dabble in Chemistry and Pharmacy, just as some of them do now with mechanical inventions. They were prompted by a blind curiosity, it may be, but often,

probably, by dreams of an easy road to fame and wealth. Charles II. had a laboratory; Evelyn was continually fussing with drugs; and the letters of his friend, the great Boyle, show a credulity in the occult properties, quite unlike his severe investigations of the visible phenomena of matter. The pharmacy of the middle ages was doubtless on a level with Alchemy and Astrology—and was pursued in a no less selfish spirit. The poisonous character of many medicinal substances were, perhaps, more thought of than their healing properties. And this may be the reason why, as we find in Burton, the narcotic class fills up so much space in the mediæval *materia medica*. Let me here offer one more hypothesis, concerning tobacco:—(and which, if it had come into general favor at the time Shakespeare wrote, he would have been deterred by no nice scruples of chronology from supplying it in some form to his characters, ancient and modern.) Since people, by way of pastime, will be putting something into their mouths besides food, may not the introduction of tobacco have superseded the habit that appears formerly to have prevailed, for persons in health to dose themselves—especially with the narcotic drugs?

Pericles, Prince of Tyre.

Pericles. Thou speak'st like a physician, Helicanus;
 Who minister'st a potion unto me
 That thou would'st tremble to receive thyself.
(Act i. Sc. 2.)

Cerimon. 'Tis known I ever
 Have studied physic, through which secret art,
 By turning o'er authorities, I have,
 (Together with my practice) made familiar
 To me and to my aid, the blest infusions
 That dwell in vegetatives, in metals, stones;
 And I can speak of the disturbances
 That nature works, and of her cures; which give me
 A more content in course of true delight,
 Than to be thirsty after tottering honour,
 Or tie my treasure up in silken bags
 To please the fool and death.

Gentleman. Your honour has through Ephesus
pour'd forth
 Your charity, and hundreds call themselves
 Your creatures, who by you have been restored;
 And not your knowledge, personal pain, but even
 Your purse still open, hath built lord Cerimon
 Such strong renown as time shall never——

Cerimon. Death may usurp on nature many hours,
 And yet the fire of life kindle again
 The overpressed spirits.

* * * * *

This queen will live : nature awakes ; a warmth
Breathes out of her ;—

——— ; now this matter must be looked to,
For her relapse is mortal. Come, come, come ;
And Æsculapius guide us! (Act III. Sc. 2.)

King Lear.

Kent. Kill thy physician, and the fee bestow
Upon the foul disease. (Act I. Sc. 1.)

Lear. Does any here know me ? Why, this is not
Lear : does Lear walk thus ? Speak thus ? Where are
his eyes ? Either his motion weakens, or his dis-
cernings are lethargied.—Sleeping or waking ?—Ha !
sure 'tis not so.—Who is it that can tell me who I am ?
(Act I. Sc. 4.)

Lear. The untented woundings of a father's curse
Pierce every sense about thee ! (Act I. Sc. 5.)

Kent. A plague upon your epileptic visage !
Smile you my speeches, as I were a fool ?
(Act II. Sc. 2.)

Shakespeare must have seen epilepsy,
judging from this passage, more than from
the mention of the disease in Othello and
Julius Cæsar.

Lear. O, how this mother swells up toward my heart!

Histerica-passio! down, thou climbing sorrow,
(Act II. Sc. 4.)

Mother or *moother* was the old popular name for globus hystericus.

Lear. ———: —may be, he is not well :
Infirmity doth still neglect all office,
Whereto our health is bound ; we are not ourselves,
When nature, being oppressed, commands the mind
To suffer with the body : (Act II. Sc. 4.)

Lear. But where the greater malady is fix'd,
The lesser is scarce felt, ———
——— When the mind's free
The body's delicate : The tempest in my mind
Doth from my sense take all feeling else,
Save what beats there. (Act III. Sc. 3.)

Lear. Then let them anatomize Regan, see what breeds about her heart : Is there any cause in nature, that makes these hard hearts ? (Act III. Sc. 7.)

An intelligent curiosity may sometimes have prompted the poet to be present at post-mortems. From the final question we may infer he was no materialist.

Kent. Oppress'd nature sleeps :—
This rest might yet have balm'd thy broken senses,
Which, if convenience will not allow,
Stand hard in cure. (Act III. Sc. 7.)

