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**Medicine and Morals of
Ancient Rome Accord-
ing to the Latin Poets** 

By DR. EDMOND DUPOUY

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MEDICINE AND MORALS OF ANCIENT ROME ACCORDING TO THE LATIN POETS.

BY DR. EDMOND DUPOUY.

TRANSLATED BY THOMAS C. MINOR, M.D., CINCINNATI, O.

I.

Lyric, Elegiac, Epic and Didactic Poets
—Ovid, Horace, Catullus, Tibullus,
Propertius, Virgil, Lucanus and Lucretius.

OVID.

The poet of the "Metamorphoses" and the "Art of Love" was born the year Julius Cæsar died (44 B.C.). He belonged to a noble and powerful family. At the age of sixteen years he assumed the purple robe of the sons of the chevaliers, and was sent to Athens, where he studied Greek literature. His nature was eminently sensitive; all his life was dominated by love and poesy, one going with the other. As if in revenge, he had a contempt for the false joys of ambition; he refused high appointments and honors that were offered by Corrina and by the Emperor, of whom he was the intimate friend. He only accepted from Augustus the position of Decemvir, that he held but a short time, for the affection of kings is of brief duration, and their friendship is often followed by disgrace. Ovid, in fact, was soon sent into exile, into the wild marshes of Scythia. What was the crime he committed? It is necessary to seek after a woman; in one of his epistles to Horace he accuses the grandson of Augustus with incest with his sister Julia, of whom he was the heart friend. This was enough for reflection on the "Art of Love" at a long distance.

In the "Metamorphoses" of Ovid we find a series of charming fictions, gracious

allusions, delicate allegories, under which are most often hidden the marvels of nature. In these immortal fables of antique poetry we discover at each step the proof of a very extensive historical knowledge, curious notions about astronomy, medicine and the natural sciences, most admirably polished and chased, from which sparkle with an incomparable brilliancy the most beautiful secrets of morality and the most seductive facets of the human passions.

Like Hugo, like Musset, like Murger, Ovid was a born poet, a divine muse, singing on its part, and from its works, what antiquity has bequeathed us as a royal gift. One of our litterateurs has recapitulated its beauties in a word when he said: "It is there that we drink in poesy from an overflowing cup." What can one add to that?

Our part does not consist in wetting our lips from this poetic cup. Others have performed this task before us, and with a literary competency to which we have no claim. We must confine ourself to investigate the marvels of fable and the wonders of nature, and pick out the good things from the midst of the beautiful thoughts, of which Apollo is the God, as he is also the deity of medicine and all the sciences in general.

In the description of chaos, that serves, so to say, as the basis of his "Metamorphoses," Ovid is not far from wrong of the facts accepted by geologists at the present day. Everywhere where there was earth, everywhere is there also water

and air. The earth was without consistency, the sea was not navigable, the sky was without light.

"Quaque fuit tellus, illic et pontus et aer;
Sic erat instabilis tellus, innabilis unda,
Lucis egens aer."

What, then, was earth at the beginning? A sphere of vapor and gas progressively condensing, an unequal surface formed by an uneven surface of solidified material, holding imprisoned minerals in a state of fusion, masses of water floating in the atmosphere, turning into torrents of rain, filling immense depressions and basins formed from eruptive upliftings, afterwards collecting into deep lakes, hot and smoking seas. The poet has remarked—

"Omnia pontus erant."

What happened afterwards? Consult your geology and you will see there the atmosphere was purified, lighted up, storm clouds and mists cleared; afterwards across these dispelling hazes, beyond these fleeting clouds, in the depths of the skies, appeared a red disc of luminosity. It was the sun, of which the first rays carried light to the world. Ovid has given us this description. He even went further; he understood that solar heat dissipated pestilential exhalations produced by the humidity of the soil. He understood it in the fable of the serpent Python, that Apollo, God of Light, pierced by his arrows.

"Hanc deus arcitenens, et nunquam talibus armis."

The explanation of this allegory is too simple not to be understood by all the world. Poesy had recourse to a fabulous history, in order to explain that the physical is attached to a natural cause. Poets have always been the first instructors of the peoples. The planet had taken a new form; a new phenomenon, up to then unrealized, is presented. It is life, manifested for the first time on earth.¹

¹ In order to explain the creation of man, the poets resorted to an ingenious fiction. The son of the earth, Prometheus, had made his statue of clay, but was incapable of giving the figure movement and life. Under the guidance of Minerva, he passed through celestial space, gathering, as he passed in the whirling planets, the influence that he considered as useful for the temperature of the humors. Afterwards, under the

Man makes his entrance into the world, and as soon as we see the family created, we note that Apollo is eager to reveal his secrets, love and glory. He initiates man to divine sentiments; he teaches him to crown with oak leaves the vanguishers at the public games. He is made the lover of Daphne.

"Primus amor Phœbi Peneia."¹

Petrarch, in celebrating his mistress Laura, did he wish to allude to the lover of Apollo? Perhaps so. Like Vervain, the laurel was always consecrated to enchantments. Fontanelle has written, as regards this allegory, a very pretty sonnet:

"I am," said Apollo to Daphne,
In the good old days of yore,
When all out of breath he chased her,
And told her his love and more.

"I am the god of delicious verses,
But to poesy's charms she is mute,
Her heart is e'en set against me,
She hears not my musical flute.

"I know the virtues of every plant,
Of the roots and herbs of the sod,
But Daphne flies more swiftly away,
When she knows I'm a medical god."

Ah! the name "medical god" was fatal.
He was young, in love, and would wed,
Had he called "Behold your conquest!"
Daphne might have turned her head.

Besides, we have elsewhere shown what was the rôle of Orpheus.² At the same time poet, legislator and physician, he sought to soften the savage morals of the primitive peoples of Greece. Ovid understood, like the author of "Precious

_____ mantle of the goddess, he approached the sun, suddenly filling a crystal phial with a chosen portion of solar rays, and then eagerly returned to his statue. He made it breathe from the flask the divine phlogistic. The latter penetrated the statue's head, entered the fibres of the brain, and life appeared. Man saw and manifested his first sensation by sneezing.

"The history of Prometheus," says M. H. de Guerle, "permits us to see, at the time of earliest antiquity, the knowledge of the actions of electricity, showing man the first link of the chain that connects it to the general system of creation, that reveals finally the highest principle of the physical and natural religion. To us it appears to depict, in an interesting manner, nature and man at his birth."

¹ Daphne was the first love of the god of poesy.

² Dupouy: "La medecine dans les poetes Grecs."

Stones." the influence of the marvellous on mankind.'

He has well rendered the ingenious images that express the power of the lyre of Orpheus over the grossest natures—

"Carminē dum tali sylvas, animosque ferarum,
Threicius vates, et saxa sequentia ducit."

This thought is also found admirably expressed in Horace—

"Sylvestres homines sacer interpresque deorum
Cœdibus ac victu fædo deterruit Orpheus;
Dictus ob hoc lenire tigres rabidosque leones."

Or, as it might be said, in very poor English verse—

Priest of the gods, Orpheus from heavenly portals,
Laws, morals, altars left on history's page.
His lyre soothed the hearts of savage mortals;
'Tis said it softened e'en the lion's rage.

In the poetry of Ovid one does not meet the same mysticism as in the Greek poets. If he sometimes happens to subordinate reason to sentiment, he always gives proof of a great scientific erudition. He loves and makes others love flowers, plants and fruits in his inimitable "Metamorphoses." What a pretty allegory in his fable of Prosperine; the daughter of Ceres consents to become the wife of Pluto, but only on condition of dividing her time between her mother and her husband. Daughter as much as wife, she gives six months to nature and six to love.

"Nunc dea, regnorum numen commune duorum
Cum matre est totidem, totidem cum conjugē menses."

This is nothing but the allegory of wheat; it is the emblem of seeding, says St. Ange, one of the commentators of Ovid. "*Proserpina est herba segetes a terra proserpens.*" She is the daughter of Ceres and Jupiter; that is to say, wheat is a production of the air and the earth. She is carried off by Pluto and descends among the dead; the seed is buried in the furrows where it is as if dead, in a manner, before being reproduced. She rests six

1 "Te precor, o vates, adsit tua laurea nobis;
Carminis, et medicæ, Phœbe, repertor opis.
In pariter vati, pariter succurrere mendenti;
Utraque tutelæ subdita cura tuæ."

Inventor of poesy and medicine, Divine Phœbus, I invoke thee! Be propitious; at the same time being poet and physician, I have the right to thy powerful aid. Art thou not protector of these two arts?

months in Hell and six months in the open day—another allusion to wheat, that remains hidden under the earth in Winter and germinates and ripens in the Spring-time and Summer. This idea has been very agreeably seized by Cardinal Bernis in his "Seasons"—

"O Ceres! hasten thy return;
Upon our plains the God of Day
Spreads heat and life.
Prosperine quits her abode,
Leaving the dark shade that ravished her."

Ovid well knew all the garden plants and almost all those of the woods. How he loved them and speaks of them with an enthusiasm that never wearies; it is the lotus fruit that makes the stranger forget the desire to return to his native land; it is the leaf of the privet he compares to the white shoulders of Galathea; it is the acanthus with large breastlike leaves from which stems unfold and roll in divers manner; it is Clytie loved by Apollo changed into the helianthus or sunflower, and who loves him under her new form still:

"Vertitur ad solem, mutaque servat amorem."

Pliny had already said that the helianthus turns towards the sun, looking after and following it in its course, inasmuch as the sunflower loves the orb of day. "*Heliotropium se cum sole circumagat, abeuntem sequitur, tantis est amor sideris.*"

Our botanists explain this phenomenon by the shortening of the fibres of the stem under the influence of the solar rays. They are evidently right, but Ovid knew much better than they how to make mankind love nature.

When we admire the beautiful shades of the crocus, is it not agreeable to add to the pleasure of our eyes the recollection of the love of a virgin for a timid adolescent, and when we visit the country to forget ourselves, who comes to seek us to recall the ruses of Vertumnus in order to possess the severe nymph, who resided in the gardens. One instant he sought to deceive her under the masque of old age, with the appearance of Winter—an impossible seduction—but suddenly he was transformed. Like Faust, a sovereign power gave him back the strength of youth; the sun changed him to a brilliant Spring-time. His amorous audacity then redoubled, and he soon goes roughly to the

denouement, but it is useless; Pomona, in love with him, consents to all; she trembles a little, and sighs deeply, and Vertumnus is happy.

“Vimque parat, sed vi non est opus; inque
figura
 Capta del Nympe est; et mutua vulnera sensit!”

How can one better paint the mysterious loves of the plants? What warm voluptuousness in these lines—

“ . . . Et mutua vulnera sensit!”

“Poetry is immortal,” says Voltaire. Our scientific positivism must not prevent us from studying nature and admiring its marvels with the sacred fire of art, and then across the seductive fictions of fable. For under this ingenuous cover, profound truths are often found. These fictions teach us to fly from the enchantments of Circe even better than the pedantry of learned or non-learned societies.

In the fable of Ixion, the hero of which only holds in his presumptuous arms a shadow fashioned in the image of the goddess, there is another great lesson for us; the science that we believe in our pride we possess, is often dissipated, like the cloud that the light breeze turns to vapor, like the image of the lovely Juno.

In the magical sacrifice of Medea, Ovid initiates us in the preparation of magical philters. He describes all the details with a power of imagination that is remarkable; he makes poetry of drugs and specifics:

“Interea validum posito medicamen ahenō
 Fervet, et exultat; spumisque tumemtibz
 albet.
 Illic Hæmonia radices valle resectas,
 Seminaque, floresque, et succos incoquit acres.”

In this pharmacopeia we assist at the mixing of herb juices with gum and peas, pearls of the Orient with the entrails of a wolf, the wings of an owl, a crow's beak and a viper's skin. We need not laugh at this mixture; all these remedies, or ingredients, were used scarcely a century since as medicines.

But what is the allusion that is hidden in the metamorphoses of the branch of dead wood that rises from the infernal depths, all covered with verdure and the fruit of the olive? We cannot figure it out, but certainly it alludes to something. Is it the imagination of the poet that makes the free description of the plague of

Ægina? The contagion attacks men and animals; it is in the air, that is the agent of transmission of the disease. The plague strikes the rich and poor, those in the city and in the country. Nothing checks the march of the epidemic. Physicians themselves are the first attacked. It is the same thing to-day and will always be thus:

“Nec moderator adest; inque ispos soeva medentes
tes
 Erumpit clades, obsuntque auctoribus artes.”

All the symptoms are perfectly described by Ovid. It is the fever that gives the pathological scene; the tongue is dry and the mouth burning. Patients can stand no clothing upon them, and they seek in vain, falling upon the ground, for a diminution of the febrile heat that devours them.

“Viscera torrentur primo; flammæque latentis.
 Indicium rubor est, et ductis anhelitus ægre.
 Aspera lingua tumet; trepidisque arentia venis.
 Ora patent; auræque graves captantur hiatu.
 Non stratum, non ulla pati velamina possunt
 Dura sed in terra ponunt præcordia; nec fit.
 Corpus humo gelidum, sed humus de corpore
 fervet.”

An inextinguishable thirst possesses the patients afterwards; they run to the streams, towards the rivers where the waters covered with the dead quench the thirst of the dying:

“Immoriuntur aquis; alius tamen haurit et
 illas.”

This description compares but little to those of the epidemics recognized by our pathological treatises, but there is nothing to prove that a similar affection might not have been observed twenty centuries ago. In Ovid's recital there are things that are more than probable, and there is certainly no exaggeration in this frightful picture of the agony of man that the poet's pen has developed with so much energy. After showing the rapid progress of the symptoms, the frantic sufferings of the victims and the convulsions that terminate the morbid drama, one of Ovid's commentators draws attention, *apropos* to what occurred in the temples, on the new tints he gives his recital, under the influence of the religious ideas of that population. “He represents,” says St. Ange, “the unfortunate suppliants expiring with offerings in their hands; victims who fall dead before being attacked; the impiety of despair that throws the hideous cadavers upon the altars of the gods as presents

worthy of their barbarity; or those who end their sufferings by suicide.”

Finally, the obsequies of the dead and the funeral duties that is their due, that are no longer rendered, terminating all the terrible picture by a striking painting in the same tone by the touching and poetical accessories that the imaginations of Ovid knew so well. This picture is far superior to that of the plague of Athens of Lucretius, who offends by the diffusion and arrangement, a little confused, of his images.

Daremberg¹ has reproached the epic poets for not giving a place in their works for the diseases that afflicted humanity. “Plagues,” says he, impitiously sow death among populations and armies; they resisted Jupiter as well as Hippocrates.” Our learned master perhaps exaggerates a little in his appreciation. Without doubt it is unnecessary to seek in these authors treatises on the different branches of the medical sciences. Meantime there are still many to be found, taking them here and there, in reading with attention the songs of Ovid. We see therein, for example, that alcoholism was well known by its effects on the nervous system, and that men had, for fermented drinks, a considerable attraction. It is true that if the feasts commenced and finished by libations, it was in order to attest that they regarded the gods as the principal and end of all the good things and of all the enjoyments of this life.

But in a fable, “The Sailors Changed to Dolphins,” we see Bacchus, in his wrath against mankind, show himself to them with lynx, leopards, and panthers attached to his chariot.

“Quem circa tigres, simulacraque inania lyncum
Pictarumque jacent fera corpora pantherum.”

Is this frightful image not an allegory to express the hallucinations of delirium tremens, in order to depict the phantoms that appear to the mind of the alcoholic? The reading of the Latin authors positively proves that the ancients made the grandest case in the art of curing.

In the metamorphosis of Æsculapius into a serpent, Ovid addresses an incantation to the muses in order that they may reveal the reasons that call Æsculapius to be placed in the rank of the gods.

¹ Daremberg, “Histoire des Sciences médicales,” Paris, 1870.

There was still an epidemic that devastated Italy and made numerous victims. They consulted the sacred books and found therein that the disease would never cease until they transported Æsculapius, of Epidaurus, to Rome. The priests of Æsculapius would give the ambassadors a mortification if they should say he was a god himself. The latter, leaving the vessel, sought refuge in the marsh reeds of the Tiber. In that place they erected a temple. In order to comprehend the allegory, it is necessary to see the god of Epidaurus, medicine, a science then unknown at Rome, and to recall the fact that the serpent is the emblem of prudence—that is to say, of prophylaxis and hygiene. Since that epoch, of which mention is made in the annals of Roman history, there was in Rome a temple to Æsculapius, where all came to consult the priests in times of plagues or epidemics.

One of the most interesting portions of the “Metamorphoses” is certainly the birth of Æsculapius. In an access of jealousy Apollo pierced by a murderous arrow the breast of Coronis, the most beautiful and frivolous of mistresses. Afterwards he wished to recall her to life, but it was a surgical case where science was powerless. Such is the wound of Coronis.

“Et medicas exercet inaniter artes.”

Now she was pregnant. After rendering her the last duties, after bathing in perfumes that beautiful body he had so often carressed, the god wished to save the child, fruit of their amours; he pulled it out from the mother and confided it to Chiron the Centaur, his grandson.

“Sed natum flammis uteroque parentis
Eripuit geminique tulit Chironis in antrum.”

It was thus that he who was one day to become the god of medicine made his entrance into the world by a Cæsarian operation performed by his father *post-mortem matris*.

Seneca¹ has put the death of Coronis into verse. The nymphs come to take the child from the hands of its father; the author adds:

“By them to Chiron’s home, in secret led,
The famous Centaur, in his lonely cave,
Our Æsculapius wise instruction gave.
The youth in art of medicine was bred,

¹ Seneca, “Les travaux d’Appolon.”

That art respected, and whose powerful aid
Prolonged our life and all our pains allayed."

In order to comprehend this allegory it is necessary to remember that Chiron, who understood astronomy, botany, medicine and the veterinary art, was the son of Saturn, God of Time, and of Philyra, daughter of Apollo, all of which signifies that the sciences are daughters of Time and genius. Such is the explanation at least given by commentators, and we believe they are right.

In philosophy, contrary to the assertions of some authors, we may state that Ovid was a spiritualist. For him every-thing changes and nothing ever dies—

"Omnia mutantur; nihil interit."

The soul is a slight essence that goes from one body to another, man or animal, and always survives death.

"Erat et illinc
Hunc venit; hinc illuc; et quoslibet occupat
artus spiritus.

The belief in a corporal soul is not verified by any of his writings. It is not in the expressions he employs—*animæ volucres, domino semine*—that one can find the proof when we read his description of the birth of man; it is a being endowed with reason that Nature waits on, as a king entitled and worthy of the tribute. The Divinity animated him with breath and the rays of ether impregnate the purest matter with life.

"Natus homo est; sive hunc divino semine fecit
Ille opifex rerum, mundi melioris origo.
Sive recens tellus, seductaque nuper ab alto
Æthere, cognati retinebat semina cœli."

The poet of Sulmo was content to believe in the transmigration of souls, a dogma brought from Egypt, and by the mouth of Pythagoras, predicting for the inhabitants of Troy the grandeur of the city they were to found on the banks of the Tiber, he declared himself a partisan of the metempsychosis. He affirms that the light souls within us will pass into the bodies of animals, and may become reincarnated in a human covering or envelope.

"Verum etiam volucres animæ sumus, inque
ferinis
Possumus ire."

This feigned or real belief authorized him to blame the barbarity of the human species in sacrificing to their cruel appe-

tite. "And the timid fawns, the little birds nourished by our hands, the gentle lambs and the patient kine." What would he have said if mankind had dared to eat horses then, he who went so far as to criticise the hook on the fisherman's line.

It is difficult to believe that this same Ovid, who condemned animal food from pure sentimentalism, should also be the author of the elegies of "Amores," the happy lover of Corrina, those who often had occasion to prove that *Sine Cerere et Baccho, friget Venus*. We should like to know full well the particulars of that day of which he thus relates his exploits:

At nuper bis flava Chlide, ter candida Pitho,
Ter libas officio continuata meo
Exigere a nobis angusta nocte Corinnam,
Me memini numeros sustinuisse novem

—which may be freely rendered:

Meantime twice the blonde Ellage,
Three times Pitho received my homage,
Corrina has seen me still more courageous, etc.

Can we furnish similar desires in eating only cooked herbs? To our mind it is best to drown in old Falerno wine our more succulent food, in order to give a single day to such expenditures. It is said that certain mineral waters known to the Romans gave men an extraordinary strength. The spring of Salmacis, that had no medical director named by Mercury, made, it is said, all men who drank the water perfect fools in love.

But since Ovid so well recognized the effects of mineral spring waters, he should have found one capable of curing the beautiful Cydippes, whose history he tells in his "Heroides." In the Temple of Diana she had an apple at her feet, and upon it was the words, "I swear to marry Acontius." This was an oath she involuntarily uttered in the temple of the goddess, an oath that nothing could break, not even the paternal will. And meantime her father presented to her *his* chosen son-in-law. The maiden fell ill; she became anemic, her strength left, she had an attack of fever. In this perplexing situation she sent a letter to Acontius, in which she said she would only be relieved of her languor when she should become his wife. "Unfortunate that I am," said he, "I cannot carry out the prescriptions of a physician; I cannot hold thy hands nor seat myself by thy couch."

"Me miserum! Quod non medicorum jussa
ministro
Effingoque manus, insideoque toro!"

"There is yet another thing I abhor in him who's near thee, while his fingers feel thy pulse; he often by this pretext beholds thy snowy arms and bosoms, and e'en perhaps may kiss thee."

"Dumque suo tentat salientem pollice venam,
Candida per causam brachia sæpe tenet,
Contrectatque sinus, et forsitan oscula jungit."

Our jealous friend writes six pages like that, and ends by saying that he does not wish to say more for fear of fatiguing his sweetheart and aggravating her malady. The poor little thing replies that "a languor, the causes of which are not apparent, opposes all the aid of the art."

"Languor enim, causis non apparentibus,
hæret;
Adjuvor et nulla fessa medentis ope."

And she adds: "Imagine thou the condition of weakness and prostration of a woman who, while she traces this answer, has difficulty in sustaining her feeble limbs upon her elbow."

"Quam tibi nunc gracilem vir hæc rescribere,
quamque,
Pallida vix cubito membra levare putas?"

"In seeing approach that day so wished for by relatives, all my body experiences the ardors of a burning fever. Then askest me to let thee see that enfeebled body. I am in a condition of frightful emaciation; I have no longer blood in my veins, and the paleness of my complexion equals that of white marble that's newly cut."

Here we have a case of chloroanemia, the *cachexia virginum*, and recognize its cause to be sad emotions, the chagrin of love, a constitutional predisposition or a disturbance in menstrual function. This history is a true medical observation.

Why did Ovid, who has written of the "Art of Loving," his "Artis Amatoria," and afterwards the art of loving no longer, "Remedorum Amoris," advise Cydippe to shake off the yoke that wounded? He was able to tell her: "Hasten thou to contend with the evil at its root; it will be too late to have a remedy when it is increased by time."

"Principiis obsta; sero medicina paratur
Quum mala per longas convaluere moras."

Had he not seen "wounds that might

have been easily cured become incurable because of neglect?"

"Vidi ego, quod primo fuerat sanabile vulnus,
Dilatatum longas damna tulisse moras."

Incurable affections! Ovid was able to study their fatal progress upon himself. In the elegies of Ovid's "Tristia" in the plaintive "Epistles from Pontus," he initiates us to the physical and moral sufferings of exile. See his sadness and bitterness during all these long years away from friends in the unhealthy marshes of Pontus. A prey to malady of languor, the poet saw himself dying slowly without pain, without fever—

"Et peragit soliti vena tenoris iter."

His bones lost their flesh, "*ossa tegit macies*;" his complexion had the color of yellow leaves, and his hair grew as white as the down of the swan.

"It is not always in the power of a physician to cure the patient," says the poet in a melancholy spirit; "medicine cannot cure gout or hydrophobia."

"Tollere nodosam nescit medicina podagram
Nec formidatis auxiliatur aquis."

Alas! it is more impatient still against pulmonary lesions, rebellious to Æsculapius himself and to his sacred herbs.

"Adferat ipse licet sacra Epidaurius herbas
Sanabat nulla vulnera cordis ope."

It was hemoptysis that now appeared and put an end to the sufferings of the poet. "Thou seest," he wrote to a friend, "how the blood that gushes from delicate lungs brings us surely to the Styx."

"Cernis, ut e molli sanguis pulmone remissus
Ad Stygias certo limite ducat æquas."

Even the vengeance of the emperor who banished the poet could not stop hemorrhage of the lungs.

HORACE.

The year 64 before our era, this master of lyric poetry was born at Venusia. After studying belles lettres at Rome and at Athens, he started out in the unprofitable rôle of politician. In the civil war following the death of Cæsar he espoused the cause of Brutus against Augustus, and assisted at the battle of Phillipi in the quality of Tribune of the soldiers. But,

after the defeat of the Republican army, he returned to Rome, where he devoted his entire attention to poetry.

Virgil presented him to Macænas and Augustus, who overwhelmed him with favors, but he refused all the honors offered him. The *aurea mediocritas* sufficed for the tastes of the poet.

Horace was a happy man. His natural joviality made him congenial to his contemporaries. In philosophy he took this ingenious device, "*Epicuri de grege porcus*," in opposition to the austere principles of the stoics. He only sought happiness in the moderate use of pleasures and in the ineffable joys of intellectual work; he was a sage. He knew of human life all that which is good—the charms of friendship, independence of character, an admiration for the classical. He loved nature, the sombre forests, the green plains, the golden harvest fields. He thought out his works during the long and silent nights in the country, so full of attractions and mysteries. He has written the eternal poem of life, of enthusiastic youth, and that more serious epoch where the soul aspires to glory and pretends that it is immortal.

"Exegi monumentum ære perrennius."

The Fates left him time to carve out his incomparable poems, that have received the everlasting consecration of the ages, admixing with the most serious subjects a little folly; it is sweet to sometimes lose one's reason thus—

"Misce stultitiam consilii brevem,
Dulce est desipere in loco."

But he, like all others, had to pay his tribute to nature, to see his illusions fly away, to render an account to the maladies that unceasingly beset him, the causes of which we shall endeavor to investigate.

Perhaps it may appear strange to go on in a doctor's way and interrogate this lover of the Muses, to demand and take medical notes regarding his odes, satires, epistles. "To place," as Daremberg remarks, "an indiscreet and barbarous hand on the pages of a poet who, for the past eighteen hundred years, received the homage of the most delicate spirits of the entire world. How can we snatch from the hands of Horace this old Massique that makes us forget all care? How pluck the flowers from the crown of roses, to

trouble those enjoyments of the banquet and put Lydia to flight in order to present the sad spectacle of the sufferings of disease and all the physical miseries to which Horace, alas! was not exempt? But the un pitying physician seizes his diseases, everywhere he finds them, especially in the midst of festivities, and above all after the intoxications of love. Horace, thus surprised by Musa or Craterus, received their advice kindly and made some painful attempts to regain a health that was not sufficient to sustain an excess of work nor the support of pleasures, puts into harmonious verse the consultations and advice of his doctors, and sings the praises of a frugal repast and the dangers of a passionate heart."

It was to Tibur, where he had a cottage, that he went to repose from his fatigues and his excesses. There, in the midst of a luxuriant nature, he made his eulogy to sobriety, to a tranquil existence, a stranger to political passions and human vanities. It was there he composed that eloquent satire in which he draws a parallel between the peaceful life of the country and the torments of the city. Here, says he, was my ambition.

"Hoc erat in votis."

"A little of earth, a dwelling with a spring of cool water, a garden with a clump of trees—my desires have been more than gratified. I demand nothing more from the gods."

"Nil amplius oro."

How many men who possess an independent fortune, who have acquired an honest celebrity, who arrive at the age for rest, know how to comprehend the happiness that Horace so well understood? The doctorat, academy, institute, senate and the ministry, are the successive rounds in the ladder of their covetous pride. Poor millionaires, unfortunate wise men! you do not know how to be happy; you are condemned to ever go on, without a truce or a cry for mercy, marching always over the accidental road of ambition. We pity you. After thirty years of work, we should think of the possession of the

"Modus agri non ita magnus et paulum.
silvæ"

of the poet, and leave to younger men the care of continuing our labors.

Horace loved the pure atmosphere of the country, the cheerfulness of the cool dales, still lit up by the semi-twilight, when the sun was warm upon the summit of the hills; there he breathed freely, no longer thinking of his infirmities, and lived on in a sweet quietude. But he also had his failings; when he heard Lydia eulogize her new lover his jealousy suddenly broke forth. This disciple of Epicurus forgot the precepts of his school, and composed that foolish ode to his frivolous mistress. "When thou vauntest of that rosy neck of Telephus and the snowy arms of that man, O Lydia, an acrid bile fills my inflamed liver."

"Quum tu, Lydia, Telephi
Cervicem roseam, cerea Telephi
Laudas brachia, vae! meum
Fervens difficile bile tumet jecur."

"Then my head turns, my cheeks alternately pale and blush, the sweat flows drop by drop and shows what fires are kindled in my breast. I foam with rage, finding on thy white shoulders the evident traces of an amorous convulsion and a night spent in orgies, seeing upon thy lips the imprint made by the teeth of that furious lover."

He terminates by supplicating his sweet-heart to listen to his advice and not believe in the faithfulness of that barbarian, whose kisses destroy those charming lips, moist with the nectar of Venus.

"Non: si me satis audias
Speres perpetuum dulcia barbare
Ludentem oscula, quæ Venus
Quinta parte sui nectaris imbuat."

What hot and penetrating perfume of passion and poesy there is in such verses! We feel that Horace was in love with this pretty girl, and with a love that seemed to hold his heart. She had dipped in blood that filter of fire known by the poets—

"Making one breath, mixing the man with the woman,
Quivering of flesh and dreams of the soul."

But why reproach him for being jealous and more restless than the waves of the Adriatic?

"Iracundior Adria."

He who had so many times wept over her treason! It is possible she loved him from caprice, without doubting that he would immortalize their amours, and the poet

pardoned and thanked Destiny that brought back the bird-like girl to her ancient nest; and in his goodness, perhaps, he sang that refrain that one of his children sang at a later day in the "Ronde de la vie de Boheme"—

"Lui sachant gre d'être belle,
Sans nous faire de tourments.
Aimons la même infidèle,
La Jeunesse, n' aqu'un temps."

This is true; youth has only one time! Horace perceived this one day, with the myrtle with which he was crowned before his tender and voluptuous Lydia. But he knew her well, at that chivalrous epoch when enthusiasm imprints its seal on our sensations and sentiments. He may be allowed his faults, his little sins; he wished to be robust and virile, healthy in body and mind. In harshness he never forbade young men—

"Chercher l'occasion de chiffonner un peu
La tunique de la morale."

But, in reality, he praised purity of morals, conjugal faithfulness, the honor of the home. He loved Lydia and many other foolish virgins, but he had a contempt for intimate relations with courtesans and the merchandise of love. In all his writings he distinguishes the virtuous matron, the respected husband, the bright girl, *puella*, the physiological recreation offered to the sons of the family and to Epicurians among monogamous peoples.

He foresaw the corruption into which public morals would fall under the successors of Augustus. One of his finest odes is consecrated as a forewarning to the Romans of the perils they ran in giving their girls a too frivolous education, and raising their sons in idleness. Libertinage would come into the world and inevitably cause the forgetfulness of the principles of the ancient Sabines, and with libertinage would come the decadence of the empire. Here is the principal passage:

"Our age, fruitful in crimes, has contaminated marriage, generation and families. Flowing from this source all the misfortunes are spread to the peoples and over the country.

"The adolescent virgin joyfully learns the licentious dances of Ionia; she kicks her docile limbs and from childhood dreams of licentious amours.

"Soon, the woman becomes adulterous, even at her own husband's table. She seeks young lovers, and without choice even, and in the darkness of night's shadows secretly indulges in scandalous pleasures. But her husband becomes her accomplice; she rises in his presence and at his order to follow some vile agent of infamy, some master of an Iberian vessel who pays with gold for her shame.

"They were not born of such parents, these young Romans, who reddened the seas with Carthaginian blood, who subjugated Pyrrhus, the great Antiochus and the terrible Hannibal. They were masculine young men, robust, and the children of rustic soldiers.

"That will not alter the disastrous course of the times! Our fathers, less virtuous than their ancestors, brought into the world wicked sons, who will one day beget a still more depraved race."

In his ode to Drusus he shows us all the effects of heredity.

"The strong beget the strong. Vigor and courage
To fiery steed, to bull pass their heritage;
The eagle never retrogrades to sing of love;
But education's all that vivifies;
By it a heart, well born, is fortified,
By it real virtue's made forever radiant."

Horace was right, the brave were ever the sons of the brave.

"Fortes creantur fortibus et bonis."

It is education that develops this strength of race, the heredity of robustness and courage.

"Doctrina sed vim promovet insitam."

Would that the future grand masters of the university and our boards of public education would contemplate this maxim! The safety of every country would be guarded.

But they are inspired by precepts of hygiene, and demand from science that which Horace asked from Apollo, God of Medicine, in his secular poem.

"God of Aurspices, thou whose arc radiates and shines over the Muses, thou whose salutary art reanimates a feeble body."

"Qui salutari levat axte fessos corporis artus."

"If thou seest with a favorable eye
Rome with its Palatine,
Be more than ever protector and aider—
Prosper the Latin Empire."

In his second satire he shows himself as

the enemy of adulterous lovers. He recalls the words of Cato, who seeing a man come out of a public house, said: "Very well, behold its virtue; it is there, young man, that it is necessary for you to go when concupiscence warms your blood, rather than turn married women from their duties."

"Quidam notus homo, quum exiret fornice;
macte
Virtute esto, inquit sententia dia Catonis;
Nam simul ac venas inflavit tetra libido,
Huc juvenes æquum est descendere; non alienas
Permolere uxores."

Legislators and hygienists are agreed upon this point; it is even accepted by the moralists: Prostitution is the sore on society, but is a necessary evil. It is not necessary to abuse it; meantime, as Horace observes, not to compromise honor by frequentation of such places. But he blamed Marseus, who never associated with honest women, who never visited the wives of others, but ate up his fortune and house with Origo, his mistress, but he lived with comedy actresses and prostitutes, all of which injured his reputation more than it ever did his fortune. The principles of Horace never found favor with all the world, and particularly not with a certain Cupiennus, who repulsed his eulogy to Cato and declared for the dainties of a more patrician appetite.

"Nolim laudari, inquit,
Sic me, mirator cunni Cupiennius albi."

For this pretentious ancient Don Juan, Horace painted a picture of the disagreements that awaited adulterers, of the *ennuis* that so often followed their guilty orgies and the dangers to which they exposed themselves; some threw themselves from the tops of houses, some were flogged to death, the latter in their flight falling into the hands of thieves, who forced them to give up their money; some were given over to the brutality of servants, and this is what happened to a certain personage; the iron severed the organs of his lubricity.

"Accidit ut cuidam testes caudamque salacem
Demeteret ferrum!"

This was legal, too.

Horace knew full well the happy influence that exercises have upon young men, that hygiene that is designated at the present day by the name of voluntary movements of locomotion—horseback rid-

ing, swimming, fencing, running, boxing, walking, jumping and foot racing. It is with this thought that he reproaches a *femme galante* for keeping near her and corrupting by idleness and voluptuousness one Sybaris, whom he saw with her.

"Lydia, dic, per omnes
Te deos oro, Sybarim cur properes amando
Perdere?"

"Is it not the love for a courtesan that causes this young man's absence from the Field of Mars, the fatigues and dust of which he dreads, leading him to avoid the manly games of his comrades, who tame the wild horses from Gaul? Does he fear the nautical struggles on the Tiber, or the bow and arrow practice of the circus?"

This ode to Lydia is well worth reading. Let us note in particular the horseback riding praised by so many physicians, ancient and modern. Hippocrates approved of equitation, and considered it the best treatment for certain affections of youth. Oribasius,¹ who was devoted to physical exercises as a means of therapeutics, also greatly approved of horseback riding, and wrote the following eulogy: "In the course of galloping," says he, "the body is violently shaken up, and this is an excellent thing, for the immediate result is to excite all the organic apparatus, and principally those of sensation."

Natation was also in great honor among the Romans. They said of a man without education, "*nec literas dedit, nec natare.*"

The language of Horace, bearing on youth, always shows the seal of a profound judgment. He never flatters them, and blames parents who fail to see the faults in their children. He criticises those fathers of sons who squint; there is something in looks; a ridiculous dwarf; those humpbacked; those not right; those who are deformed; their raising is not assured.

But they did not speak of Horace thus. His father, as he remarked in his fourth satire, raised him without any weaknesses. He was taxed at an early age to avoid vices.

"To guarantee my heart from shameless love,
I've never been slave to any fallen dove.
Sectanus abandoned to unworthy appetite,
Profit by his experience and do right," etc.

Physically, Horace was small and obese.

¹ Galen: "Collectorum Medicinalium," liber vi, cap. xxiv.

In one of his satires Damsippus said of him that he was only two feet tall.

"Ab imo
Ad summum totus moduli bipedalis."

Augustus also states this in a letter that he wrote him for he says:

"Dionysius has brought me thy little volume, and, such as it is, I have received it without complaint of its brevity. Thou seemest to fear that thy books may be larger than thou. But at least if thou failest in height, thy fat belly is not wanting. There is nought to prevent thee from standing in a bushel basket when writing, the size of thy book resembles thy own, for it is thick through as is thy abdomen."

We omit the Emperor's Latin and render the translation. Horace draws a portrait of himself in his XX Epistle. "I am small, my hair gray before its time; I love the sun. I am prompt at loosing my temper, and it is as quickly appeased."

"Corporis exigui, præcanum, solibus aptum,
Irasci celerem tamen ut placabilis essem."

From a pathological point of view he was gouty and likewise gastralgic, and he was *lippus*, that is to say, attacked by herpetic blepharitis. We know that Celsus recognized two kinds of ophthalmia; one dry, called *lippitudo*, and the other moist, that he named *pituita oculorum*. Horace was subject to this double affection, which led him to often say he never had possessed perfect health.

"Præcipue sanus nisi cum pituita molesta est."

We see, in fact, during his travels to Brindisi, despite the facetious recital he gives, that he does not forget to mention that he was taken down at Anxur by this malady considered by him as a true infirmity. "While Mecænas and Cocceius were installing themselves, I went to bathe my eyes with a black collyrium—

"Hic oculis ego nigra meis collyria lippus
Illinere."

While making an excursion to the mountains at Treviso, our travelers were forced to take shelter in a small farm house. The farmer made a fire, but the smoke from the wood that was green and full of mouldy leaves, cost our poet many tears.

"Lacrymoso non sine fumo
Udos cum foliis ramos camino."

But this did not prevent him from pinching the servant girl at the supper table. Some days later the party arrived at Capua. "Mecænas," he says, "went to play tennis, Virgil and I went to sleep, for tennis is an enemy to the eye and a sick stomach."

"Lusum it Mæcenas, dormitum ego Virgiliusque;
Namque pila lippis inimicum et ludere crudis."

Always his gouty diathesis attacked him from one point or another. When it was not articular it was visceral, and here is the proof.

The acid stomach of Horace supported condiments badly. One day he went to sup with Mecænas and was much upset by a dish in which was a profusion of garlic. This circumstance furnished him an occasion to write one of his epodes, "Ad Allium," against garlic, that Galen called the theriacum of the peasantry.

"If there is a human being," says he, "who with impious hand may have strangled his old father, he should be condemned to eat this poison garlic, that is more toxic than hemlock. O harvester of the entrails! What is the dreadful poison that produces the fire I feel in my stomach"—

"O dura messorum ilia!
Quid hoc veneni sævit in pectoriis?"

That is the sensation of heat that we doctors very justly call pyrosis. We know this epigastric and esophageal pain is followed by acid eructations, that relieve the unfortunate gastralgic. Horace does not forget to allude to his sonorous and gaseous evacuations in the last verse of his ode. He shakes his fist at the host and threatens him with severe punishment. He says to Mecænas: "Ah, my joyous Mecænas, if thou ever seekest to regale me with such a poison, may thy young mistress oppose her hand to thy kisses and fly from thee to the end of the bed."

"At, si quid unquam tale concupiveris,
Jocose Mæcenas, precor
Manum puella suavio opponat tuo,
Extrema et in sponda cubet."

Since we are upon this culinary chapter we shall recall the fact that the school of Salerno said of this species of garlic (*Allium Cepa*), that it might well be accused of producing pyrosis.

"Let us speak of the onion; is it healthy to use? Galen thought the choleric its taste should refuse.

He permitted its eating by the very phlegmatic, Yet Esclepius onions praises in terms most ecstatic.

'Take them for your stomach,' the latter's advice;

They give one's complexion a pink color nice. A bald-headed man, as every one knows, Rubs his head with an onion and up the hair grows."

In several passages of his works Horace praises his own health. "This," says he, in an epistle to Lollius, "is a very necessary thing if one wishes to enjoy the treasures he may acquire. Palaces and riches without health are as useless as pictures for the sore-eyed, fomentations for gout and the musical sounds of the lyre for those attacked by purulent otitis."

"Ut lippum pictæ tabulæ fomenta podagrum
Aurículas citharæ collecta sorde dolentes."

All the good things of earth, to him who is ill, cannot drive away the fevers from his body.

"Ægroto domini deduxit corpore febres."

Horace had entire confidence in his physicians,¹ as he makes it plainly understood in that passage that concerns all those who wish to mix themselves up with things they know nothing about.

"The stranger on the sea," says he, "fears to attempt to steer the ship; physicians only do that which they consider, and it is only the wise man who dares give abrotonum to a sick man.

"Abrotonum ægro
Non audet, nisi qui didicit, dare; quod medicorum est,
Promittunt medici."

The abrotonum, or southern wood, as we know it, was a species of artemisia (*artemisia abrotonum*). This flower is yellow, odor strong, and the taste bitter like that of absinthe. According to Pliny, the leaves and seeds are very useful in medicine. It was used in coughs, in affections of the kidney, in dysuria, and all sorts of venoms.

Yet it is not necessary to believe that Horace liked drugs, and followed all the hygienic precepts that his health needed.

¹ Petronius made this observation to a sick man: "*Medicus enim nihil aliud est quam animi consolatio.*" The part of the physician consists in consoling his patient and afterwards curing his mind, that is more or less affected.

Once over an attack of illness he soon forgot it and fell back to his usual errors like all patients. In the periods of the intermission of his constitutional disease, he sang the delights of a good table, the charms of intoxication, that warms the heart and gives courage; and naturally did not forget to mention Venus and the Graces. But when his morbid symptoms returned, he sought refuge in his little home, thinking only of rural pleasures, moaning over his state of health and praising his own sobriety. "For me," says he to Apollon, "olives, chicory and mallow suffice for a feast. Grant me, son of Latona, the enjoyment of health in body and mind, and a little benefit acquired from my works."

But Horace does not even mention chicory or infusion of mallow, when he said to a friend—

"Nunc est bibendum, nunc pede libero
Pulsanda tellus."

This, rudely translated: "When there's anything good to drink let us join in the dance and feasting." He did not think of his pectoral tea when writing his ode "To the Bottle" (*Ad Amphoram*).