Old Man. Madman and beggar too.

Gloster. He has some reason, else he could not beg.

(Act iv. Sc. 1.)

Cordelia. What can man's wisdom do,
In the restoring his bereaved sense ?

Physician. There is a means, madam :

Our foster-nurse of nature is repose,
The which he lacks ; that to provoke in him,
Are many simples operative, whose power
Will close the eye of anguish.

Cordelia. All blessed secrets,
All you unpublished virtues of the earth,
Spring with my tears ! be aidant and remediate,
In the good man's distress !

(Act iv. Sc. 4.)

Lear. Thou know'st the first time we smell the air,
We wawl and cry :—

(Act iv. Sc. 6.)

Lear. Pray, do not mock me :
I am a very foolish fond old man,
Four-score and upward ; and, to deal plainly,
I fear, I am not in my perfect mind.
Methinks, I should know you, and know this man ;
Yet I am doubtful : for I am mainly ignorant
What place this is ; and all the skill I have
Remembers not these garments ; nor I know not
Where I did lodge last night : Do not laugh at me,
For, as I am a man, I think this lady
To be my child Cordelia.

Cordelia. And so I am, I am.

Physician. Be comforted, good madam : the great
rage,
You see, is cur'd in him : and yet it is danger

To make him even o'er the time he has lost.

Desire him to go in ; trouble him no more

Till further settling. (Act iv. Sc. 7.)

Shakespeare places before us the emotions of the mind, and "turns to shapes" whatever else is invisible yet known to exist, with the same ease that a painter shows us material things. Having forbore to extract many passages of the dramatist, which would be interesting to Physicians, who make insanity, and whatever approaches that condition, the object of their special study, I have therefore given Lear's speech at length ; as I have, likewise, the passionate exclamations of Constance.

Regan. Sick, O, sick!

Goneril. If not, I'll ne'er trust poison.

(Act v. Sc. 3.)

The tragic muse is represented as holding a dagger in one hand, and the poisoned chalice in the other. Considering what a convenient thing poison is, for a dramatic poet to resort to, to bring about his catastrophe, Shakespeare must be allowed to have made sparing use of it.

Romeo and Juliet.

Paris. Younger than she are happy mothers made.
Capulet. And too soon marr'd, are those so early
 made. (Act i. Sc. 2.)

Benvolio. Take thou some new infection to thy eye,
 And the rank poison of the old will die.
 (Act i. Sc. 2.)

Nurse. And she was wean'd—I never shall forget
 it,—
 Of all the days of the year, upon that day ;
 For I had then laid wormwood to my dug,
 * * * * *
 When it did taste the wormwood on the nipple
 Of my dug, and felt it bitter, pretty fool !
 To see it tetchy and fall out with the dug.
 * * * * *
 For then she could stand alone ; nay, by the rood,
 She could have run and waddled all about.
 (Act i. Sc. 3.)

Friar Laurence. Now, ere the sun advance his
 burning eye,
 The day to cheer, and night's dank dew to dry,
 I must fill up this osier cage of ours,
 With baleful weeds and precious-juiced flowers.
 * * * * *

Many for many virtues excellent,
 None but for some, and yet all different.

O, mickle is the powerful grace that lies
 In herbs, plants, stones, and their true qualities :

* * * * *

Within the infant rind of this fair flower
 Poison hath residence and medicine power :
 For this, being smelt, with that part cheers each part ;
 Being tasted, slays all senses with the heart.

(Act II. Sc. 3.)

Nurse. Is this the poultice for my aching bones ?

(Act II. Sc. 5.)

Friar Laurence. Take thou this phial, bring then
 in bed,

And this distilled liquor drink thou off ;
 When presently, through all thy veins shall run
 A cold and drowsy humour, which shall seize
 Each vital spirit ; for no pulse shall keep
 His natural progress, but surcease to beat :
 No warmth, no breath, shall testify thou liv'st ;
 The roses in thy lips and cheeks shall fade
 To paly ashes ; thine eyes' windows fall,
 Like death when he shuts up the day of life ;
 Each part depriv'd of supple government,
 Shall, stiff, and stark, and cold, appear like death.
 And in this borrow'd likeness of shrunk death
 Thou shalt remain full two-and-forty hours,
 And then awake as from a pleasant sleep.