"Daughter of the trellised vine,
Soft idleness you send.
Ah! the pleasures, sweet, divine,
From intoxicating wine.
Dear Bottle! faithful friend," etc.

We see the ancients knew the art of leading a joyous life. It is not astonishing, then, that upon the darkened stones on funeral monuments we read epitaphs like the following:

"Ede, bibe, lude, post mortem nulla voluptas."

"Eat, drink, enjoy yourself; after death there are no pleasures."

Before Dante had put all wicked people into his Hell, Horace had made all the poor in spirit of his epoch appear in his satires. It was Damsippus and Stertinius, two stoic philosophers, who play the rôle that Virgil has filled in the "Divine Comedie." There are those who show to Horace all those more or less lucid fools who lived in Roman society, fools of the same kind one daily meets even in the modern world.

"Insanity," say they, "spares no one save the wise; it attacks individuals, races and kings; it may change its form but is never cured. Thus pain passes from the side or from the head into the

chest, thus delirium succeeds stupor and the patient tries to strike his doctor."

This comparison is very remarkable. This mutation of a malady that ceases in one place of the animal economy to appear in another, its nature remaining the same, is the exact definition of metastasis, as the ancients understood it, and nearly what modern pathologists conceive it to be. As for the madman who suddenly rouses from stupor to do violence to the physician who attends him, that is seen every day in our modern lunatic asylums. Horace was a great observer, and we see he profited from his association with his medical attendants, Musa and Craterus.

In his classification of maniacs he shows us a collection of old bric-a-brac, bullies and cowards, blood-thirsty kings, jealous spendthrifts and misers, seducers of women, fanatics and the superstitious. Among the latter he cites a mother who has a baby sick for five months and makes the following absurd vow: "O Jupiter, thou who givest and takest away great pains, if the chills and fever leave my son the morning of any day thou mayest indicate, I will plunge naked into the Tiber,"

"Frigida si puerum quartana reliquerit, illo
Mane die, quo tu indicis jejunia, nudus
In Tiberi stabit."

Horace, who hated the prejudices of the vulgar—

"Odi profanum vulgus"—

Horace, who had medical ideas, justly observes that chance or medicine saved the child from the grave, but its mother, in delirium, went to kill herself, for she stood on the frozen river and took a fever. "What disease affected her brain?" queries the poet, and justly answers, "Superstition!"

How many mothers in this world are just as crazy as this ancient Roman matron who, instead of taking their rachitic, scrofulous and chlorotic children to the sea baths, make them drink the water blessed at Lourdes. Human stupidity is immortal.

In his epistle to Julius Florus we see an inhabitant of Argos who goes to the theatre when no one is there, and believes he hears the best tragedians declaim,

"Qui se credebat miros audire tragædos"—

and he applauds this imagination with all his heart.

When, by reason of the cares of money, they cured him, thanks to good doses of hellebore, they drove away his insanity, the crazy man cried aloud: "Alas! my friends, you have killed me instead of saving my life! You have taken away my sweet illusions, and your remedies have ravished me from an error that was my very joy."

"Pol, me occidistis amici,
Non servastis, ait, cui sic extorta a voluptas,
Et demptus per vim mentis gratissimus error!"

Boileau has imitated this satire, that, by the way, is not very agreeable to physicians.

To Horace, avarice was a form of delirium, a pseudo-monomania. He figures himself falling into this kind of mental aberration, and gives us the following monologue:

"If nought can quench thy ardent thirst, thou shalt tell it to thy physician; and this ambition, this desire for money, will increase as it is glutted; thou darest not avow it to any one.

"If to cure a wound, they indicate to thee an herb or a root, and that does not relieve thee, thou wilt abandon all, after finding the virtues of the root or plant to be non-efficacious.

"If it be true, that riches render men less stupid and wicked, there are exceptions to thee; thou hast always the same old ways. But if Fortune could make thee prudent and less miserly, less mean-spirited, thou wouldst blush then for not being the most covetous man that the world owns."

To that false divinity, before which so many men prostrate themselves, to that Fortune to which they sacrifice repose, health, conscience and even honor, J. B. Rousseau has left us a beautiful ode, closely imitating these words of the immortal Horace.

"Fortune, dont la main couronne
Les forfaits les plus inouis,
Du faux éclat qui t'environne
Serons nous toujours éblouis?" etc.

The vain are not forgotten by our stoics. In order to preserve their families from the monomania that leads men to make every sacrifice to obtain public office, they show us a wise father making his children promise, under solemn oath, never to seek after empty honors. "Those of you," says he, "who shall be named edile or

prætor, I will curse and deprive of civic rights!" We might recommend the reading of this satire to many of our medical *confrères*, who give up physic for politics, the Academy and learned societies for parliamentary chambers or even municipal councils.

Horace does not forget to satirize those artists to whom is given the privilege, daring to produce works that are similar to a sick man's dreams, "*Velut agri somnia*. He was evidently familiar with the impressionist school of art, likewise those artists who take their inspirations from the weird; those paint daubers, those fools, who grow long beards and finger nails, and seek solitary places; men who are not fond of the bath tub.

"Bona pars non unguis ponere curat
Non barbam; secreta petit loca, balnea vitat."

Diseased brains will never be cured by the hellebore of three anticyræas.

Finally, Horace assigns a place of honor to reasoning maniacs, to poets tormented by leprosy and jaundice, and who act with the fury and wrath of Diana.

"Ut mala quem scabies aut morbus regius urget
Aut fanaticus error, et iracunda Diana."

Morbus regius has the same significance as *icterus aurugo* and *morbus arquatus*. Icterus is the name of a bird that we now call the oriole (the Galbulus of Pliny). This bird had a yellow color, and the ancients thought that when a man attacked by jaundice looked fixedly at the bird for some time, that the bird would die and the man recover his health. The golden and rainbow colors also gave to this disease the name of *aurago* and *morbus arquatus*. *Iracunda Diana*. They called certain atrabiliary subjects, whose melancholy increases or decreases with the moon, lunatics. The ancients attributed lunacy to the wrath of Diana.

In his satire on the manias of persons, he relates the history of a miser with a charming verve. There was a pinch-penny, called Opimius, who was attacked by a grave disease. He soon fell into a profound lethargy.

"Quondam lethargo grandi est oppressus."

His heirs, already intoxicated with joy, ran to his money chests with his keys. His faithful physician tried the following method to arouse the miser from his stupor—

“Hunc medicus multum celer atque fidells,
Excitat hoc pacto.”

The doctor spread a table, and emptied on it a heap of coin, counting it over with others several times. The miser recovered consciousness. “If thou dost not watch thy gold,” said the practitioner, “thy heirs will run away with it!” Opimius awakened now from his lethargy; the doctor had struck a responsive chord.

Horace has not left us the name of the clinician who furnished this observation, but it was probably Craterus, who was the poet’s friend, and who is cited in some verses further along. In a discussion with his physician, Craterus, he has an argument. “Suppose, Craterus, that a patient had a good stomach. Do you conclude from that he is well and can get up? Certainly not!”

“Non est cardiacus, Craterum dixisse putabo
Hic æger; recte est igitur surgetque? negabit!”

For an acute affection may occupy his chest or his kidneys, for example—

“Quod latus aut renes morbo tententur acuto.”

These medical expressions that so often serve Horace give his writings a particular strength, and furnish us a proof of the intimacy in which he lived with his physician, and does honor to the memory of both.

Thus he compares in one of his odes a miser’s thirst for gold with pathological thirst. “Very cruel towards himself was this poor dropsical subject,” says he; “he kept on swelling, moreover, giving way to his thirst. He could not extinguish the heat that devoured him, for the cause of the ill would not leave his veins, and an indolent lymph kept up the paleness of his body.”

“Crecit indulgens sibi dirus hydrops,
Nec sitim pellit, nisi causa morbi
Fugerit venis, et aquosis albo
Corpori languor.”

In one of his satires he addresses another miser, a usurer who took large interest on money from minors.

“Quinas hic capiti mercedes exsecat.”

Caput is the capital, the sum loaned; *mercedes* is the interest; *Exsecare* signifies to deduct the interest in advance.

This miser was seriously ill and naturally preferred to die rather than touch his hoarded money. Horace says to him:

“The chill from the fever possesses thy body, where another malady forces thee to keep thy bed. Hast thou some one to care for thee, to prepare thy medicines, to seek a physician who might cure thee? Give thyself up to thy children and thy family.”

If Horace had lived at the present day he would not have reproached this miser for having no one to go after doctors. He would only have been able to say, after convalescence, that if health is the first of good things, that it is necessary to pay those who care for you with zeal. Perhaps he thought to recall the three faces of the physician, described by Enricus Cordus.

“Tres medicus facies habet; unam quando ro-
gatur,
‘Angelicam’ mox est cum juvat esse ‘deus’
Post ubi curaco poscit sua præmia morbo,
Horridus apparet terribilisque ‘satan.’”

which may be translated—

The patient’s the strangest being of all,
Calls the doctor an angel when first he doth call;
If cured, the doctor’s a God, fighting evil,
When the bill is to pay the doctor’s a devil.

In this satire Horace likewise blames those discontented with the position allotted them by Destiny; the soldier envies the merchant; the lawyer who boasts of liberty envies the laborer; the countryman always wishes he lived in a city, etc. All, he concludes, would be still more unfortunate did Destiny grant their prayers. But that which it is necessary to remark in this spirituelle lesson given by the poet to his contemporaries is that he makes one exception in favor of the doctors. He permits them to complain of the fatigue of their many labors, of public ingratitude and the neglect of the government; for it was already that way in the days of Horace, and will so continue to be until the end of time. Augustus, meantime, was an exception to the general rule as regarded Antonius Musa. On the return of the expedition from Biscay, as Dr. Meniere relates, the Emperor was attacked by a serious hepatitis. The hot fomentation applied did not prevent the malady from making progress. The disease appeared to be about to carry off Augustus, when Musa resorted to an opposite plan of treatment. Cold water, “*intus et extra*,” conquered the affection. We have here one of the first applications of hydrotherapy as recognized by Pricssnitz, and

such as is practiced to-day throughout all Europe, empirically, it is true, in the majority of cases, but sometimes with marvelous success.

The Emperor Augustus honored Musa royally; he was made a freedman and overwhelmed with honors and wealth; he was exempted from all public taxes, given the rights of a Roman citizen, authorized to wear the gold ring of a chevalier, and a bronze statue of him was made and put up near that of Æsculapius.

Let us turn over some pages of Horace, and we will find some specimens of brain-blind beggars. There are two divisions that he calls *mendici*, in which he includes the priests of Cybele, the priests of Isis, the interpreters of dreams and voluntary castrated fanatics, passing for simple people, but belonging to a dangerous species of human parasites. All these men carried beggars wallets, and warned women what they should avoid doing, or telling them where to go in order to perform some act of worship. Thus they worked the corruption of the feminine sex by acting as letter bearers, and arranging assignations with lovers. The priests of Isis were particularly active in this kind of business; for the temple of Isis was the place where gay women resorted.

There was yet another variety of mendicants, who went from door to door, demanding the waste food. They wrapped themselves up proudly in two tattered rags one folded over the other.¹

"Contra quem panno duplici patientia velat."

Horace here alludes to Diogenes as among those who carry a staff, wear double mantles, and are only pure sophists. "He gives back to Aristippus," adds Horace, "the rich mantle that was offered him, and kept his assumed delirium."²

"Refer et sine vivat ineptus."

Here is the gallery in which Horace placed eccentrics, lunatics and the degenerates of his epoch.

"Where, then, do we find wisdom? Among these? For the wise merit the name of extravagant, and the just are unrighteous if they carry exaggerations into their conduct and maxims.

"Insani sapiens nomen ferat, æquus iniqui,
Ultra quam satis est, virtutem si petat ipsam."

We have seen that Horace was an expert at gourmandizing. He knew its attractions and inconveniences. With what art he enumerates and censures the manias and depravations of the gourmand. But in order not himself to be taken in such flagrant acts, he makes a eulogy on the frugality of Ophellus, an honest peasant, his neighbor in the country. Ophellus thus expresses himself: "Go chase the hare, with a wild horse to worry thee. If warlike habits worthy of Rome are repugnant to thy Greek habits, seize a hand ball, deceive by the pleasure of play the lassitude that overcomes thee; take quoits if thou so prefer. Fatigue the body if thou hopest to drive away the wearied feeling from thy mind; afterwards hungered, with dry throat, have a contempt, if thou darest, for coarse meats and Falerno wine, that even the honey from Hy-mettus cannot more sweeten.

"Thy hotel keeper hath gone out; it is winter, and the fish fall short. What difference? Bread and salt should suffice; the cries of thy stomach are appeased; thus thou art content. The sources of voluptuousness reside in thyself, not in flavors for which thou payest so dear. Seek in fatigue thy appetite and the seasoning for meals. Indolent gastronomic, pale from enjoyments, thou wilt not find taste in oysters, sargets, nor the game that foreigners bring thee."

Our peasant speaks like a book on hygiene, and continues his learned dissertations on fish and gluttony. "All is corrupt," says he, "in a sick stomach that the accumulation of food fatigues."

It is necessary, then, to use radishes and aromatic elecampane.

"Mala copia quando
Egrum sollicitat stomachum, quum rapula
plenus
Atque acidus mavult inulas."

There are still a few doctors who use elecampane (*Inula Campana*) as a tonic, as an excitant, and anti-dysenteric. Its use in medicine dates back to a remote period of time, and we see long before the days our Gubler used its expectorant qualities it was used in bronchitis.

Now, what are the advantages of frugality? Ophellus goes on to tell us:³

¹ The cynic philosophers wore no coats. They were content with wearing a ragged mantle passed twice over the shoulders.

² Petronius likewise puts into verse the ad-

"At first thou wilt not support frugality well. A variety of meats injure a man; dost remember how thou found thyself every time thou nourished thyself with a single dish? Yet when thou confoundest roast meats with boiled meats, oysters and wild thrushes, the softer, sweeter flavors changed and became bile; thy stomach then was given to intestinal warfare, charged by a pitiuity that slowly tortured thee."

Catarrh of the stomach, dyspepsia, stomachal acidity, are all well indicated. It was necessary that the poet should have experienced the anguishes of gastralgia and the successive indigestions that are induced, in order that he could analyze the symptoms with so much precision. Behold, then, Horace as a pathologist, hygienist and Professor of Bromatology. It is in this quality that he finds it equitable to make small exceptions in diet when a friend dined with him. He added then a plate of vegetables and grilled pig's feet, and every day a roast chicken and a hare. Afterwards grapes were pulled from the overhanging arbor, and with nuts and figs formed the second course. "After that," says he, "we drank the very largest cup that I own dry, passing the goblet from hand to hand. We drank to Ceres for beautiful gifts. Wine charms away cares, unwrinkles foreheads and lightens the heart."

"*Explicit vino contractae seria frontis.*"

In another satire he makes a eulogy on the good cheer furnished by Catus, a simple epicurean and culinary supernumerary. This Catus, less talented than

vantages of frugality. To all those who aspire to science and glory it is necessary to make a duty of this virtue.

"*Artis severae si quis amat effectus,
Mentemque magnis applicat prius more
Frugalis lege polleat exacta.*"

He recommends keeping away from the tedious banquets set by the rich, to fly from debauchery, to never give one's self up to an excess of wine that stupefies the mind.

"*Nec perditis addictus obruat vino
Mentis colorem.*"

"Genius is the child of frugality.
Thou, whose ambition longs for immortality,
From the tables of the great fly all perfidious
luxury.
The vapors of Bacchus obscure reason,
And rigid virtue
In happy vice fears to bow down the head."

Brillat Savarin, formulates his precepts as follows:

"Eggs of an elongated shape have a most delicate taste; milk-white ones are used by preference, for their shells contain the male germs. Garden kitchen cabbage has less savour than that grown in open lands. There is nothing more insipid than the fruits from a too freely watered garden. Mushrooms are almost all of good quality, but it is bad to take them from everybody." Here we protest; Mushrooms are not worth as much as chestnuts, cepes from Perigord, nor even the truffles, another mushroom, that grow in the same fortunate places.

Our Catus now gives us some advice for our health. "If you are not sick," says he, "eat black mulberries at the end of your dinner, cooked only by the sun's rays. Do not drink Falerno mixed with honey before eating, for in case the stomach is empty it is necessary to only drink sweet things.

"*Quoniam vacuis committere venis.
Nil nisi lene decet.*"

There is a condemnation of aperatives, vermouth, Madeira, absinthe, bitters, etc.; a very just condemnation that even children at the age of seven know.

Let us continue.

"Is your lazy belly obstructed? Mussels and other shell fish will cause an evacuation with sorrel without forgetting the wine of Cos."

We might add not too much sorrel nor too much wine, but this would be useless. He ends his course with different ancient sauces with which fish should be eaten, and a disquisition upon the production of the best varieties of game, etc.

In his epistle to Numonius Vala, Horace asks for information relative to the climate of Salerno, where Musa was going to send him, because the sulphur baths of Clusium were contrary to affections of the stomach. But he does not forget to inform him of the near country where the most hares and boars abound, as well as the sea shores most plentiful with fine fish. For, if at his country home, all is well; if his time be passed on the sea shore he loves a fresh and generous wine, that would dissipate his cares, fill his heart with bright hopes, delight his tongue and render his youth more agreeable to his affectionate Lucanienne. It is necessary to be explicit,

too. "Because," says he, "I wish to return to you big and fat, like a true Pheacian."

"Pinguis ut inde domum possim Pheaxque reverti."

If Horace knew the cares necessary to give to good wines he also laid great stress on pure water. "Would you drink cistern water," says he, "or water that flows down fresh and cool from high mountains?"

"Collectosne bibant imbres, puteosne perennes
Dulcis aquae?"

He did not like—and he was right, too—"that water that is forced through lead pipes, where it is held; it was less pure than that falling with soft murmurs down a natural declivity from a brook."

"Purior in vicis¹ aqua tendit rumpere plumbum
Quam quae per pronum trepidat cum murmure rivum."

But what he preferred, above all others, was a fountain more fresh than the waves of Hebrus that water Thrace, that is a water salutary for diseases of the stomach and head.

"Infirmo capiti fluit utilis, utilis alvo."

It was not very difficult to divine where it is found. It is in its domain in that delicious retreat that protected him against the heat of the dog days and the malignant influences of September, where he awaited the daily visits of his friends.

"Incolumen tibi me praestant Septembribus horis."

It was there, in fact, that true hospitality was to be found. It was in the small myrtle grove, meeting his friends with outstretched arms and a happy smile on his lips.

In order to better be seen at home, it is necessary to note a letter that he wrote to Torquatus, a missive full of friendship and rapture.

"If thou hast no fear of sitting upon rustic seats and supping on vegetables, thou mayest bring along some good things. I await thee at sunset at my home. Thou shalt drink a wine of a vintage made under the second consulate of Taurus. Come

on! The wood blazes on the hearthstone, and all is ready to receive thee. Leave thy affairs and come and talk gaily up to daybreak. We will empty a few bottles and tell anecdotes."

And he adds: "What a marvel there is in a little intoxication. It is the key to confidence; it is hope transformed into reality; it pushes, despite himself, even a coward to fight; it relieves the soul of heaviness, of care, and makes talent blossom. Who is there that a well-filled goblet shall not make eloquent? Where is the poor man that wine does not enrich even in the midst of his misery?"

The first verse of this epic upon drunkenness may be thus translated:

"God of the Vintage, it is our right.
To sing thy praises each festal night.
Is not all wit due to thy lightness?
You chase off care, flashing in brightness.
Strength to the feeble you ever gave,
Making e'en cowardly soldiers brave," etc.

Where was this little cottage at Tibur that witnessed so many joyous fêtes. We find its plan and description in his epistle to Quinctius.

"Imagine, thou, he writes, "a chain of mountains divided only by a valley full of freshness; at the right the sun shines radiant at its rising; at the left it is full of colors in its dying rays. If the climate is delicious it is none the less fertile. The trees are loaded with plums, and there are dogberry bushes under which the sheep find abundant nourishment, while the master of the house has a thick shade. Thou mightest say all the verdure of Tarranto is transported here."

It is there where Horace lived! It was there he ate his cool things in summer and his warm things in winter, with some old friend or young mistress; it was there he knew all the joys of an easy and voluptuous life, convinced that the treasures of kings added nothing to human happiness, if the stomach acts well and if the feet and belly are in a good condition.

"Si ventri besis, si lateri est, pedibusque tuis, nil
Divitiae poterunt regales addere majus."

Still his stomach and his feet—always arthritic—that appeared to Horace as an enemy that besieged him, as a rule, and and disturbed his happiness.

In this same epistle Horace shows us the degree of cleanliness that was in vogue among the Epicureans. He recalls, in

¹ The great number of aqueducts in ancient Rome was one of its principal wonders; Agrippa reports to Pliny that in the year 735 Rome had almost seven hundred reservoirs and five hundred fountains, a number largely increased afterwards.

fact, Torquatus, and we may have confidence in this report. "He watched that his bed and mattress should always be immaculately clean, '*ne turpi toral.*' Table cloths and napkins were very white so that they did not inspire disgust.

"Ne sordida mappa corruget nares"—

to the end that the marks of cups and plates were never seen.

"Ne non et cantharus et lanx ostendat tibi te."

Generosity was also one of the grand qualities of Horace. It was necessary to allow the boar's meat to be rancid—

"Rancidum aprum laudabant,"

says he, because, were it served fresh and whole, the voracity of men left nothing for the convivial who might happen to drop in late. It was in this idea that he derived from the Pythagoreans the precept: It is not necessary to put out the lamp because it is always necessary to be ready to receive a guest. And it is not necessary to sit down on the bushel basket because you want to keep something over for the next day.

In all his writings we find proofs of his elevated sentiments. The poet was kind-hearted to both his rich and poor friends. In his epistle to Iccius, he admires Democritus who permitted his neighbors' flocks to ravish his fields and even his garden, while disengaged in things terrestrial his spirit traveled in space.

"Miramur, si Democriti pecus edit agellos
Cultaque dum peregre est animus sine corpore
velox."

On this point he showed, as we see, the ideas of the Platonists upon the functions of the soul. The latter, in meditation, truly detached their minds from their bodies in order to raise themselves above earthly questions and to more clearly view objects they wished to study.

Is it not curious, to see this man, who took a part in all human enjoyments, who sometimes appears to us as a materialist, high liver, an amiable Epicurean, raise himself like the poets into ethereal spheres that genial intelligences move in, and leave to us a philosophy and precepts that are eternal truths?

As a disciple of Epicurus, he thought that the fruit drawn from philosophy has in it nothing to admire—that is to say, nothing to fear.

"Nil admirari prope res est una."

He knew, like the stoics, how to receive without pride and to give back without pain, *cuncta resigno*. One of his precepts was that it was necessary to measure by the ell, *metiri quemque suo*—a precept that was written on the walls of the Temple of Delphi by Chilo. Finally, as a patriot, he has left us this sublime sentence—

"Dulce et decorum est pro patria mori."

Although always conscious of the value of his works, Horace was modest. The advice he gives in his book to those who ardently aspire for the honor of publicity is the proof. He saw the disillusionments that awaited him; the reader would close the book if it wearied him; it would be praised when it might attract by novelty; it would later on be worm-eaten and gnawed by granary rats in some corner; it would be used to wrap up merchandise. But, perhaps, it might be honored in its old age and be read by the pupils of the school.¹ This appeared to be all his ambition.

"Hoc quoque te manet ut pueros elementa docentem
Occupet extremis in vicis balba senectus."

Behold, Horace, then, talking like an Epicurean, but in reality a free thinker, taking what he deemed good from the Stoics, the Pythagoreans and all of the other philosophic sects. It was thus that he vaunted to Numicius the worth of virtue and a contempt for grandeur, because all that is raised to-day will eventually be destroyed, and that hidden in the earth will again see the open day. The genius that presides over this evolution, or, better, this revolution, is Time.

"Quidquid sub terra est in apricum proferet
ætas."

Before him Sophocles had said that "Time raises that which is hidden and buries that which is raised." This is a lesson for those who live only for the glory of arms and the honors of politics,

¹ Besides the celebrated schools that were found in the finer quarters of Rome, in which learned professors explained to their followers the best Greek and Latin authors, there were small schools at the extremity of the streets where children went in order to learn how to read.

but that cannot be addressed to great men whom work has immortalized. In his dialogue with a peevish fellow who annoyed him with idle questions, Horace interrupted him by asking: "Hast thou a mother or relatives to whom thy health is dear?"

"No," he replied, "I have buried them."

"So they are happy," said Horace, "and I am under the knife. So! executioner, I touch on that fatal moment that was predicted for me in infancy by an old sorcerer of Samnites, after moving his horn about, 'this child,' said he, 'need not fear poison, the steel of an enemy, and he can defy pains in the side, cough and dropsy, but beware of blabbers! If the child is wise he will avoid such when he comes to the age of reason, for such a one will some day leave him for dead.'"

This sorcerer was deceived; it was excesses, those of the table and passion that injured him. His slaves one day reproached him, for Roman customs gave them the right to criticise their masters without fear of punishment. "For me to gourmandize," said a slave, "is often fatal, because my poor back suffers." "But thou, art thou less punished, when thou eatest those delicate flavored meats bought at a high price? As many as the foods with which thou fillest thy stomach sour beyond measure and thy staggering feet refuse to carry thy body sapped by its intemperance."

Some years later our poet became hypochondriac, and would revert to the times that had taken flight, years that had ravished him with their gayety, love, feasting and the play. Now even poesy fain would fail him. His slave reproached him constantly—reproached him for sighing after the country when he was in the city, and longing for Rome when in the country. His humor changed. When he was not invited out he ate vegetables with all the respect for the prescriptions of hygiene. His slave said to him: "Thou vauntest of the morals of thy ancestors, but if we take thee at thy word and propose to lead thee back to them, thou

1 Independently of blows from a staff with which slaves troubled with gluttony were rewarded, they marked on their bellies with red hot iron, as they marked fugitives on the feet and thieves on their hand, and burnt the tongues of talkative slaves.

wouldst not consent. Thou canst not be convinced that life is happy with a pure and virtuous morality. Thou fightest against adultery but sometimes thou lovest thy neighbor's wife—

"Te conjux aliena capit."

It is a wise man who has empire over his sentiments and the courage to resist his passions."

Meantime the season of love, of lilies of the valley, and roses approached the end. Yet we see our poet sending his slave to tell Neera, the seductive Spanish singer, to perfume her hair with myrtle and come quickly, too.

What a change! Horace in his decline unable to write odes to Pyrrha, Lydia or Venus. Love was now a simple physiological affair to him, the heart with the head cold—

"'Tis only the trembling of the flesh,
The soul is no longer afire."

"I have less health in mind than in body," Horace wrote to Celsus. "I wish to hear or know of nothing that will relieve me. I am impatient with the physicians and against my friends who cannot cure this languor (*Veternum*, a species of hypochondriasm, very well described under the name of *Stolidum Veternum* in the ode, "*Ad Coloniam*," of Catullus). I continually go after what I know injures me, and avoid all I know to be salutary; finally, like a weathercock, at Rome I wish to be at Tibur and when at Tibur I desire to return to Rome."

The malady from which Horace suffered was senility; his gouty diathesis assisted at that period of cachexia; the organism commences to discover it is incurable. It is at this period that Musa, his physician, made him cease using the sulphur waters of Baia, and sent him to Salerno. Some years more elapse, the poet's organs lose their activity, his strength grows weaker, his teeth fall out, and his skin is dry and wrinkled. This is the physiological hour of life, when poets, more than any other class of men, think they perceive all the physical and moral infirmities of women. Horace was no exception, and indulged in brutal tirades against the fair sex. Horace had now become a materialist—this elegant poet!—that's all. So his last odes were abuses of the Musettes and Lydias, of whom, in youth, he had chanted the praises.

CATULLUS.

Catullus was the friend of Cicero and Cornelius Nepos; he came to Rome while he was yet young and was raised under the tutelage of Manlius. He was rich, amiable and handsome, endowed with robust health, so necessary for the gay life he led and for the fatigues that always follow sleepless nights of wild debauchery.

Despite his vices, Catullus was a charming poet; one finds among his works a large number of pretty poems that escaped from his muse in the double drunkenness of love and wine. One of the most severe critics of the eighteenth century remarks: "His poesy has no words in it that are not precious jewels, but it is as impossible to analyze it as it is difficult to make the translation. Those who can explain the charm in the looks and smiles of a winsome woman might possibly be able to explain the enchantment of the verse of Catullus." His epigrams do not, unfortunately, resemble his elegiacs, and passing from one to the other is like going from the perfumed boudoir of chastity to the atmosphere of an infected lupanar. But we physicians, are we not accustomed to this sort of antithesis? The physiologist ever interests himself in that presented to his observation. If in his madrigals there is not much for commentation from a scientific standpoint, we may still find some exquisitely polished literary gems, that are the property of a world that will ever love the beautiful. Works of literary art will ever be admired by the scholarly physician.

We need dwell but briefly on his amours and only smile at the happiness that so delighted Lesbia—

"Passer, deliciae meae puellae."

Hidden in her bosom we will not even point the finger of shame at the poet, nor hear his amorous sighing when he says:

"Vivamus mea Lesbia, atque amemus
Rumoresque senum severiorum."

"Let us live, let us love, my Lesbia,
Contempt for the old and jealous murmurs;
'Tis only youth that life enjoys;
Can they enjoy it better than we?"

"If on the restless breast of the waves
The sun dies at night it wakes at morn;
'Though from the cruel world we depart,
Ever remember there is a tomorrow."

But his Lydia was not even faithful.

Gallus says of Roman womankind, their hearts are ever inconstant.

"Fœmina natura varium et mutabile semper."

And our poet remarks: "Lesbia swears she prefers me to the entire world, but she would e'en disdain the homage of Jupiter. For the oaths of women are written on the wings of the wind, upon the crystal of the foam-tipped waves of love's ocean.

"Sed mulier Cupido quod dicit amanti,
In vento, et rapida scribere oportet aqua."

The medicine of Catullus need be but briefly mentioned as his allusions to the healing art are infrequent. Catullus has dedicated one of his odes to "The Country," in recognition of a cure he found there when suffering once from a bad cough. "O fields of my father," says he, "it is to thee I owe relief from that catarrhal fever and that distressing cough, by means of rural rest and an infusion of nettles."

"Hic me gravedo frigida, et frequens tussis
Quassavit, usquedum in tuum sinum fugi,
Et me recuravi otioque et urtica."

It is not so very long since that we used the seeds of a certain species of nettle (*urtica urens*) in medicine for diseases of the chest. The syrup of nettle was likewise once a remedy for hemorrhage of the lungs and certain accidents of pulmonary phthisis. This is nothing new. The ancients likewise were acquainted with the virtues of alimentary plants.

Martial lauds the aphrodisiac properties of onions, as much by reason of their taste as by reason of their excitant qualities. So he remarks: "If thine member has lost its vigor, thou canst do no better than to eat of onions." He also says of truffles, that after mushrooms they are the first fruit of the earth.

Ovid praised, on his part, the shallow of the white variety found in many of our gardens (*Allium Ascalonicum*), and after it another strong aphrodisiac, i.e., *herba salax*. Before quitting this subject, let us recall the fact that in one of his odes to Lesbia, Catullus alludes to the famous silphion that grew in the perfumed fields of Cyrenis—

"Laser piciferis jacet Cyrenis."

On account of its agreeable odor some writers think that he mentions benzoin.

To the number of aphrodisiacs it is necessary to add satyrion, which, according to Pliny, was a stimulant to carnal appetite. The Greeks held that this root, when merely held in the hand, excited amorous desires, and that the effects were even stronger when it was taken as an infusion in wine. It was for this reason that the ancients gave it to bulls and rams when these animals aged. The excitement created by satyrion, or, as it is vulgarly called, "standard grass," was allayed by honey water and an infusion of lettuce. It is this same plant that Apuleius, the physician, called *priapicon*, or *testiculum leporis*, that is known at the present day under the name of *satyrium hircinum*, a variety of the orchid family, that grows in moist situations and exhales a strong, goat-like odor. The ancient Greeks gave the general name of satyrion to all kinds of drinks that might exalt sexual desires.

Dr. C. Castel in his poem, "*Les Plantes*," Paris, 1797, tells us that lazer (*lazantium* or *silphium*) was a famous plant in times of antiquity, that for a long period has escaped modern investigation. This plant only grew in Libya, near Cyrenaica, and was stamped on its monies. It was forbidden, by a public ordinance, from being exported from the country. After a time, however, the Cyreneans relaxed their severity; but as the plant could only be raised with great difficulty on any other ground, and also lost its medicinal qualities, the gum of Cyrenaica, kept up a high price in commerce. It sold at its weight in silver. It was preserved in the public treasuries with all other very precious materials.

History informs us that Cæsar carried off fifteen hundred pounds of lazer from the treasury of Rome when he forced it after the flight of Pompey. This medication was used internally as well as externally. Use was also made of various parts of the plant; the stems boiled and then baked under ashes was a very mild and efficacious purgative; the root, made in infusion, was an antidote for poison; the leaves, dressed as a salad, strengthened the stomach and perfumed the breath.

Catullus had very curious notions regarding pregnancy and the signs of virginity. In one of his heroic pieces, "The Wedding of Thetis and Peleus," he felicitates the happy couple. "Dear maid,"

he says to Thetis, "give thyself up to thy husband who adores thee. Tomorrow at dawn thy curious nurse will laugh at being no longer able to gird thy swan-like neck with the collar of virginity."

"Non illam nutrix orienti luce revisens
Hesterno collum poterit circumdare filo
Currite ducentes subtemina, currite, fusi."

Roman matrons claimed by this sign they could recognize pregnancy in the newly married.

There was yet another method of knowing the virginity of girls. The throat was measured by means of a ribbon. Afterwards the young person suspected took the two ends of the magical band in her teeth. If the head passed through the loop of this collar it was a certain sign that the girl was no longer a virgin.

Cabanis, in his "*Rapports du physique et du moral de l'Homme*," states that the first sexual connection causes a general swelling of all glandular localities, notably of the breasts and the anterior portions of the neck. Present day physiologists, generally, admit that the sudden swelling of the neck in young girls is one of the signs of defloration.

Let us now examine a few of the epigrams of Catullus. In one against Egnatius, the poet says: "Thou hast beautiful teeth and a mouth ever smiling with laughter. Meanwhile thou art not a Sabine, Etruscan or native of any Italian province in which they rinse their teeth with pure water."

"Si Urbanus esses, aut Sabinus, aut Tiburs,
Aut Transpadanus, ut meos quoque attingam
Aut quilibet, qui puriter lavit dentes."

And the poet maliciously adds, "Thou art a Celtiberian, a native of that country in which the inhabitants remove the tartar from their teeth every morning with the liquid vulgarly known as urine. Though thy teeth be white, they betray the disgusting method by which thou hast utilized thy night chamber."

It will be seen that Catullus did not admire urine as a dentifrice. Curious fact that both Strabo and Diodorus state that the Spaniards, in ancient days, cleaned not only their teeth but even washed their bodies with urine, deeming the habit healthful.

The odor of rheumatism is noted in one of the epigrams of Catullus, who mentions

an individual with gouty rheumatism who every time he made love exhaled the fetid odors of podagra. Thus does the poet class love in the etiology of rheumatic gout.

As before remarked, these epigrams of Catullus are for the most part, as regards medicine, too erotic for translation. The poet died aged forty-six, in the year 40 B. C.

TIBULLUS.

Aulus Albius Tibullus was one of the poetical glories of the age of Augustus. He belonged to one of the most illustrious families of Rome; and, although still young, was attached as major to the army of Val. Messala, and in this military capacity went through several campaigns; but after the war with the Aquitanians, he abandoned his military career and gave himself up to poetry. He had as friends Ovid and Horace.

We see that Tibullus had talent, wealth, beauty, and most brilliant qualities of mind and heart. He sought his poetry, like most poets, in the inspiration of women—such hetaires as Delia, Sulpica, Nemesis and Neera, all distinguished for their bright minds and glorious beauty. He was the lover of all; and, finally, died in the height of his poetic fame and power in the arms of Delia and Nemesis, who covered his face with kisses and tears as he gently passed away from life to the Elysian fields.

The poems of Tibullus are, for the most part, jewelled collections of glittering word elegiacs. His eulogy has been often written in various ages by admirers.

Mirabeau says of him: "That delicious Tibullus whom it is necessary to read, re-read, know by heart, and then re-read again."

Labarpe remarks: "Tibullus, the poet of sentiment, is superior to all his rivals. His style is of exquisite elegance, his taste pure and his composition irreproachable. He has a charm of expression that no translator can render, and can only be felt by the heart. His delightful harmony transports the soul with its sweet impressions; his is the book for lovers. He had, moreover, that taste for the country that so well accords with true affection; for nature is always more beautiful when it sees but one object of love. Happy the man of such a tender and flexible imagi-

nation, that, added to the taste of voluptuousness, is delicate in tracing imagery in words; who occupies his leisure hours in painting his moments of intoxication, and gloriously sings of youth's pleasures!"

In his works are songs of love, the most beautiful ever written by man, and there are but a few things in which he touches on medicine; but he does dwell most fervently on all that touches humanity, morals, sentiments, passions, especially valuable to medical students of biology.

Let us briefly dwell on the views of Tibullus on death, that to him was merely a phenomenon of terrestrial existence. "May my fond glance rest on thee when my last hour comes; may I, in dying, press thy trembling hand. Thou, thou wilt weep, Delia, when my body shall be placed on the funeral pyre, and thy tears will commingle with thy parting kiss. Thou wilt weep; thy breast is not made of steel nor is thy heart a stone. All that are young will return from my funeral rites with dry eyes. But thou, for fear of afflicting my manes, spare thy lovely floating hair, spare thy delicate white cheeks, O my Delia, loved one! However, pray Destiny may permit it, love shall unite our hearts again—soon death will arrive and thy head be covered by a somber veil. Very soon an idle old age would have come to me, and love and tender words would be no more, for our heads would have grown gray."

Tibullus was of delicate constitution, and had a presentiment that he would die young. He said to Messala, under whose orders he found himself at Corfu, on an expedition of which Asia was the objective: "Traverse the Ægean Sea without me, but vow to the gods that thou and thy companions shall keep my memory green when I return sick to Pheacia, that unknown country.

"Me tenet ignotis ægrum Pheacia terris."

"Somber Death, withhold thy hands and spare me! I have no mother here who will tenderly gather my ashes in her mourning robe, nor any fond sister to throw o'er my remains the sweet perfumes of Assyria."

These passages show one of the ceremonials of cremation; when the body had

1 In sign of mourning many Roman women threw their hair on the biers of the dead. This custom caused the invention of wigs.

been incinerated on the funeral pyre, it was the nearest and dearest relative who received the ashes to be deposited in the tomb, after having been perfumed with rare essences.

Afterwards Tibullus implores the goddess Isis. He exclaims: "Goddess come now to my succor, for thou canst heal me; the numerous tablets that hang on thy temple's walls are proof of thy power; Delia, fulfilling her vow, will seat herself at thy sacred portals, and, twice daily, with hair floating in the wind, will sing thy praise."

The custom of suspending *ex voto*, by the faithful in modern churches, is only an imitation of Pagan morals.¹

The resort to divine power in desperate cases is an essentially human idea, found in the history of all peoples.

Tibullus terminates his reflections on death by the following: "But if I have fulfilled the number of years that Destiny has accorded me, let them grave these words upon my tomb: Here reposes Tibullus, removed by cruel death, while he followed Messala over land and sea."

"Hic jacet immitti consumptus morte Tibullus
Messalam terra dum sequiturque mari."

After his death, his spirit, he trusts, will go to the Elysian fields, and he will be led there by Venus herself,² because he

¹ The same when men invoked Priapus, women attacked with diseases of the sexual organs went to invoke Isis. In the temples to this goddess are seen a great number of pictures of the organs cured. Tibullus says:

"Nunc dea, nunc succurre mihi; nam posse
mederi,
Picta docet templis multa labella tuis."

It is well to add, that in the neighborhood of these Pagan temples, there were numerous drug shops.

² Tibullus alludes to the attributes of this divinity, who was nothing else than the allegorical image of the creative power, that succeeds death by life and life by death. Venus, in fact, had one temple at Rome where she was worshipped as the "Goddess of Sepulchres." The ancients recognized several origins for Venus; some held she was the daughter of Heaven and Light; some that she was born from the foam of the sea; some that she was the daughter of Jupiter and Dione; some that she came from Tyre and was called Astarte. They explained her birth from the foam of the sea by the history of Saturn, who mutilated by a blow, the virile parts of his father, Uranus, and threw them into the sea. In falling, the blood stained the water and produced a foam, from which was born Venus Aphrodite.

had always been docile to the tenderest lessons of love. "There," says our poet, "will be only dancing and singing; the birds will fill the air with their entrancing melodies; the perfumed plants, with the breath of the rose, will ever exhale a delicious perfume in that summer land. All, as boys and girls, will play together throughout eternity. It is the land of lovers whom cruel death surprised on earth; there they are recognized and their heads crowned with myrtle."

This is the idea of Tibullus. He makes us see the Paradise of our dreams, that is as good, to our mind, as any other of which we have any knowledge; it is a real Paradise of love, the idea of all poets, naturalists and the philosophers.

Tibullus, despite his presentiment of death on this occasion, recovered for the time being. But it is painful to find on his return that his beloved Delia was ill. What her malady was he does not tell us; but ventures to state he one day found her in a bad humor. "Since cruel disease has chained thee to thy bed," says our poet, "it is I who fain would suffer. Three times I have walked about thee with purifying sulphur—

"Ipseque ter circum lustravi sulfure puro."

So we see that even in those remote Roman days the virtues of sulphur were known. Burning sulphur to disinfect a sick room is nothing very new.

An old man affirmed to Tibullus that charms and herbs had something to do with impotency.

"Quid credam? Nemp̄e hæc eadam se dixit
amores
Cantibus aut herbis solvere posse meos."

Herbs played a great rôle in ancient therapeutics. Sorcerers gathered them from among lone tombstones at the rising of the moon; many plants were supposed to neutralize the effects of charms and preserve persons from witchcraft. Pliny cites one, after Homer, called *moly*, that Mercury gave to Ulysses to preserve him from the enchantments of Circe; the root of this plant was black, its flower snow white. Many have endeavored to find out what this mysterious plant described by Homer was, but no one has ever yet discovered its variety. Meantime, Linnæus has bestowed the name of *moly* on a species of garlic (*Allium Moly*), but its flowers are not white, they are yellow.

Linnaeus, the grand Latin naturalist, also mentions another plant, the *cerros*, that is nothing more than the officinal betony, the flowers of which are red or white and its leaves hairy or oblong, that produce, when dried, sternutatory effects like tobacco. The root of betony has a penetrating odor; it is emetic and purgative. In ancient times this plant was considered a panacea, and Tibullus mentions this when he says to Delia: "I have given thee juices and herbs to efface the bluish traces that two lovers imprint on each others' cheeks with amorous teeth."

"Tum succos herbasque dedi, queis livor abiret,
Quem facit impresso mutua dente Venus."

In one of his poems, Tibullus cites the herbs of seven mountains—

"De septem montibus herbas."