(Act IV. Sc. 1.)

Capulet. ———, alas ! she's cold ;
 Her blood is settled ; and her joints are stiff ;
 Life and those lips have long been separated.

(Act IV. Sc. 5.)

Romeo. I do remember an apothecary,—
And hereabouts he dwells,—whom late I noted
In tatter'd weeds, with overwhelming brows,
Culling of simples; meagre were his looks,
Sharp misery had worn him to the bones:
And in his needy shop a tortoise hung,
An alligator stuff'd, and other skins
Of ill-shap'd fishes; and about his shelves
A beggarly account of empty boxes,
Green earthen pots, bladders, and musty seeds,
Remnants of packthread, and old cakes of roses,
Were thinly scatter'd to make up a show.
Noting this penury, to myself I said—
And if a man did need a poison now,
Whose sale is present death in Mantua,
Here lives a caitiff wretch would sell it him.
O, this same thought did but forerun my need,
And this same needy man must sell it me.
As I remember, this should be the house;
Being holiday, the beggar's shop is shut,—
What, ho! apothecary!

[*Enter Apothecary.*]

Apothecary.

Who calls so loud?

Romeo. Come hither man.—I see that thou art poor;
Hold, there is forty ducats; let me have
A dram of poison; such soon-speeding gear,
As will disperse itself through all the veins,
That the life-weary taker may fall dead,
And that the trunk may be discharg'd of breath
As violently, as hasty powder fir'd,
Doth hurry from the fatal cannon's womb.

Apothecary. Such mortal drugs I have; but Mantua's law

Is death, to any he that utters them.

Romeo. Art thou so bare, and full of wretchedness,
And fear'st to die? famine is on thy cheeks,
Need and oppression stareth in thy eyes,
Upon thy back hangs ragged misery;
The world is not thy friend, nor the world's law:
The world affords no law to make thee rich;
Then be not poor, but break it, and take this.

Apothecary. My poverty, but not my will consents.

Romeo. I pay thy poverty, and not thy will.

Apothecary. Put this in any liquid thing you will,
And drink it off; and if you had the strength
Of twenty men, it would despatch you straight.

Romeo. There is thy gold, worse poison to men's
souls,

Doing more murders in this loathsome world,
Than these poor compounds that thou may'st not sell.
I sell thee poison, thou hast sold me none.
Farewell; buy food, and get thyself in flesh.
Come, cordial, and not poison; go with me
To Juliet's grave; for there I must use thee.

(Act v. Sc. 1.)

I could not be expected to omit this famed scene of the Apothecary, because it happens to be in the school-books; and I have given the whole of it—for I was unwilling to mar it by abbreviation.

But the apothecary of to-day is wiser than he of Romeo's time; for plate-glass and gilded

cornices come more from selling cosmetics, hair-brushes, and the like, than from "culling of simples."

Romeo [*Drinks.*] O, true apothecary!
Thy drugs are quick.—Thus with a kiss I die. [*dies.*]
(Act v. Sc. 3.)

There is but one substance, which, in a highly concentrated form, *may* act thus instantaneously in most cases; and that is the one Mr. Oily Gammon chose for his exit.

Hamlet.

Hamlet. My fate cries out
And makes each petty artery in this body—
As hardy as the Nemean lion's nerve.
(Act I. Sc. 4.)

Ghost. With juice of cursed hebenon,
—————: whose effect
Holds such an enmity with the blood of man,
That, swift as quicksilver, it courses through
The natural gates and alleys of the body;
And, with a sudden vigour, it doth posset
And curd, like eager [*acid*] droppings into milk,
The thin and wholesome blood: ———
(Act I. Sc. 5.)

This may stand for a pretty good description of the effects of an animal poison on the blood, but not for the effects of a vegetable or mineral poison.

Polonius. And he, repulsed (a short tale to make),
Fell into a sadness ; thence into a fast ;
Thence to a watch ; thence into weakness ;
Thence to a lightness ; and, by this declension,
Into the madness, wherein now he raves.

(Act II. Sc. 2.)

Hamlet. I'll tent him to the quick ; if he do blench,
I know my course.

(Act II. Sc. 2.)

King. Haply, the seas, and countries different,
With variable objects, shall expel
This something-settled matter in his heart ;
Whereon his brains still beating, puts him thus
From fashion of himself.