The laurel, when it crackled in the sacred fires, was supposed to foretell a happy year, and laurel leaves obtained prophetic dreams. The poet points out an ancient hair dye, and indicates how to hide the ravages of time by tinting the hair with the green bark of nuts.

"Coma tum mutatur, ut annos
Dissimulet, viridi cortice tincta nucis."

In the midst of some proper notions, what a curious mixture of magic, superstition, sorcery and ignorance. Yet, despite this, many admit that the priests and sybils of ancient Rome produced extraordinary effects by natural methods; if their potions and philters acted on the imagination and nervous system, disposing minds to illusions and hallucinations, it was not astonishing. Tibullus tells us that his sorcerer only knew the malevolent herbs of Medea.

"Sola tenere malas Medæ dicitur herbas."

Poisonous herbs, evidently such as white hyoscyamus, or the yellow and black varieties, hemlock and stramonium, that are not called without reason "sorcerer's herbs," the great medicinal properties of which, as well as their magical spells, have been duly discovered by methods of modern chemistry in many a laboratory.

The old sorcerer composed for Tibullus various magic spells, by which one could be deceived. "If thou wilt but sing thrice, and then spit thrice, no one will ever believe what may be said of thee; they will not believe even their own eyes."

Spit three times! (*Numero Deus impare gaudet*) was the formality used in enchantments. Pliny, the naturalist, in one of his chapters consecrated to the properties of saliva, remarks: "It is necessary to spit in order to repel sorcery."

The superstitious minds of the Romans drew signs from everything; from meeting a man who limped with his right foot, from serpents, from wolves, from foxes. They were frightened by a shaking, by sneezing, by even kicking a foot against a door, as Tibullus notes, and as has likewise said Valerius Maximus *apropos* of Tiberius Gracchus. The latter knocked his foot with such violence that he broke his toenail and died soon after.

But Tibullus refused to believe either in dreams or their interpretations. "Ye lie to me," says he, "ye threatening dreams, that towards morning disturbed my sweet repose! Away, ye false imposters! Take with ye that imaginary science of divination, cease to seek in dreams for any certain signs!"

Tibullus believed in the ancient gold cure for many of earth's sorrows. The poet remarks: "Gold is pleasing to young girls, so that Venus and wealth go together. My Nemesis bathes in luxury; in passing down the avenues of Rome she draws the eyes of all by the magnificence of her attire. She wears those fine tissue garments, in which the women of Cos interweave gold with silk."

This influence of gold is found mentioned by all the Latin, Greek and French poets and prose writers, be they sacred or profane,

"Without doubt," says Horace, "money is the king of this world that gives his spouse with a dot, credit, friends, family and a fine figure. Venus and eloquence are always fond of a full purse."

"Icilicet uxorem cum dote, fidemque, et amicos,
Et genus et formam regina pecunia donat."

And what does Boileau say? Whoever rich is, he is all; without wisdom, he is wise. He has nothing to learn; science belongs to him. He has mind, heart, merit, rank, virtue, valor, dignity, blood. He is loved by the great and cherished by beautiful women. Gold, even to ugliness, confers a certain beauty, but everything is frightful in the case of poverty."

Another poet has eloquently depicted

the power of this wonderful metallic agent, yet the most malleable of all metals.

"Gold is the magic key that opens all portals,
It is the hand that twines life's flowers for mortals."

Yes, it is gold that smooths out the wrinkled forehead over virginal bosoms. Unfortunately, gold is truly but little employed in medicine; we know this to be a professional truth with which we terminate this little philosophic digression.

In his III Book, Tibullus writes to his friends these lines: "You are now at the springs of Etruria, and it is well to visit there in the dog days. These waters are to be preferred to the sacred waters of Baia."

There were, in those days, much frequented springs in Etruria, the most celebrated being those of Taurum, known at the present time by the name *Bagni di Vicarello*, near the town of Acqua Pendente.

The place, known as Baia, is located some miles from Naples, on a semicircular hill overlooking the blue sea. In ancient days the fashionable Roman world went there in the proper season. There may yet be seen many ruins of great beauty, but the larger number were buried in the waves. There were once the baths of Nero, the palace of Julius Cæsar, the villas of Cicero and Agrippina, the temples of Venus, Diana, Mercury, etc. The healthfulness of the springs of Baia, and their location in such a beautiful part of the Italian country, often drew crowds there, seeking more for pleasure, however, than for health.

The Romans were our masters in matters of hydrotherapeutics.

But neither medicine or mineral spring waters could cure Cerinthea, a young girl with whom Tibullus finally fell in love one summer day. It was in vain that our poet called on Apollo, god of medicine, in her behalf. "Harken to my supplications and cure the ills of this young girl. Believe me, if thou dost but hasten, thou shalt never regret having given to beauty the succor of thy medical assistance.

"Huc ades, et teneræ morbos expelle puellæ,
Crede mihi, propera, nec te jam, Phœbe, pigebit
Formosæ medicas applicuisse manus."

"Prevent consumption from consuming her discolored limbs and wrinkling her white skin.

"Effice ne macies pallentes occupet artus
Neu notet informis candida membra color."

"Come, powerful God! Bring with thee the juices and magical secrets that shall relieve her sufferings.

"Sancte, veni, tecumque feras, quicumque sa-
pores,
Quicumque et cantus corpora fessa levant."

It was in vain that Tibullus invoked Apollo, and that he assured the medical god what glory awaited him in saving a single mortal, while all the other gods would envy the medical skill of Apollo. Cerinthea was the prey of consumption; fever tormented her; her limbs failed her. The poet does not tell us the result of this faith cure, but his prognosis as to the final result, was most probably realized.

PROPERTIUS.

There was yet another delicate spirit who lived for love and that love made a poet. This was Propertius, who was born in Umbria, at either Spello or Mevania, and died about nineteen years before the Christian era, at the age of forty. His family destined him for the bar, but, while studying Roman law, he became enamored with the sweet Lycinna, who seems to have so much diverted his attention that he abandoned law and gave his entire time to poetry. He was a great friend of Mæcenas, Ovid, Gallus and Virgil and all the poets of his epoch, and Augustus was his patron. But our poet abandoned the faithful Lycinna, for the frivolous and unfaithful Cynthia, and became the poet of the disease known as love. Yet he was fonder of singing of his sensations than of his young and new mistress. He speaks of Cynthia: "Thou, to whom Phœbus accords the gift of verses, to whom Calliope loans a lyre; thou, whose discourse has no equal; thou, who hast all the talents of Minerva and the graces of Venus; O, thou dear charmer of my existence!"

But Propertius was overfond of Falerno wine and suffered therefrom in consequence. So his Cynthia abandoned him for another and our poet's verses became mournful. "Alas! I am distracted," says he, "but one can never drag love from my heart."

"Differtur, nunquam tollitur ullus amor."

"It was not only the beauty of Cynthia that seduced me, though her complexion disputed with the lily in its whiteness, and recalled the vermilion of Iberia mixed with the snows of Thrace; her lips were rose leaves swimming on a sea of pure milk; her hair floated over a neck of alabaster, and her sparkling eyes were the lights of my life; her garments were as beautiful as the fabrics of Arabia. Did not Cynthia dance at festivals with more grace than Ariadne when she led the choir of Bacchantes? Her bow string, does it not dispute in harmony with that of the Muses when she plays upon the Æolian lute? Her writings remind one of Corrina herself, and even Ernuia could not rival her poesy."

One must not conclude from this that Roman women all had such developed intelligences as the blonde, fair, but fickle and false Cynthia, even although anthropological discoveries show us an almost equal mental capacity between men and women of antiquity. Let us remember that the matrons of ancient Rome were for the most part very illiterate, and that the hetaires alone received that great feminine education that in days of antiquity attracted to such women the great thinkers, soldiers, poets and even philosophers.

Eloquent lawyers and great politicians, with orators, are, however, the most frequent victims of the disease called love. Propertius even cited the fact that an occasional physician is attacked by the malady, and alludes to Melampus, who was surprised robbing the herds of Iphicus and caught the love disease from the beauty of Pero. We all know what a celebrated doctor Melampus was, and he had learned his medical art from Apollo, besides.

How can the disease called love be explained? Tibullus tells us it cannot be cured "by herbs, enchantments, nor by decoctions prepared by Medea herself; all such magic is in vain. It is an enemy that strikes you without warning. Those blows are very mysterious. Patients neither need doctors nor a soft bed."

"Non eget hic medicis, non lectis mollibus æger."

Propertius has left us a long account of the symptomatology of the disease called love. The poet states that his worst wish

for an enemy is that "he might love some woman."

It was one Acanthis who beguiled Cynthia into leaving Propertius, and when the poet heard Acanthis was ill he purchased a white dove to offer up on the altar of Venus in hopes that the goddess might strike this Acanthis with a good dose of broncho-pneumonia.

"I have seen an obstinate cough swell the wrinkled neck of Acanthis and bloody sputum escape from between rotten teeth.

"Vidi ego rugoso tussim concrecere collo,
Sputaque per dentes ire cruenta cavos."

May that impure soul be exhaled from thy ancestor's sick bed.

"Spare no stones for the tomb," adds the poet, "nor curses for the ashes. Yet," Propertius adds reflectively, "our manes are not all chimerical, and all does not die with us; a pale shade escapes the funeral pyre."

He could not forget his false Cynthia. Although her lover was now dead, our poet followed soon after. When one only lives for love one dies young. It is said that before Propertius expired he dressed himself as if for a feast, crowning his head with a wreath of roses, and three times emptying a full goblet of Falerno.

VIRGIL.

Virgilius, or Virgil, called "The Prince of Latin Poets," was born at Andes, a town at the edge of Mantua, October 15, 70 B.C., in the year 684 of the foundation of Rome. He belonged to a wealthy family of farmers. He was given a brilliant education, first at Cremona and then at Milan, afterwards at Naples, where he studied philosophy, belles-lettres, mathematics and medicine; for in his time literary studies were not deemed incompatible with science. The depths of his thoughts and the justness of his expressions show his scientific erudition and the spirit of observation that is the consequence of the latter.

Like Horace, Propertius and Tibullus, Virgil sided with Brutus against Octavius, and after the victory at Phillipi his property was confiscated; but, thanks to Mæcenas, the grand protector of all Latin poets, his paternal domains were restored to him, and his political history ends there.

Virgil had an aristocratic nature; he was sensitive, affectionate, modest, observing, ever an enemy to discords and civil wars, a disbeliever in public dissensions. His timidity was excessive; he would blush when his modesty was offended; as Seneca has said of him, "*Ad eo illi ex alto suffusus est rubor.*" Yet he easily abandoned himself to the kisses of love. Virgil, the friend of Horace, had a very tender heart; he was not always able to resist the coquetries of Venus. However, he never so far forgot himself as to lose his dignity; he had the delicacy, of the superior man. He was a poet under all circumstances, epic, elegiac, didactic, with a passion for all that was beautiful and great; he was such a poet as Homer. He was a charmer in his mission on earth. He sang love of country, he inspired his peoples with noble and generous sentiments, he was a benefactor to all humanity. Meantime, despite his mildness of character, he was sometimes in a bad humor. Horace remarks of Virgil in one of his satires: "He is too susceptible; he does not know how to take the quips of our jokers. We may smile at the sight of this man with savage-looking hair and trailing cloak, but he is a good fellow, the best of men and friends, and his queer envelope encloses a sublime spirit—

"Iracundior est paulo."

In physique, Virgil was tall, lank and of feeble constitution. He had the fine complexion of a countryman, good features and very long hair. The humid and marshy (*impaluda*) climate of Mantua caused him bronchial troubles, that forced him to leave a country the cloudy sky and green plains of which were so pleasant to his dreamy and melancholy nature. He passed much of his life then at Naples, at times in Rome, where he died, at the age of fifty-one years, after returning from a sojourn in Greece, where he spent the three last years of his life.

Let us now briefly glance at his life and works, viewed from a medical and scientific standpoint.

When one reads the "Bucolics" and the "Georgics" one is profoundly surprised at the extensive knowledge of Virgil as to botany, agriculture and hygiene. He teaches the art that produces smiling harvests, the seasons when it is necessary to return to earth and marry the vine and

young elm, the cares that it is needful to bestow on cattle and bees. He knows what kind of soils are proper for different crops, the influence of winds, the processes taught by long experience, local traditions, the productions of each province. Such a land is good for cereals, such for vines, such others for trees and grasses. "Tmolus," says he, "sends us its saffron, India its ivory, the plains of Saba their incense, the black Chalybes its iron, Pont its stinking castoreum." He advises us to never put wheat two succeeding years in the same ground, but to replant with peas, vetch or bitter lupines. "But," says he, "separate flax, oats and poppies; these plants dry up the earth. At least it must be renewed by means of thick manure and the salts of ashes in order to reanimate the vigor of the exhausted soil." Manures contained fatty materials that modified and enriched the land; the salts in the ash modified the nature of the earth and stimulated its vegetation.

We need not follow these learned lectures in agriculture, but will merely stop an instant to mention a tree of which the author states the different properties without giving its name.

"Medea produces this salutary fruit, the bitter juices and persistent taste of which chase from the veins, by powerful activity, the poison given by some stepmother, like the mixing of magical words. This tree is large; it resemble the laurel very much, and, without the odor, it spreads far and wide. It might be considered the laurel. Its leaves resist every wind and its flowers are tenacious. The Medes use it to perfume their breaths and stinking mouths, and it often relieves the asthma of the aged."¹

"Animas et olentia Medi

Ora foveat illo, et senibus medicantur anhelis."

What is this tree? Several botanists have thought it was the lemon tree, for the fruit's juices may drive away marshy miasms, designated by the poet as poisons given by a stepmother. We advance this explanation inasmuch as it seems plausible, and on account of the fantastic etiology that the ancients gave to epidemic maladies. As to the antispasmodic action of lemons in senile asthma, it might possibly control such action, but personally we

¹ Virgil, "Georgics."

have never tried it as a remedy for this special disease.

In the twelfth book of the "Æneid" we find another example of the knowledge of Virgil in medical botany. Æneas was wounded in the leg by an arrow; the blood flowed, there was hemorrhage. It was Venus herself who carried to the surgeon, old Iapis, the plant, an infusion of which was to wash the wound. This was the dittany of Crete, with cottony leaves and purple flower, so well known to wild dogs when they are wounded by arrows. Venus gave the plant great virtues; by mixing it with ambrosial juices it became an odorous panacea.

Iapis, without knowing the power of this remedy, proceeded to dress the wound of Æneas. Suddenly the pain disappeared from the body of Æneas and the blood ceased flowing from his wound.

"Subitoque omnis de corpore fugit
Quippe dolor; omnis stetit imo vulnere
sanguis."

Now the dittany gathered on Mount Ida by the goddess was nothing less than the famous dittany of Crete, a species of *Origanum*, of the family of *Labiates*. It was celebrated in ancient times for the curing of wounds, and it is still used to some extent in modern therapeutics; it enters into the composition of the *electuarium diascordium*, and the confection of *compound saffron*.

As for the salutary juices of ambrosia and the odorous panacea with which Venus admixed her liquid hemostatic, it was *chenopodium ambrosioides*, of which *mate* or *Paraguay tea* is only a variety.

We have seen that Virgil was a botanist. Let us now look at him as a hygienist.

If Virgil knew nothing of microbial theories, he nevertheless suspected a morbid principle arising from a diseased organism and capable of contaminating by its contagion the healthy individual. The observers of antiquity all noted that infectious diseases arose from a centre of deleterious emanations, and the atmosphere served as a vehicle to propagate maladies.

Melboeus says to Tityrus: "Thy fattened sheep have not to suffer from strange pastures, and, becoming mothers, they fear not the *contagion* from neighboring flocks."

"Non insueta graves tentabant pabula fetas
Nec mala vicini pecoris contagia laedent."

In his third book of "Georgics" Virgil gives us a very curious description of a celebrated epizootic. This disease, he says, attacked the sheep-folds and carried off the flocks. Already a pestilential air was generated by the autumnal heat, and wild and domestic animals perished, poisoning the lakes and infecting the pastures. The English reader is referred to John Dryden's translation for the fuller notes:

"Here from the vicious air and sickly skies
A plague did o'er the dumb creation rise;
During the autumnal heat the infection grew,
Tame cattle and the beasts of nature slew.
Poisoning the standing lakes and pools impure,
Nor was the foodful grass in fields secure.
Strange death! for when the thirsty fire had drunk
Their vital blood, and the dry nerves were shrunk,
When the contracted limbs were cramped, e'en then
A waterish humor swell'd and oozed again,
Converting into bane the kindly juice,
Ordain'd by nature for a better use."

Virgil tells us that the cattle presented different symptoms; their limbs grew weakened, they drooped stupidly, their eyes were dimmed, and their heads hung as if weighed down to the earth. They vomited blood mixed with foam and uttered long lowing groans before dying.

"The fawning dog runs mad; the wheezing swine
With coughs is choked and labors at the chine.
The victor horse, forgetful of his food,
The stud renounces and abhors the flood;
He paws the ground, and on his hanging ears
A doubtful sweat in clammy drops appears;
Parched is his hide, and rugged are his hairs,
Such are the symptoms of the young disease."

So our poet describes the variety of disease manifest in each animal, and especially dwells on the contagion of the malady. He mentions the pustules that form, and that mere contact serves to carry infection.

"Verum etiam invisos si quis tentarat amictus,
Ardentes papulae, atque immundus olentia sudor
Membra sequebatur; nec longo deinde moranti
Tempore contactos artus sacer ignis edebat."

That's the malignant pustule inoculated to man by the virulent matter arising from skins and hides of animals attacked by carbuncular affections. Virgil perfectly describes the inflammatory gangrene, the slough that appears afterwards, as well as the general adynamic and ataxic symptoms that accompany the last period of the

disease, when good treatment has failed to check the malady.

It is truly curious to see the author of the "Æneid" reveal his knowledge of the veterinary art. If you desire it he can teach you the causes and symptoms of all affections attacking flocks and herds—

"Morborem quoque te causas et signa docebo."

The unclean itch or scabs affects the sheep—

"Turpis oves tentat scabies."

Bramble and thorn bushes destroy sheepskins and induce abscesses. "What is the remedy," asks Virgil? "It is best to bathe them in running water," adds our poet.

"Or, better still, shear off their thickened wool, Anoint their hides with grease and sulphur full,

Take fir roots, anticyrra flowers and tar,
And mix with onion juice when ulcers are."

Virgil advises puncturing the purulent centres, and in some cases prescribes bleeding. He lays down antiphlogistic treatment for dogs and hogs attacked by quinsy (angina).

He describes the diseases of bees. He states: "Their color changes, a horrible thinness disfigures them; we note them removing the dead bodies of their companions from the hive; they remain suspended from the hive by their little feet, or rest quietly in their cells, where they languish, famished by hunger and stupefied by coldness."

To cure bees from swarming he advised burning galbanum in the hives. It was also well to feed the bees some honey mixed with myrtle, dried roses, sweet wine, thyme from Hymettus, odorant centaury and aster amellus. Let us remark that as regards dysentery and vertigo, apiculturists have discovered no other signs of this disease, that has for its cause a cryptogramic product in the bee's stomach. Let us remark, too, that the treatment of sick bees most in vogue at the present day is almost the same as that prescribed by Virgil, *i.e.*, treatment by compositions that have ingredients with antiseptic properties, like thyme and galbanum.

Still another example of the utility of empiricism in medicine. Hygiene informs us as to the action of salt upon the organism; it excites the mucous buccal secretions, increases the flow of saliva and

mucus, provokes appetite and stimulates the production of gastric juice.

After the experiments made on animals by some physiologists, it appears certain that salt added to rations of forage favorably modifies the quality of meats and possesses a real influence in fattening cattle. Salt forage was what Virgil recommended to the stock raisers of his time.

"Carry to thy flocks with thy own hands bean trefoil and lotus in abundance. Season with salt the grasses given thy sheep; for salt produces thirst, swells their breasts, and gives to all milk a most delicate taste."

"Ipse manu salsaque ferat praecepibus herbas,
Hinc et amant fluvios magis, et magis ubera tendant,
Et salis occultum referunt in lacte saporem."

Thus, having viewed Virgil as a most skillful veterinarian, let us now look at him as an anatomist.

In his description of the battles in the Æneid he records the bodily struggles of the various heroes. But there is but little there to interest surgical art. We only learn that the poet knew the regions of the body where it was necessary to strike in order to kill an antagonist. It is thus young Almon receives a mortal wound in the neck and a torrent of blood pours fourth; evidently the carotids were severed.

"Haesit enim sub gutture vulnus, et udae
Vocis iter, tenuemque inclusit sanguine vitam."

Lagus receives an arrow in the back that severs the vertebral column and the spinal marrow. Pallas is struck a blow in the chest by a sword and the wound penetrates his heart and lungs, and turning falls in the same manner under the sword of Æneas. The latter, it is true, is wounded by a dart in the lower portion of the leg.

"No readier way he found
To draw the weapon, than t' enlarge the wound.
Eager of fight, impatient of delay,
He begs and his unwilling friends obey.
Iapis was at hand to prove his art,
Whose blooming youth so fired Apollo's heart,
That, for his love, he proffered to bestow
His tuneful harp and his unerring bow.

"The plous youth, more studious how to save
His aged sire, now sinking to the grave,
Preferred the power of plants, and silent praise
Of healing arts, before Phœbean bays.
Propped on his lance the pensive hero stood

And heard and saw, unmoved, the mourning crowd.

The famed physician tucks his robes around
With ready hands, and hastens to the wound.
With gentle touches he performs his part,
This way and that soliciting the dart," etc.

We see that Iapis used forceps or ancient pincers in his efforts at extraction. Iapis was the father of Iasus. It will be noticed that Æneas stood up during this surgical operation, supporting his weight with his long javelin. We all know the strength of the herbs of Apollo—

" Ille retorto

Pœnum in morem senior succintus amictu,
Multa manu medica Phœbique potentibus herbis
Nequidquam trepidat."

We have mentioned before how the hemorrhage was finally checked, but let us again introduce Dryden's version of the Æneid.

" But now the goddess mother moved with grief
And pierced with pity, hastens for relief.

A branch of healing dittany she brought,
Which in the Cretan fields with care she sought.
Rough is its stem, which wooly leaves surround,
The leaves with flowers, the flowers with
purple crowned.

Well known to wounded goats a sure relief,
To draw the pointed steel and ease the grief.
This Venus brings, in clouds involved, and
brews

The extracted liquor with ambrosian dew
An odorous panacea," etc.

Among the numerous narrations of combats, that usually ended by a mortal blow to vital parts, it is also curious to read the description of the death of that superb virgin, the daughter of the King of the Volsques, who fought so bravely at the head of her squadron of Amazons in the struggle of the Latins commanded by Turnus against the Trojans led by Æneas.

Camilla receives an arrow in the breast and falls fainting; her eyelids droop under the coldness of death and her face loses its naturally brilliant color and grows paler. After saying some words of farewell to her sister Acca, her weak hands drop the chariot reins and her body slips to the earth. We see Virgil does not make the mistake of giving immediate post-mortem rigidity to his slain heroes like some other ancient poets. He always makes mention of the principal signs of death—loss of sensorial faculties, cadaverous face, discoloration of the skin, coldness of the body, etc.

We need not mention the new combat

in which the two armies engaged. Æneas, we all know, struck down Theron, and as he withdrew his bloody sword from the unfortunate's chest he turned and plunged the weapon yet again into Lichas. Now we all remember how Lichas was taken from his mother's bowels by the operating iron—

" Inde Lichan ferit, exsectum jam matre perempta,

Et tibi, Phœbe, sacrum, casus evadere ferri.
Quod licuit parvo."

There it is for you, a case of hysterotomy, that few surgeons ever heard of before!

Finally, since we have touched on the subject of accouchements, let us mention the end of the fourth eclogue where he remarks: "Commence then, child, to know thy mother by her smile, thy mother who for ten months suffered so much on thy account.

" Incipe, parve puer, risu cognoscere matrem,
Matri longa decem tulerunt fastidia menses."

There's the proof that for a very long period of time three hundred days of gestation was the calculation.¹

" Heu jaceat menses paene sepulta novem!
Nec tantum morbus, quantum gravat ira parentis."

After that it may be permitted us to conclude that if the history of medicine has so few things in epic poems, we still find enough to show that the healing art was not completely overlooked, as Daremberg seems to have thought.

While we cannot gather such an abundant harvest as in the works of Martial, Plautus and Juvenal, we should be content to glean this good sheaf. One of the principle characteristics of Virgil was his ardent love of nature, of the physical and moral world. Let us briefly pursue our subject by a short study of the "Georgics," a study that is rather literary than medical. Let us glance over that pretty description of Springtime.

"It gives to the trees their leaves and to the forest its sap. At Springtime the earth swells, impatient to receive the

¹ It is an error to believe that the ancients always counted ten months of gestation. In an elegy of Gallus, the lover of Lycoris regrets that he has to withdraw and leave her behind a prey to the corruptions of her relatives and afflicted by sickness for nine months.

germs of creation. Then the powerful God of the Air descends in fecund rains upon the bosom of his joyous spouse; and clasping to his large body mother earth, he vivifies the seeds that she receives. The thickets resound with the harmonious carols of the birds, and the flocks and herds rush again to the pleasures of love."

Delille has given us a few pleasing lines on this marriage of the air and earth:

"Then the earth opened its entrails profound,
And fruits and flowers blossomed on the green
green ground."

In the Spring a young man's fancies softly turn to thoughts of love," another poet has remarked. For what will youth not dare when devoured by the implacable fires of love?

"Quid juvenis, magnum qui versat in ossibus
ignem
Durus amor?"

Virgil has shown us the metamorphosis that adolescence brings to youth:

"New desires produce in a young man audacity and timidity; audacity because he feels himself animated by an unknown vigor; timidity because the nature of the desires he has formed astonishes him.

"Those who know the secrets of nature must be happy," says Virgil.

"Felix qui potuit rerum cognoscere causas."

"It was because I always thought," responded Newton to those who asked him how he had come to formulate the law of universal gravitation. The observers of antiquity were ever good thinkers, so it came to pass that they discovered many truths.

Virgil said of creation: "In the immensity of void were assembled the creative principles of earth, sea, air and water. From these elements came forth all being. The globe, at first under the form of soft clay, rounded itself and became a solid mass; afterwards, little by little, it hardened and forced Thetis to confine herself within bounds. The earth was greatly astonished by the first rays of the sun, on seeing the clouds rise into space only to fall again in rain from the upper ether, then the forests showed their verdured heads and animals wandered over the unknown mountains."

It was thus Virgil sang through the mouth of Silenus, for we all remember, too, how Silenus was surprised by shep-

herds while sleeping at the bottom of a grotto, his veins swollen by the wine he had taken the night before.

"Inflatum hesterno venas."

Near him was his crown of flowers, fallen from his head during his nap, and his heavy drinking cup that always hung from his belt.

In the group of shepherds and shepherdesses "To you my songs," he said to the first, but to the shepherdesses, "I reserve another recompense."

"Carmina vobis, huic aliud mercedis erit."

What was the recompense? Let the reader divine that for himself. To our mind it was a rose, and when one thinks of the history of the birth of that most beautiful flower, at which Silenus presided—

"When Venus appeared from the crystal waves,
Charming the gods by her beauty and mirth,
At the edge of the land that the ocean laves,
That loveliest flower, the rose, had its birth.

"It took from the lily its snowiest white,
But alas! the god of the ruby red wine
Let fall from his hands his goblet bright
And sprinkled the rose with color divine."

We might quote more from the lines of Parny, for this is not Virgil, and we digress. But the rose, what of the rose? Cherished forever at Citharon and beloved at Paphos.

LUCANUS.

Born at Corduba, Spain, 39 B.C., Marcus Annæus Lucanus came to Rome at an early age as a student. His uncle, Seneca, the philosopher, made him enter the Imperial Court, and classed him as a competitor to Nero in a literary contest. Lucanus chose for his subject "Orpheus," while Nero took the history of Niobe. Lucanus easily carried off the literary honors, but this embroiled him in a wrangle with the tyrant. Nero forbade his victorious rival from reading poems in the theater or in public. Such is the jealousy of all upstart emperors.

Lucanus now gave himself up to his immortal work "Pharsalia," a record of the civil wars of Cæsar and Pompey, that was never completed. Meantime, let us remark that Quintillian deemed Lucanus rather an orator than a poet; it is probable that Nero's jealousy was really, then, more a fear than a dislike for the poet.

Lucanus was afterwards so insulted by the friends and partisans of Nero that he joined in a conspiracy against the Emperor with Piso. The plot was discovered; Lucanus was allowed to choose the manner of his death. He had his veins opened in a hot bath and died thus, his last words being a recitation of some of his own verses from his "Pharsalia." The poet was but twenty-seven years of age when his young life was so cruelly cut off by the tyrant Nero.

The "Pharsalia" is an epic poem, narrating, as before stated, the story of the civil wars of Cæsar and Pompey; in reality its real purpose is an apology for liberty. For our own purpose we need only refer to those passages that interest physicians, for Lucanus belonged to the school of Stoics, and his scientific erudition was therefore considerable. Let us give a remarkable example:

"In his first song the author of "Pharsalia" shows us Cæsar crossing the Rubicon, the ancient frontier of Gaul, and marching on Rome, that is immediately abandoned by Pompey and his partisans, the Senators and other notables. The panic is complete; the inhabitants go to consult the Etruscan diviners and soothsayers. Aruns, the most famous, orders the purification of the walls of the city and prepares for an expiatory ceremony, for the gods had thundered from the heavens, the earth had shaken and the very seas were troubled. Unknown stars had flashed across the midnight skies, their light illuminating mighty spaces, and a comet had shaken its silver head at the earth. In the midst of deceptive serenity dazzling rays sparkled in the firmament and bolts from the heavens fell from unclouded space, without even a noise, upon the Capitol.

"Then, while the priests of the temples, the augurs, soothsayers, oracles and sacrificers, followed by processions of terrified citizens, marched through the streets of the threatened city, Aruns collected the fire from the thunderbolts and directed it into the earth, that received it in its bosom with a stifling murmur."

"Aruns dispersos fulminis ignes
Colligit et terrae moesto cum murmure condit."

"This Aruns must have been a very learned man," observes Dr. Meniere; "he must have been a sort of human

lightning conductor." This comment does not appear to be very exact. Perhaps Aruns used conducting kite strings to induce the lightning to enter the ground. We learn from many historians, in fact, that the Greeks and Etruscans had studied atmospheric electricity, and that Numa Pompilius could draw lightning from the clouds (*Eripuit celo fulmen*); this was centuries before Franklin's time.

We know that this experiment in physics was ever dangerous, and that the operator was liable to be struck by lightning. This was what happened to Tullius Hostilius, successor to Numa, who, according to Pliny, "was struck by a thunderbolt at a moment he was clumsily imitating the experiments of Numa in bringing down lightning. Titus Livius¹ has confirmed this fact of the death of Tullius Hostilius, adding that he was assisting at the time at a religious ceremonial. Seneca, the philosopher, has initiated us as to the knowledge possessed by the ancients as to thunderbolts and their effects on men and animals; he had already determined the nature of the phenomenon of the return current, that is to-day explained by the disturbance produced by the reunion of the two electric fluids decomposed by certain influences."

As for the therapeutic employment of electricity, the physicians of antiquity knew no other electric machine than the *cramp fish* or *torpedo*.² The ancient Greek and Roman physicians used this living electric apparatus as a powerful therapeutic agent; they knew, besides, for they had carefully studied the subject, the sensations and commotions that this fish caused in the human body. Aristotle states that the torpedo produces a numbness among the fish on which it preys, thus rendering the capture of its victims easy. Scribonius Largus, a Roman physician, writing in the time of Christ, states: "Against gout it is necessary, during the painful attack, to place under the patient's foot, at the seashore, a black living torpedo fish, so that its numbness may be felt in the whole gouty foot as

¹ Titus Livius, liber v, Capitola xxxi.

² Long before the Etruscans, 332 years before Christ, a Greek philosopher, Theophrastus, discovered the properties of yellow amber (elektron) of attracting, when rubbed, light bodies such as quill feathers, blades of straw, dry leaves, etc.

³ Dujardin Beaumetz's article, "Electricité medicale du Dictionnaire de thérapeutique."

in the tibia as far up as the knee. This will remove the present pain and remedy the disease for the future." This might have been what cured Anteros crossing the Tiber.

Pliny says the ancients facilitated labor by the employment of torpedoes. Dioscorides, who lived in the first century of the Christian era, indicates the application *in loco* of living torpedoes or cramp fish for the cure of obstinate diseases of the head and for prolapsus of the rectum. Galen corroborates this fact. "I thought," says he, "of putting a living torpedo in contact with the head of a person attacked by cephalalgia, because I imagined that this fish might be a calmative remedy, like all those remedies that numb sensation. I found it was so."

Why this historical dissertation? Merely to prove that the Greeks and Romans knew and studied the phenomena of electricity, and employed it in this unique manner as a therapeutic agent.

Let us now return to the ceremony presented by the priest, the depository of the oracle. He wished to persuade the Romans that he had disarmed the hands of Jupiter by drawing the lightning bolts into the soil, in the place chosen by himself for that purpose (Bidental), as has been pointed out by Frederick Creuzer.¹

But that was not all. Aruns demanded that there should be thrown into the flames the monstrous fruits that a disordered nature had formed in women condemned to sterility.

"Monstra jubet primum, quae nullo semine discors

Protulerat natura, rapi, sterilique nefandos
Ex utero fetus infaustis urere flammis."

It is evident that this means the different degenerations produced by disordered conceptions; for instance, moles, graviditas vesicularis, hydrometra hydatica, hydrops uteri vesiculosus. It is probable that these false germs, of which the mode of formation was unknown, were preserved for some purpose, and favored part of the mysterious collection of the Aruspices. Let us recollect from these passages that the ancients knew all these products of an imperfect conception; that, according to the expression of Lucanus,

they were not confounded with uterine tumors, pathological productions foreign to the function of conception.

After his performance Aruns brought to the place where the lightning bolt enters a bull that the sacrificers proceeded to immolate. Of this occasion Lucanus gives us a pathologic-anatomical description of the animal's viscera, that proves much in favor of his imagination. He says the blood that escaped from the wound was a black poison, the intestines covered with livid spots, the liver bathed in corrupted blood, the lung shriveled, heart out of its covering membrane, the intestines torn and bleeding.

So Aruns may have had reasonable support in declaring that he found hell in the flanks of the bull, and that horrible misfortunes were to be feared.

After him Nigidius Figulus took part. This celebrated Pythagorean, for whom the "world turned as fast as a potter's wheel," says Lucanus, and who after long studies had been admitted to the secrets of the gods and the sages of Memphis, read from his knowledge of the stars and in the mystical numbers that controlled the celestial movements, telling his assistants called in conference the astrological signs he perceived in the constellations, and ended by this very politic conclusion:

"If Orion burns with such a brilliant light, it is from raging combats that this illumination is caused; it is that crimes come to take the names of virtues, because a tyrant approaches Rome, and that there is no more liberty for us save in the bosom of a civil war."

This raging combat, these bloody cruelties upon the battlefield, develop the skill of Lucanus as an anatomist. He draws a picture of the lugubrious scenes enacted at Rome—women robbed of their jewels flying for refuge in the temples, where they uttered dismal shrieks and groans, and old men who recalled with frightful sadness the days of terror in the times of Marius and the horrible vengeance of Scylla. The suicide of Catullus, to escape from the jealousy of his ancient colleague of the consulate, "enclosed in his chambers where he lit a large brazier of charcoal, the vapors of which suffocated him."¹

¹ Creuzer: "La symbolique et la mythologie des peuples anciens."

¹ Marius and Scylla, those two men who caused the outpouring of so much human blood, and

Lucanus afterwards recounts the murder of a brother of Marius and the sufferings endured by that unfortunate. "We have seen," says the narrator, "that disfigured body of which each limb was only a wound, pierced by stabs, torn into shreds. He had not yet received the mortal blow, and by an unheard of cruelty they took care to preserve his life. His hands fell under the cutting of the sword blade, his tongue torn from his living mouth still quivered, and mute as it was, trembled in the air. One man cut off his ears, another his nose; the latter, too, pulled from their orbits the terrified eyes that had witnessed the punishment of his body."

Now the rivals are in each other's presence. Cæsar has pursued Pompey into Greece, where all his forces are concentrated, having with him to assist his efforts two hundred senators, among whom were Cicero and Cato, whose influences were well worth an army. Cæsar had established his camp at Dyrrachium upon the heights; the troops of Pompey were on the plain about the city. Soon the country is ravaged, there is no longer forage

whose antagonism was so fatal to liberty, died of very different diseases. Plutarch describes their symptoms. "Marius," says he, "was only in bed for seven days. His ambition appeared in his malady, by a delirium into which he fell; for he dreamt he was heading a Roman army against Mithridates, and was giving him battle. He made the same gestures and movements he was accustomed to make in war, shouting out his commands, uttering cries of victory, so much had his wish to command and his natural jealousy impressed his heart by this strong and violent passion for leading in warfare.

"Scylla, like Marius, was given to all sorts of debaucheries. He had an abscess in his body. This abscess finally rotted his flesh and turned it into running sores, so that even although the rotten flesh was removed night and day in quantities, they dared not remove it all for fear of engendering it anew; yet his clothes, baths, even his table napkins were inundated by an inexhaustible flood of this verminous corruption, that flowed out of him in such abundance. He was obliged to throw himself into the water several times every day to wash and clean his miserable body; but all this was useless, for the change of his flesh into corruption exceeded his efforts by its promptitude in gathering, and the frightful quantity of verminous matter resisted all baths. On the evening of his death he cried out so much with the torment of his abscess that it was opened and emitted much blood. This exhausted his vital forces, and he passed the last hours in most horrible agonies.

Here was a beautiful case of phthiriasis, that is at the present day so successfully treated by sulphur baths and bichloride preparations.

for the cavalry, horses die, and their cadavers bring unhealthy emanations into Pompey's camp, inducing an epidemic of typhus that carries off numbers of victims. What is the vehicle of contagion? "It was water," says Lucanus, "easier and more prompt than the air in giving the disease, that carries an impure mixture and overcomes the entrails with a devouring poison."

"Inde labant populi, cœloque paratior unda.
Omne pati virus, duravit viscera cœno."

"Labant," that signifies staggering, to lose equilibrium, also indicates the condition of torpor and stupor into which patients attacked by malignant typhus fell, the regular type of army typhus. "The skin is dry and black," says Lucanus, "the eyes dulled; the head, weighed down as if by heaviness, is no longer held up, while the fever is intense."

"Jam riget atra cutis, distentaque lumina rumpit;
Igneaue in vultus, et sacro fervida morbo
Pestis abit, fessumque caput se ferre recusat."

The case becomes rapidly developed; it creates ravages each instant; there is no longer an interval between health and death; the instant almost they are attacked they die.

"Jam magis atque magis praeceps agit omnia fatum;
Nec medii derimunt morbi vitamque, necemque.

The contagion is nourished and increases number of its victims, and the only sepulture accorded the unfortunates is dragging them outside the tents.

"Sed languor cum morte venit, turbaque cadentum
Aucta lues, dum mixta jacent incondita vivis
Corpora: nam miseros ultra tentoria cives
Spargere funus erat."

Lucanus the poet shows himself to be a free *contagionist*; he was right. However, he does not blame the commander of the army for his carelessness in not burning up the cadavers and taking no precautions to prevent the extension of the epidemic. He contents himself by adding: "Their sufferings were ended when the wind from the sea came from behind the camp, that north wind that purified the tents, and when vessels arrived bringing fresh foods from abroad."

We see from all this that overcrowding

and food privations were causes that preceded this typhus outbreak in Pompey's army. Lucanus, besides, was correct in considering, as the origin of the infection, the numerous bodies of decaying horses. This observation is supported by Jaccoud, who, at the Academy of Medicine, in 1874, demonstrated that "the accumulation of animal products in a state of fermentation or decomposition may, outside of all other influences, provoke the outbreak of typhus."

While the soldiers of Pompey were being decimated by the epidemic, the army of Cæsar, freely scattered over the hills, neither suffered from bad water nor from injurious miasms, yet were a prey to a horrible famine. Not being able to ration themselves by sea, the soldiers, pressed by hunger, disputed the pasturage with the animals; they nibbled the leaves from bushes, bit off the bark from trees, uprooted and ate plants the nature of which was unknown to them, and many of which were poisonous—anything that fire could soften or that teeth could dent, anything that could be swallowed and carried to the stomach, even that which tore their palates. Meats up to that time never eaten by men were taken, and, despite all this hardship, they continued to besiege their enemy, among whom an abundance of food was to be found. However, their forces were not exhausted, as is proven by the heroic defense they opposed to a sortie made by the soldiers of Pompey, a defense in which the centurion Scaera made prodigies of valor, holding back alone a whole legion of the enemy from a rampart, "cutting off their hands as they clutched the wall, beating them back with handspike and cudgel, crushing brains with huge stones, burning their heads and faces with a flaming torch."

If the legionaries suffered from hunger, the army of Pompey suffered from thirst. In Spain, upon the dry summits of the hills of Hilerda, Cæsar's cavalry had hedged them in and separated them from the plain by a deep trench. Immediately Pompey's unfortunate army lost all their water supply; vainly they dug the earth to find springs. Cæsar foresaw he could reduce his foes by thirst, and would not permit the use of a single spring. The painful search for water and the hot air they breathed made them thirstier than ever; they dared not even use their abun-

dant food supply to repair their failing strength, for eating without water only intensified thirst. They fled from their tables, for hunger was even a relief from thirst.

"Nec languida fessi
Corpora sustentant epulis, mensasque perosi
Auxilium fecere famem."

But we need go no further into long and very accurate description of the physiology of hunger and thirst, painted by a master hand; the poet never once forgets the effects of food and water, hot and cold air, the losses of the mucous membrane or of the skin; he describes fevers, gastro-enteritis, and the dreaded kind of army pyrosis that consumes the digestive tube. Lucanus terminates this one lengthy article on physiology by the very just reflection: "O wasteful debauchery! O foolish display of opulence! O ambitious show of rare meats! O vainglory of surreptitious festivals, to only evidence how man must sustain and prolong his life, and to what nature has reduced his real wants. To reanimate these unfortunates it was not necessary to have famous wines in cups of solid gold, only a little pure water to recall life. A river and Ceres would suffice for all mankind"—

"Satis est populis fluviusque Ceres."

We need not go into the ceremonies of the Delphian oracles, nor of the mysterious doings of the mighty Erichtho, who dealt in the magic of that day.

The details of Lucanus upon wounds made by ancient weapons are full, and would ever interest the surgeon. His battle scenes of blood and carnage are more than graphic. Cæsar looks around and contemplates his triumph. The head of Pompey is brought to him; it has been preserved by an anatomical process. Lucanus thus describes this ghastly trophy: "By the aid of an impious art they had taken the dried blood from around the head, removing the brain; they had dried the skin, and when all the fluids were exhausted they had preserved and closed over the skin again."

"Tunc arte nefanda
Submota est capiti tabes, raptoque cerebro
Exsiccata cutis, putrisque, effluxit ab alto
Humor, et infuso facies solidata veneno est."