(Act III. Sc. 1.)

Hamlet. But, sure, that sense
Is apoplexed :

Queen. Your bedded hair, like life in excrements,
Starts up, and stands on end.—

Hamlet. Ecstasy !
My pulse, as yours, doth temperately keep time,
And makes as healthful music : It is not madness,
I have uttered : bring me to the test,
And I the matter will reword ; which madness
Would gambol from. Mother, for love of grace—

Lay not that flattering unction to your soul
 That not your trespass, but my madness speaks;
 It will but skin and film the ulcerous place,
 Whil'st rank corruption, mining all within,
 Infects unseen. (Act III. Sc. 4.)

Shakespeare knew that wounds and ulcers should begin to heal from the deepest part, and that the discharge should have a free outlet, to keep it from burrowing. There is one other passage expressing the same thought.

King. But like the owner of a foul disease,
 To keep it from divulging, let it feed
 Even on the pith of life. (Act IV. Sc. 1.)

King. Since yet thy cicatrice looks raw and red,
 * * * * *
 For, like the hectic in my blood he rages,
 And thou must cure me. (Act IV. Sc. 3.)

Hamlet. This is the imposthume of much wealth
 and peace;
 That inward breaks, and shows no cause without,
 Why the man dies. (Act IV. Sc. 4.)

How Shakespeare may have acquired his medical knowledge it is, of course, impossible to conjecture. But it is likely that he never received a regular medical education. Since, if he had, and, being a gentleman and the

“creator of polished gentlemen like Hamlet,” his instinctive good taste in composition would have rarely permitted him to make use of terms and comparisons borrowed from the shop;—though such a convenience may be allowable enough in a “*lay gent.*”

Laertes. ——— no cataplasm so rare
Collected from all simples that have virtue—
(Act iv. Sc. 7.)

Othello.

Iago. Yet again your fingers to your lips? Would they were clyster-pipes for your sake!
(Act ii. Sc. 1.)

Iago. This broken joint between you and her husband, entreat her to splinter; — this crack of your love shall grow stronger than it was before.

Iago. What wound did ever heal but by degrees?
(Act ii. Sc. 3.)

Clown. Why, masters, have your instruments been at
Naples, that they speak i' the nose thus?
(Act iii. Sc. 1.)

In the streets of Naples, even at this day, the effects of syphilis are both more audible and visible, than in other cities.

Iago. The Moor already changes with my poison :
 Dangerous conceits are, in their nature, poisons :
 Which, at the first, are scarce found to distaste ;
 But, with a little act upon the blood,
 Burn like the mines of sulphur. (Act III. Sc. 3.)

Iago. Not poppy, nor mandragora,
 Nor all the drowsy syrups of the world,
 Shall ever medicine thee to that sweet sleep
 Which thou owd'st yesterday. (Act III. Sc. 3.)

Othello. Give me your hand : This hand is moist
 my lady.

Desdemona. It yet has felt no age, nor known no
 sorrow.

Othello. It argues fruitfulness, and liberal heart :
 Hot, hot and moist ; this hand of yours requires
 A sequester from liberty, fasting and prayer,
 Much castigation, exercise devout ;
 For here's a young and sweating devil here,
 That commonly rebels. (Act III. Sc. 4.)

For this same idea, see also Antony and Cleopatra.

Iago. My lord has fallen into an epilepsy.

Cassio. Rub him about the temples.

Iago. No, forbear :
The lethargy must have his quiet course :
If not, he foams at mouth ;—— (Act iv. Sc. 1.)

Othello. Drop tears as fast as the Arabian trees
Their medicinal gum. (Act-v. Sc. 2.)

This ends the task I proposed to myself, of inquiring into the amount of Medical Knowledge incidentally displayed by Shakespeare in the thirty-two plays, in which the foregoing passages are to be found. If it should be thought that I have given some passages that might better have been omitted, I can only say :—I am confident, if I had extracted every line or part of a sentence in which a medical term is used, a medical subject referred to, or a medical thought expressed, the number would amount to three-fold that presented in this collection.

THE END.

254
SHAKESPEARE'S

MEDICAL KNOWLEDGE.

BY

CHARLES W. STEARNS, M.D.

U.S. Med. Staff 1841

20852

NEW YORK:
D. APPLETON AND COMPANY,

443 & 445 BROADWAY.

1865.