Afterwards Lucanus shows us the austere Cato, rallying the remnants of Pom-

pey's army in the Lybian desert. In that region the sun's rays grew hotter, springs of water were few in number. In the midst of the sandy waste they reached an oasis infested by numerous serpents. The soldiers, seeing the snakes on the water's edge, feared to quench their thirst, thinking the water poisonous, when Cato informed them that their alarm was groundless. "Without doubt," said he, "the bite of these snakes is venomous; the poison distilled from their fangs is fatal, but only when it enters your blood; the water in which they swim is harmless."

The accidents following numerous snake bites confirmed Cato's opinion. A serpent bit a young ensign named Aulus, who was taken by an inextinguishable and mortal thirst. *Satellus*, bitten in the thigh, succumbed with frightful symptoms. The venom of the aspic, or horned viper of the Nile, is very deadly. *Lucanus* mentions various kinds of serpents. He also speaks of a tribe of natives of Libya, known as *Psylles*, who have no fear of serpents, knowing how to charm them and antidote their poison. These, he states, are invulnerable, "*for the Psylles inoculate their infants with the venom of the aspic.*" These *Psylles* accompanied Cato's soldiers in order to protect them from serpents. When a soldier was bitten in the desert the *Psylle* licked the wound, covering it with saliva, then muttering a magical incantation, sucked the poison and "*spat out death.*"

"Tunc superincumbens pallentia vulnera lambit,
Ora venena trahens, et siccat dentibus artus,
Extractamque tenens gelido de corpore mortem
Exspuit."

Here we rest our study of the "*Pharsalia*" of *Lucanus* and permit triumphant *Cæsar* to enter Alexandria and disperse the enemy's forces in order to march on *Utica*, defended by *Cato*. After the battle of *Thapsus* the celebrated stoic protects the flight of his companions, thinking only of death. He sleeps after reading *Plato* on the immortality of the soul, and on awakening pierces his breast with a sword. A surgeon called in arrests the hemorrhage, makes a dressing, but *Cato* tears off the bandages and dies bathed in his own blood.

Lucanus consecrates the most beautiful passages of his work to the great philosopher; he makes him, after "*Pharsalia*,"

a courageous leader, rendering homage to *Pompey's* name, a lover of his country and a magnificent patriot.

LUCRETIIUS,

Lucretius belonged to one of the greatest families of Rome; he descended, it is said, from *Spurius Lucretius*, whose daughter, the celebrated *Lucretia*, was violated by *Sextus*, son of *Tarquin*, the Superb. He was the contemporary and friend of *Cicero* and *Catullus*. He committed suicide at the age of forty-four, in the year 55 B.C.; his self-destruction was the result of jealousy of his mistress, followed by melancholia.

His poem, in six books, "*De Rerum natura*," is a treatise, in verse, of physics, metaphysics and physiology. In his philosophy he very nearly approaches modern positivism. He was the enemy of superstitious ideas, and he informs us that he became anti-religious because he perceived that religion was being used in political service (as at the present day), and that it continually approved of the crimes committed by the ruling government.

How can a scientific work be presented in the form of a poem? *Lucretius* answers this in his first chant made to his friend *Memmius*:

"Learn," says he, "the truths I am about to teach you. I am not ignorant of the fact that they are obscure, but the hope of glory incites my courage and throws into my soul all the passion of the Muses—that enthusiasm, indeed, that raises one to Parnassian heights, to the spot interdicted to ordinary mortals. I love to draw from its mysterious sources; I love to gather new blossoms, and to enthroned around my head that brilliant crown with which the spirit of poesy adorns every true poet; first, my subject is grand, and I free all men from the yoke of superstition; afterwards, because I cast rays of light on most obscure matters, throwing the graces of verse over a very dry philosophy. Am I not right? I do like good doctors, who would fain make children take absinthe. I take off the bitterness of wormwood with pure honey floating on the cup, to the end that lips seduced by this sweet deceit swallow without wincing the darkened beverage—a happy artifice that gives back to old limbs the vigor and health of youth again."

"Sed potius tali facto recreata valescat."

Thus the subject I treat of, being too serious for those who do not reflect, and repellant for common men, I take the language of the Muses, correct the bitterness of philosophy with the honey of poetry, hoping that, seduced by the charm of word harmony, to make men have from my work a profound knowledge of nature."

Now, this profound knowledge of nature, according to Lucretius, resides in the hypothesis of atoms, that are endowed with very rapid movements, very nearly perpendicular in action, but never parallel. He discusses and refutes the system of Anaxagoras, according to which the bones are formed of a certain number of smaller bones, the viscera of a certain number of smaller viscera, the blood of a collection of many smaller particles of blood. We see from this how really near our poet came to the accepted ideas of moderns.

"Ossa videlicet e paucillis atque minutis
Ossibu', sic et de paucillis atque minutis
Viceribus viscus gigni, sanguemque creari
Sanguinis inter se multis cauntibu' guttis."

In a word, according to this theory, all bodies are composed of a collection of smaller similar elements, that which Lucretius only admits, for him each organ is formed of foreign material.

The corollary of this atomic theory is contained in the axiom, "Nothing comes from nothing, nothing returns to destruction."

"At neque recidere at nihilum res posse, neque
autem
Crescere de nihilo, testor res ante probatas."

"Besides," adds he, "since foods increase the body and nourish, it necessarily follows that our veins, blood, bones and nerves are formed of heterogeneous particles."

"Praeterea, quoniam cibus auget corpus alitque
Scire licet nobis venas, et sanguem, et ossa,
Et nervos alienigenis ex partibus esse."

The ideas of Lucretius have been taken up in modern days by Dr. Buchner.¹ The intervention of creative force is useless, according to our poet, to explain the phenomenon; and force inherent to matter, according to the second, for it is only one of its properties, and divinity itself, ac-

ording to Lucretius, cannot draw the existent from destruction.

"Nullam rem e nihilo gigni divinitus unquam."

In other words matter exists because it exists, and force is only manifested because atoms produce it. But what of its movement? It cannot be explained, since matter is inert, and the force it exhausts in itself is also under its dependence, and, consequently, deprived of intelligent action.

Modern materialism is still at the same heights as Lucretius; it pretends to wish to resolve questions of the highest philosophy by the processes of scientific positivism. How will this adaptation of laboratory revelations agree with our psychological studies? To deny the soul and consider the human species endowed with instinct similar to that of fish and birds. This error reappeared even among the pupils of Augustus Comte and positive philosophy. However this may be, the reading of the works of Lucretius can only be of great interest for the modern medical public, and they should be carefully analyzed.

We find this ingenious comparison of life; an immortal fire that is transmitted from being to being, from generation to generation. "Thus," says our poet, "the elements are never fixed; the universe is renewed every day, and mortals lend themselves to the lives of the moment. We see some species multiply, others decrease; a short interval changes generations, and as at the races of the sacred plays, we pass from hand to hand the very torch of life."

"Nec remorantur ibi; sic rerum summa novatur
Semper, et inter se mortales mutua vivunt.
Augescunt allae gentes, allae minuuntur,
Inque brevi spatio mutantur saecula animantium,
Et quasi cursores, vitali lampada tradunt."

He continues: "Life is only supported by the efforts of nature for a determined period; it rests a moment in equilibrium and disappears when nature puts a check on its increased duration. In fact, the body that slowly and progressively elevates itself to the condition of maturity acquires more than it dissipates, as then all the substances of the food circulate with ease in the veins."

"Dum facile in venas cibus omnis deditur."

"We must admit that our bodies make

¹ Buchner: "Force et Matière."

considerable losses, but such losses are repaired with usury up to the time of their increase.

“Nam certe fluere ac decedere corpora rebus
 Multa, manus dandum est; sed plura accedere
 debent,
 Donicum olescendi summum teligere cacu-
 men!”

“Thus, the forces are insensibly lost, vigor is exhausted, and the animal being goes on declining.”

“Inde minutatim vires, et robur adultum
 Frangit, et in partem perjorem liquitur aetas.”

“The alimentary juices no longer are spread in their entirety nor with ease throughout the veins, and nature is not rich enough to repair the flow of material that unceasingly escapes from the body of the animal. It is necessary, then, that the machine should perish, being weaker against exterior attacks, for nutrition is no longer strong in old age and has no more the strength to struggle against the morbid influences that assail it.”

“Nec tuda tantia rem cessant extrinsecus ullam
 Corpora conficere, et plagis infesta domare.”

“Thus,” adds Lucretius, “all bodies have need to be repaired and renewed by aliment and the nourishing juices that sustain the entire edifice of the human machine. But the mechanism cannot endure eternally, because the nourishing canals are not always in a condition to receive as much subsistence as is necessary, and nature cannot always keep up repairs.”

Would any one believe that such a page on animal nutrition could have been written almost two thousand years ago, and by a Latin poet? Here we find a very good expression of the circulation of the products of digestion in the veins, food serving to repair the machine by nourishing juices to sustain the edifice. But this is nothing else than the fact of the nutritive liquid of the plastic lymph, that passes outside the walls of the capillary vessels by transudation, to moisten and nourish all the tissues. The knowledge of these phenomena appears truly extraordinary in view of the complete ignorance that the pupils of Epicurus were in of the double sanguinary circulation, and consequently of the tension of blood in the vessels repairing and regulating the outpour of nourishing liquids.

Lucretius often shows himself to be a profound observer in his poems, a physiologist and even a pathologist. In his fourth book he endeavors to explain how exterior objects act on the mind through the intermediary of the senses. He admits that all our sensations are produced by invisible corpuscles, that he calls “*simulacres*,” a sort of membrane detached from the surface of the body that are introduced into our organisms and variously impress the mind. The “*simulacres*” are of inconceivable tenuity and subtility, and divided into several classes. One of the latter is thus described :

“Primum animalia sunt jam partim tantula,
 eorum
 Tertia pars nulla ut possit ratione videri.”

“What shall we think, then, of their intestines, heart, eyes, limbs, articulations? What fineness! How can we even conceive of a tissue as subtle and as delicate?”

What discoveries would this idea have led the ancients to had they but known the microscope? Is there not in this a vague intuition of microbes, microzymes, of the infinitely small, the medical fad of to-day?

Matter likewise produces, according to Lucretius, certain emanations that are the “*simulacres*” or images of a particular species. The surfaces of all bodies incessantly emanate corpuscles, and it is through these that vision is produced, for they not only lead us to judge of color, of the size of figures and objects, but even their distance and their movements. This theory of Lucretius is as good as any other, and perhaps the eminent Professor Crookes (of London), the author of the fourth state of matter, may find therein something closely akin to his discovery.

Lucretius explains the sensation of sound in the same manner. The corpuscles strike on the organ of hearing, and when they are fashioned by the tongue and lips they form words; when they are supercussed or reverberated by solid bodies—by rocks, for instance—we have echoes.

These same corpuscles, acting on the tongue and palate, upon the membrane of the nasal fossa, produce taste and odor. As for the sensations of touch, it is produced by the immediate impression of objects and not by the emanations that act upon the other senses.

It would require too much time and space to analyze the theories of Lucretius on ideas and sensations. Let us, meantime, note this passage: "When the predominant bile lights fever or when some other cause produces disease in us"—

"Quippe, ubi quoi febris, bili superante, coorta est,
Aut alia ratione aliqua est vis excita morbi."

As when the harmony of our body is found disturbed and principles are displaced, the corpuscles that at other times had an analogy with our organs cease to have it, and those that bring pain are the only ones that can be introduced.

As for the sensation of hunger and thirst, here is how our poet explains them: "Exercise and movement induce more abundant emanations of the body; transpiration occurs in large quantities. These losses rarify the body, weaken the machine and determine a painful condition of exhaustion. We then resort to foods, that, in disseminating in all the interstices, sustain the organs, filling the canals that the need of eating has dilated. Drinks, on their part, are spread every place where moisture is required; these dissipate the whirlwinds of heat that devour the stomach, and extinguish those fires that dry and consume the organs."

The theory of Lucretius is not the least whit inferior to those of modern physiology, that contents itself with teaching us that hunger is an internal sensation connected to an assemblage of phenomena of nutrition and that thirst is an analogous sensation coinciding with the diminution in proportion to the liquid parts of the human economy.

After having said some words upon sleep, that he considers as much a change of the seat of the mind as an absence of the latter, a state during which the body is enfeebled, all the limbs languishing, the arms falling, the eyelids closing. Lucretius then speaks to us of dreams.

"The constant objects of our preoccupations," says Lucretius, "that cause the most contention of the mind are those that reappear most often in our dreams. Certain men plead reasons and interpret the laws of dreams. A general dream of combats and assaults; the pilot of winds and waves; for myself I do not interrupt my works during the night; I continue to interrogate nature and unveil

its secrets. Those who assist at theatricals see, in dreams, the actors jumping about the stage in all their suppleness, they hear the music of the lyre and the soft voice of harmonious notes; they find before their eyes the audience and the same decorations that adorn each brilliant scene.

"What great movements of the human mind act during our sleep? How many vast projects are formed and executed in a single instant?"

"In other cases some are merely occupied with the material wants of life. Children, sleeping, think they raise their clothes near a basin or a half-cut tub and relieve themselves to the desire that possesses them, inundating the rich Babylonian cloth that covers their beds."

Let us freely avow that modern medical science has not added much to this page in physiology, when we compare what is thus written as to the functions of the nervous system *apropos* to sleep.

Lucretius only considers in his chapter on generation, that spermatic secretion, pollution and excesses induced, bring on sterility. Let us quote some passages that appear to be worth a citation:

"When the first effervescence of age is felt in the hearts of young men, when time has ripened the germs of proliferation in their members—

"Tum quibus aetatis freta primitus insinuantur,
Semen ubi ipsa dies membris matura creavit."

A crowd of "*simulacres*" emanates from bodies of all kinds, offering to them features of beauty joined to freshness and youth, provoking the organ filled with generating juice and opening to the ardent imagination the sanctuary of voluptuousness, exciting an abundant seminal flow, with which the night clothing is more than soiled—

"Profundant
Fluminis ingentes fluctus, vestemque cruentent."

Such are the nocturnal emissions of puberty. Then love comes to enter the scene. Lucretius describes it in the following lines:

"The heart that Venus has wounded is imprinted on the features of the young man. Aroused by the fires of some seductive woman, he flies to the arms of the object, to unite with her in a warm embrace of passion, for passion is only the

presentiment of voluptuousness. There is your Venus, from which your origin of the word "love," there is the foundation source of that roseate dream that insinuates itself drop by drop in the heart and afterwards develops an ocean of inquietudes. For, in the absence of the object loved, the "*simulacres*" always besiege the soul, and the name falls sweetly on the ear. But love is a wound that poisons and embitters when one tolerates it; it is a frenzy that increases from day to day if we do not choke down the malady at the very onset, by varying its pleasures to make it take on some new transports of passion."

Lucretius does not exactly hold to this point, for he continues his eulogy of physical love, when it trembles in the first transport of pleasure.

"Denique cum membris collatis flore ruunter
Ætatis, cum jam præesagit gaudia corpus,"

that Venus is upon the point of fecundation, her bosom and two lovers should more closely join their lips.

But enough. The act of fecundation, as further explained by Lucretius, might shock English puritanical ears, and so is omitted, as well as the remarks of our poet in regard to venereal excesses. The English reader is referred to Dupouy for further entertainment.

As for atavism, Lucretius speaks most wisely, as witness: "When, in the intoxication of pleasure, the arid bosom of the woman absorbs the productive germs, the child will resemble the father or the mother according as the seed of the one or the other predominates.

Let us pardon some things in this poet, who wrote about twenty centuries since. He adds: "But children sometimes are born into this world who resemble their ancestors, yes even their most remote ancestors, because their parents contain in themselves a great number of principles, transmitted from father to father, who originally came from the same branch.

"Fit quoque in interdum similes existere avorum
Possint, et referant proavorum sæpe figuras."

It is by the aid of this multitude of principles that the creating power varies figures and reproduces all the features, voices, hair and eyes of ancestors, because these parts are formed by fixed germs, as

well as are the limbs and organs of the body."

We have had no time to examine and explain that which Lucretius says; we have only to mention that Dally¹ does not even note the remarks of Lucretius. He states, to the contrary: "We must not forget that the question of atavism, viewed under its physiological day, is altogether new; that of heredity in general counts but two or three special treatises,² and it is not without astonishment that we find, in the most classical works on physiology, a mere mention of this powerful property."

Our learned friend defines "atavism" as follows: "The reappearance in an individual or in a group of individuals, of anatomo-physiological characteristics, positive or negative, that the immediate parents do not offer, but which their direct or collateral ancestors may have offered. The characteristics transmitted by atavism are of all orders—normal, pathological, teratological, intellectual and moral."

According to the "Bulletin of the Anthropological Society," Dally claims that it often happens that families that possess genealogical portraits find all resemblance ceasing for several generations, then suddenly there is found an exact reproduction of the features of some remote ancestor. These facts have been evidenced principally in certain cases where the races were crossed or colored. Martin de Moissy has observed families among whom "at the end of several generations there were a series of children bearing much more on their father than mother the signs of African blood, going back more than five anterior generations." He cites the case of a lady whose father was a quadroon and whose mother had traces of Indian blood; married to an Englishman of pure race they had nineteen children, who every one presented traces, not equivocal at that, of having one-sixteenth African blood.

"We can cite," says Dally, "a large number of cases where the parents of children were red headed on one side or the other, but the children were not red headed themselves, yet had families of red-headed children."

¹ Dally article, "Atavism," "Dictionnaire encyclopedique des sciences medicales."

² Lucas: "Traite de l'heredite naturelle," Paris, 1847-1850.

Those who agree with Quatrefages,¹ that certain types of primitive men were red headed, might consider as atavic all such cases of erythrim. According to Broca, the same phenomena present themselves in families of brunettes, where the recollection conserves memory when a blonde crossing occurs.

We might mention more numerous facts, and no less interesting, on atavism, but that is going away from our subject. Then we may conclude it is wrong to consider this subject as new. The pupils of Epicurus knew all about it, and sought to explain its causes.

Lucretius terminates this chapter on generation by some chapters on sterility.

Lucretius teaches very justly that it is the superstition of belief that the divinity deprives some men of the faculty of propagation, so that it is ridiculous to implore, by means of prayer and by making sacrifices, in order to obtain fecundation. "It is useless," says our poet, "to tire out the divinity and oracles by your supplications. Women remain sterile when the seed is too fluid or too thick; when it is too fluid it does not attach itself where it should, it is dissolved in liquid and flows without effect; when it is too thick its consistency prevents it from going far enough, and it does not penetrate the proper reservoirs.

"In fact," says our poet, with reason, too, "the difference of organization has a great part in the union. There are men more fecund with certain women, and women who receive from certain men the burden of pregnancy. Many women languish sterile under several marriages, when suddenly a man more conformed to their temperament enriches them with numerous progeny. There are husbands, who, after several unfruitful marriages, find in some new companion a support for even old age. When the proper temperaments are properly intermixed all goes well.

"The quality of food, too, is another thing to be observed. There is sometimes a thickening of the generative fluid; there is also an attenuating or dissolvent action.

"The manner in which procreation is to occur should not be neglected," remarks Lucretius. "People should model

after the connection of animals, because in this attitude the horizontal situation of the chest and the elevation of the kidneys favors the direction of the generative fluid. Nevertheless, women should not excite by lascivious movements and cause immoderate exhaustion on the part of men. Such lascivious movements are an obstacle to fecundation; they turn the germs of creation from their real purpose. Honest women cannot afford to give way to the criminal artifices of prostitutes. Let them remember that men who desire to raise families are, as a rule, not lascivious."

So ends the fourth book of Lucretius, that is, after all, only the science of Epicurus, the real author, a man not only regarded as a god, but even one who raised himself above the ordinary divinities; his discoveries, even in the light of modern science, deserve apotheosis.

Lucretius explains the cause of contagious maladies, and remember this was two thousand years ago. The medicine then was good, the teaching on a scientific basis.

Lucretius explained the cause of contagious maladies by the presence in the atmosphere of an infinity of corpuscles of all varieties some of which were necessary to life, others of which engendered disease and death. "When the chance occurs," says our poet, "a great number of the latter kind in the air corrupt it and render it fatal. These active and pestilential maladies are transmitted to us from foreign climates by means of the air, like fogs and tempests; they arise from the bosom of the earth, too, in which the humid soil has putrefied the germs by alternations of rains and heat."

Among the conditions that preside at the evolutions of epidemics our hygienists place in the first line temperature, climate, altitude, latitude, local conditions, and methods of propagation.

Lucretius does not forget to mention the influence of climate. "What difference," says he, "between the atmosphere of Brittany and that of Egypt!

"Nam quid Britannum coelum differe putamus, Et quod in Egypto est?"

"What a difference between the climate of Pontius and that of the vast regions that extend from Gades to peoples consumed by the sun! These four countries and climates, of a very different kind,

¹ Quatrefages: "Homme fossiles et hommes sauvages," Paris, 1884.

also vary the natures of the diseases to which they are subject.

“Et morbi generatim saecula tenere.”

“It is thus,” adds Lucretius, “that elephantiasis is a disease that arises on the Nile—

“Est elephas morbus, qui propter flumina Nili.”

in Egypt and few other places. For the climate of Attica is contrary to the limbs; that of Achea unhealthy for the eyes; other countries attack other portions of the body; all these differences arise from the atmosphere.”

After the preliminary upon the action of climates, winds, locality and country, and their effects on mankind, Lucretius comes to describe the plague at Athens that alone is a masterpiece of ancient medical literature. He makes his etiology in the following terms:

Born at the end of Egypt, after traveling over immense spaces of air and sea; it came to strike the peoples of Attica, who fell in multitudes from the disease and died.

“These are the prodroma:

“The plague commences by a devouring fiery pain that burns the head; the eyes grow red and inflamed. The interior of the throat is bathed in a black phlegmy blood, and the canal that holds the voice is choked and filled with ulcers.

“Principio, caput incensum fervore gerebant,
Et duplices oculos suffusa luce rubentes.
Sudabant etiam fauces intrinsecus atro
Sanguine, et ulceribus vocis via septa coibat.”

“The tongue in plague patients is covered by blood, is sore and rough to the touch.”

Lucretius now comes to the best symptoms of the malady:

“All the forces that sustain life are at once exhausted—

“Omnia tum vero vitali claustra lababant.”

“The mouth exhales a fetid odor, like to that of a decaying body; the mind fails, and the body languishes so that one feels that the threshold of death is nearly reached. To these insupportable ills is joined the torment of continual disquietude, complainings, and groans exhaust the patient.

“The entire body becomes red, as if inflamed by ulcers or that sacred fire that overspreads the limbs—

“Et simul ulceribus quasi inustis omne rubere
Corpus, ut est, per membra sacer cum diditur
ignis.”

This sacred fire (*ignis sacer*) is erysipelas, that certain ignorant translators have translated as epilepsy, or *morbis sacer*. The poet's comparison is not bad to designate this particular redness of the skin.

Lucretius completes his symptomatology by mentioning the awful heat that is felt in all the organs, and the inextinguishable thirst that leads the sick to throw themselves into rivers and drink immoderately.

“Soon pain leaves no repose for the sick, insomnia is continual, the extended limbs lose all power of movement, and medicine seems to have no effect; the physician stammers and trembles at the bedside of the sick—

“Mussabat tacite medicina timore.”

In modern times, even upon the battle fields of science, physicians may sometimes be embarrassed, but they do not tremble. Victims of professional duty are no longer even considered by a sordid world.

“This grand pathological drama ends by a considerable agitation, buzzing in the patient's ears, quick and labored respiration, profuse sweating, dryness of the mouth, chills and rigidity of the muscles of the hand.

“Finally,” adds Lucretius, “at the last moments their nostrils were contracted and shriveled out—

“Item ad supremum denique tempus
Compressae nares, nasi primoris acumen
Tenue.”

“Their eyes were sunken, temples wrinkled, skin rough and cold, lips drawn thin, forehead corrugated and projecting. So death usually came on after eight or nine days of great suffering.”

Among the particular phases of the disease Lucretius speaks of certain patients who only succumbed after a period of remission, or following a nasal hemorrhage, or yet, again, after nervous symptoms. It also sometimes happened that the organs of generation were attacked in such a way that the unfortunates, in the hope of avoiding death, gave themselves up to the knife.

“Et graviter partim metuentes limina lethi
Vivebant ferro privati virili.”

“As for treatment, there was none,”

says Lucretius, "that is, no remedy that was sure; the same medicine that prolonged the life of one was dangerous for another."

Last detail to describe, bodies were buried or carried to a funeral pyre, as the family of the deceased wished, wholly without any control of the authorities, an advantage not possessed by official sanitation governed moderns.

We have now spoken enough of the plague; let us view Lucretius, then, as a psychologist.

Our poet considered that the mind and body were one, and he thus tried to prove his proposition. The mind, being tormented by cares, sadness and affright, as the body is by pain and sickness, must, accordingly, participate in the same death.

In physical diseases reason is often astray, delirium and dementia carry off the mind. Sometimes a violent lethargy plunges one into the eternal sleep. The patient hears no voices, does not recognize the features of those about who strive to recall life.

Since the contagion of the disease thus reaches the mind, it is necessary to conclude that it is as much subject to dissolution as the body, for an oft repeated experience teaches us that pain and disease are the two real ministers of death.

This argument is far from strong, for the mind never manifests itself save by the aid of the healthy brain, and all efforts are impotent with any diseased organ. The same observation applies to alcoholic delirium, that our poet describes in the following manner:

"When the subtle part of the wine—

"Vini acris vis—

"we say to-day the alcoholic part—has been introduced into the body of man—

"Penetravit hominem—

"and flows through the circulation—

"Et in venas discessit diditus ardor—

"the victim's limbs become weary, his walk uncertain, steps staggering, his mind incoherent, his eyes wavering—

"Consequitur gravitas membrorum, praepe-

unter
Crura vacillanti, tardescit lingua, madet mens,
Nant oculi?

"Why this crisis, the hiccough, the profound modification of character in cases

of drunkenness? What does it signify if it be not the force of the liquor that attacks the mind itself? Now, all substances that are altered or disturbed must necessarily be destroyed and deprived of immortality, if exposed to a superior cause."

Let us leave the philosophic side of the question to Lucretius, and he gives a curious description of drunkenness in its second degree. Without transition, and perhaps rightly, he shows us an attack of epilepsy, *apropos* to which he renews his reasoning upon the condition of inertia of the mind during the duration of the pathological drama.

"Sometimes," says he, "an unfortunate attacked by a malady suddenly falls at our feet as though struck by lightning. His mouth foams, his chest heaves, his limbs are agitated; he is rigid, out of breath, tormented, and yet senseless.

"Quin etiam, subita vi morbi saepe coactus,
Ante oculos aliquis nostros, ut fulminis ictu,
Concidit, et spumas agit, ingemit, et tremit
artus,
Desipit, extentat nervos, torquetur, anhelat
Inconstanter et in jactando membra fatigat."

Lucretius follows this up with a picture of the convulsive neuroses, that have a most perfect clinical exactitude; he remarks:

"Psychal disorders ulteriorly arrive, provoked by disturbances of the mind and soul, that exercise an influence on the faculties. Afterwards, when the morbid attack is passed, the patient rises; at first he staggers, then little by little recovers his senses and his reason.

"Tum quasi vacillans primum consurgit, et
omnes
Paulatim redit in sensus, animamque receptat."

As another proof of the solidarity of the existence of mind and body, Lucretius examines what occurs during the syncope; without quitting the seat of life, the mind, shaken and shocked by violence, appears on the point of leaving its tenement; the face grows livid as at the moment of death, and the limbs, in a state of rigidity, seem ready to be detached from the body, *in which the blood no longer circulates.*

"Such is the state," he adds, "of a man who falls helpless and loses all consciousness, a terrible attack in which all the forces of the body seek to rend the bond that unites them. For the entire mind

falls with the body, and would perish should the shock be more violent."

The conclusions drawn by our author from these examples is that the mind is born and dies at the same moment as the body. "But what does it matter?" says he; "there is nothing to fear about death; life is a continual death that delivers us from prejudices, chimerical terrors and devouring disquietudes. Besides, in living a longer time we would always inhabit the same earth, and nature would not invent new pleasures for us."

"Praeterea, versamur ibidem, atque insumus usque;
Nec nova vivendo procuditur ulla voluptas."

This contempt for death and for the terrors with which it inspires weak minds has been well rendered by Cabanis.¹ Cabanis formulated the following conclusion, imitated from Lucretius:

"No, without doubt, in Death itself there is nothing to fear in the eyes of Reason. All that makes death painful is to leave our dear ones behind; it is there, in fact, that our true death resides. As to the cessation of earthly existence, it can only shock feeble imaginations, incapable of justly appreciating that which they are quitting for that which they may find; wicked souls often regret the past, so badly put to profit, joined to the avenging terrors of a doubtful future. For a wise spirit, for one with pure conscience, death is only the turn of life; *it is the evening before a most beautiful coming day.*"

Is not this philosophic spirit of resignation far preferable to the fear inspired by microbes and bacilli, that are just as difficult to determine and reach as the corpuscles and deleterious miasms of Lucretius?

II.

Satirical Poets—Lucilius, Perseus, Juvenal, Martial.

LUCILIUS.

Caius Lucilius, one of the oldest of Roman satirical poets, was born at Suessa, about the year 150 B.C. He came from a family of chevaliers or knights, the same family from which Pompey afterwards sprang.

¹ Cabanis: "Rapports du physique et du moral de l'homme," Paris, 1844.

At the age of fourteen he followed Scipio the first Africanus into Spain and took part in the siege of Numantia. On his return to Rome he commenced writing his satires, of which only a few scattered fragments are left behind.

Lucilius was a liberal Stoic; he was upright, independent, loyal. Virtue to him consisted in recognizing good from evil, that which is useful and honest from that which is otherwise, only honoring what is worthy of honor and ever the defender of morality. Finally he put in the first rank of human interests love of country; secondly, one's parents; thirdly, the family.

"Commoda praeterea patriae sibi prima putare
Deinde parentum, tertia jam postremaque
nostra."

After having given striking proofs of military bravery, he showed what is more rare, that we call civil courage. In the war of the pen, that has also its glories and perils, he never hesitated to pull the masks off the faces of public swindlers of his day and show them up to the laughter and ridicule of the populace; he was especially severe on the superb patrician class. His audacity was encouraged by Scipio and Lelius, with whom he was on intimate terms. Lucilius was immensely rich; he had as hetaires the two most beautiful women in Rome, Gretea and Collyra. But his health was poor and failing, and for that reason he left Rome and located at Naples, where he died in his forty-sixth year. We have said he flagellated the vices of his contemporaries! He was a Roman, and under their state of morals was no better perhaps than the others.

In his first book he depicts the gods gathered on Mount Olympus to judge the wicked men of the time. In his burlesque consultation of the gods he does not make even Jupiter shine by modesty or eloquence. The celestial cabinet deliberate upon the judges Tubullus and Lucius, who received money for acquitting those they should have condemned; Lupus, the sacrilegious questor, and Carneade, the unfaithful edile, who dispensed with obeying laws; and, finally, on Elius, who "knew how to take up everything like a malignant and corrupted gangrene."

"Serpere uti gangraena mala atque herpestica posset"—

A comparison that permits us to suppose the frequency of gangrene as a complication of pathological conditions in both body corporal and political, even as at the present day. "In his manner, as in his features, we see everywhere death, jaundice, poison."

'Vultus item est facies, mors icteru morbu venenum.'

"This Elius has the effect of one of those encumbered personalities. We note everywhere in places of power, in the ranks of the army, in the public lobbies, in the fashionable antechambers, ambitious, atriliary, icterus-faced, verminous, obsequious, dangerous beings. You have all known such."

A following satire seems to be directed against the ostentation and luxury of the young Romans. We find some passages referring to a duel, at the end of which one of the heroes is left for dead. His lodgings are purified, following the custom, with a fat cake.

"Farto omnia sunt circumlata."

The funeral commences, the sacrifices are made before the funeral pyre. When lo and behold! the supposed dead hero walks around the city. It was a cadaver secured for the occasion before which the relatives and invited guests took on sad countenances and gave away to their grief.

Among the persons whom the poet criticised let us cite Manlius, who introduced at Rome, after his expedition to Asia, the luxuries and delights of the Orient. Lucilius makes this remark:

"Hostibu contra Pestem perniciemque, catax quam Manliu nobis."

"Let us send back to the enemy this pest and plague that crippled Manlius has brought among us."

Emilius is worth still less. "He passes for a serious man," says our poet, "full of integrity and venerable; but he only affects such outside austerities in order to hide his vices, and Nonius is only an immodest man totally shameless and rapacious."

The following verses are addressed to all the sad heroes of his satires:

"Vivite lurcones, comedones! Vivite ventres."
 "Live gluttons and eaters. Long live bellies!"

In a trip he made to Capua, Lucilius tells of his adventures. At an inn he found neither oysters, fish, pigeons, and no asparagi.

"Asparagi nulli."

The poet is not much pleased, and in his anger draws a portrait of a poor devil of a butcher connected with the country inn. "He had an elongated snout," says our poet, "and, with his teeth pointing out, the air of an Ethiopian rhinoceros. Besides, he was sick and exhaled a last, stinking breath from his lungs. Poor Symmachus, he is phthical; and his mother should never have given him birth. But," adds our poet, "she probably vomited him." Meantime, Lucilius dined without asparagi or fish, but the poet remarks to his next neighbor at table:

"Exhalas tum acidus ex pectore ructus."

In reference to an acid eructation from alcoholic indigestion, most probably.

We need not enter into the dissertation of our poet on wine, woman and song; the translation would be too erotic for English reproduction.

Lucilius was a very good observer, and proves by his works that he possessed a certain amount of scientific erudition acquired by reading from the ancient Greek masters. He was a fierce satirist of old age. Speaking of an old man, he says: "He had gummy eyes, itch and lepra that went to his orbits. He is eaten up by scabies, and has his head covered by eruption."

"Tristem et corruptum scabies et porrigini plenum."

A beautiful example of senile herpetism! And he mentions, too, that this Trebilus is only an admixture of fever, marasmus, excrement and pus.

"In numero quorum nunc primu, Trebelliu multo Obmarcessebat, febris, senium, vomitum, pus."

We see, then, why hygienists have good reasons for recommending temperance, especially at the time of old age, when one should avoid all habits of good living and the pleasures of the table—to follow a diet that conserves and will not develop infirmities.

Our poet did not believe there was a thoroughly beautiful woman.¹ The fair

¹ In his poetic fragments Petronius gives us

Helen, she who had the thirty points required in a woman to be absolutely beautiful, and these are the thirty points of beauty laid down by the ancients and possessed by the magnificent Helen. The reader may translate at his leisure, and

"Triginta hæc habeat quæ vult formosa videri
Femina; sic Helenam fama fuisse refert.
Alba tria et totidem nigra, et tria rubra puellæ,
Tres habeat longas tres totidemque breves;
Tres crassas totidem graciles tria stricta tot
ampla.
Sint itidem huic formæ sint quoque parva tria.
Alba cutis, nivei dentes, albi que capilli;
Nigri oculi, cunnus, nigra supercilia.
Labra, genæ atque unguis rubri. Sit corpore
longo,
Et longa crines; sit quoque longa manus.
Sint que breves dentes, auris, pes; pectora lata,
Et clunes; distent ipsa supercilia.
Cunnus et os strictum, stringuntubi cingula,
stricta;
Sint coxæ, et culus vulvaque turgidula;
Subtiles digiti, crines et labra puellis;
Parvus sit nasus, parva mamilla, caput."

thus get his own reading between the modest lines.

Lucilius did not know the advantages of marriage from the moral and morbid point of view. So he consecrated his twenty-sixth satire to the miseries and inconveniences of matrimony, of which he knew nothing. His Roman ideas at the present day are not worth repeating in way of translation, hence are omitted.

He was what moderns would call a free lover, and bewails the sacrifices that social conventionalities place on women. He remarks of women: "She needs must care for man in his illnesses, giving sweetness to the unworthy and sparing them for others. Woman has no relaxation; when a man has a fever or an indigestion a glass of wine will carry them off."

"At cui? quem febris una, atque und' aperyia,
Vini, inquam, cyathus potuit unus tollere."

Lucilius was a believer in athletics. "When in the gymnasium I season my body by rough tennis playing."

A little further along we find this advice: "In order to eat properly one

an idea of the beauty of the Roman woman. He says of her: "Thy eyes are brilliant as the stars of night, thy cheeks the color of the rose, while thy hair surpasses the glitter of gold as to tint."

"Candida sidereis ardescunt lumina flammis;
Fundunt colla rosas, et cedit crinibus aurum."

"Thy sweet lips have the color of the ruby and the azure lines on thy throat serve to relieve its snowy whiteness."

should wash himself well before sitting down to table."

Another very good reflection is on the effects of apepsia caused by excesses when dining: "How tiresome it is to live without an appetite!"—

"Quam fastidiosum ac vescum cum fastidio vivere"—

but he draws a picture of another poor devil, "who suffers from hunger from uncleanliness, owing to no washing water and no baths, who fails in all hygienic cares, and yet goes hungry."

Lucilius understood all about the malaise experienced by one accustomed to bathing when deprived of his baths, that permit the skin to act well. He compares this depression of the organism with the strength and feeling of good being experienced when one comes out of a fresh bath; how the skin reacts better against heat and becomes less impressionable to cold and atmospheric variations; how the muscular system develops in strength and suppleness; how the appetite grows better and digestion easier; how the sleep is more profound and circulation calmer; and how the nervous system is relieved of over-excitation! Such, in fact, is the action of the bath on the organism, and the moral action is no less, for cleanliness of body is ever a cleanliness of the mind.

Of politicians he remarked that they had dropsical spirits. "Thou hast the mind of a hydrops!"

"Aquam te animo habere intercutem."

"That is to say that pride swells thy mind, like dropsy swells the skins it attacks." This is a common example of the picturesque forms of speech that Latin authors give to their style, by the common employment of medical expressions.

Among the passages of Lucilius are some interesting indications that show Latin conformation to Greek customs in the matter of exposing the sick at house doors for the purpose of soliciting advice from the passer-by. "At the threshold of the door Tiresias was coughing and rattling, exhausted by old age, following after querquera fever and pains in the head—

"Querquera consequitur febris, capitisque dolores."

Certain commentators define querquera

as "*Febris frigida cum tremore,*" that would seem to be an algid form had we not another symptom—

"*Tum laterali dolor certissimum nuntiu' mortis.*"

"A pain in the side, sure presage of death. This pain in the side points to pneumonia. In the pathological ignorance of the time it was a very fatal symptom that announced an unfavorable ending for the case.

Lucilius speaks of another malady exposed in the public place. "In order there should be no bubo formed in the groin, so that there should be no pustules or swelling of the limbs."

"*Inguen ne existat; papulae, tama, ne boa noxita.*"

To make a diagnosis here would be difficult. However, one might rashly demand if this disease that brought on a bubo in the groin complicated by pustules, tumors, etc., might not be syphilis?

And so much more the disease responds to the consultant. "This discolored skin disturbs me but is not painful."

"*Hæc odiosa mihi vitiligo est, non dolet, inquit.*"

We know that syphilides exist that are pigmented and resemble vitiligo, but their situation by predilection is the neck. They are usually developed in the secondary stage.

We shall see, when we come to study Martial, that the origin of syphilis is almost as ancient as humanity, and that it can only be attributed to venereal excesses.

The rest of the ideas of Lucilius are omitted, for even our French author admits they are unfit for publication, even in his own language.

PERSEUS.

Rome underwent punishment for its faults, liberty was dead, despotism reigned in the midst of the orgies of the Empire. Some proud souls had preserved a remembrance of the Latin country; they protested and sought a refuge in stoicism. Among the latter was Perseus, the poet.

The father of Aulus Perseus Flaccus was a Roman knight of the equestrian order, and brought his son to Rome at an early age so he might study letters and philosophy. The youth had for a master and friend Thræseas and Cornutus; Lucan was his co-disciple.

Thanks to a considerable fortune, Perseus could afford to mingle with all classes of society, from the city to the court, going everywhere he desired to study public morals. He described everything with the greatest independence, and, as it has been said, he was made the apostle of that philosophy that served for refuge and support against military despotism. His satires contained, under forms of illusion and irony, the history of the turpitudes of the Empire, the social wounds, "those vices hidden under the tinsel of gold," debaucheries, political comedies, poisonings, murders that had for their theatres the processions of the throne and the windows of Suburra, that notorious street of ancient Rome.

His first satire is a dialogue between an interlocutor who represents popular opinion and one who represents public conscience. Perseus reproaches the Romans for their manner of writing platitude, of making bad verses. Perseus says to one of these writers: "The wind of the largest pair of lungs is exhausted in declaiming his pretensions and bombastic productions. When it comes thy turn to speak, thou wilt climb the steps of the tribune, and after having softened thy pharynx with the gargle of the period thou wilt make thy reading with a languorous eye and appear as though dying with pleasure."

"*Sede leges celsa liquido quum plasmate guttur
Mobile colueris, patranti fractus ocello.*"

From thence arise indecent scenes, says our poet. Our good Roman wind spinners frisk and wriggle, neighing when licentiousness excites the regions of their kidneys, the seat of their pleasures, by noises of their titillation.

"*Quum carmina lumbum
Intrant, et tremulo scalpuntur ubi intima versu.*"

These sensations described by Perseus have never, we believe, been cited in any of our treatises on physiology. Meantime, Remy, in July, 1884, communicated to the Biological Society, a note on the ejaculatory nerves. He made experiments on the great sympathetic, and discovered that a small ganglion existed situated in front of the kidney, the excitation of which, transmitted by the nerve filaments to the vesicules seminales, determined an ejaculation without any pre-

vious erection. The current, passing by the ganglion and the dividing nerves, is a centrifugal current, for the excitation of the central end gives no rise to any phenomena.

In his second satire, dedicated to his friend Macrin, Perseus brands the religious hypocrisy of the aristocracy and the absurdity of popular superstitions. Men ask the divinity to accord them wisdom, virtue, honors, but at the bottom of their hearts they say: "Oh, if my rich uncle were to die, would he remember me? He is lymphatic, he has ganglionic engorgements, bile torments him and leads him to despair!"

"Namque est scabiosus, et acri bile tumet!"

He mentions then the intrigues of Agrippina and Nero, that preceded the murder of Claudius and Britannicus. It is in order to sanctify their vows that these gentlemen go every morning to plunge their heads in the Tiber two or three times, in order to purify themselves. Go, hypocrites and purify yourselves; one never buys divine protection with sacrifices, with lungs and a fat gut.

"Pulmone et lactibus unctis!"

To superstitious women he says: "See that grandmother or aunt? She believes in Heaven. She pulls her grandchild from the cradle to rub her ancient finger over its forehead, and upon its moist lips she purifies the new born with the grandmother's salival poison; it is the preservative against the evil eye. Afterwards she slaps the baby's two little hands, and with that superstition the child's future will be brilliant. But," says Perseus, "you ask the proof. The fat bodies of old age—alas! the fat bellies of these old grandmothers of Italy. The gods grant them nothing, and Jupiter's hands are tied. Let us offer to immortals," says this pagan poet, "a pure heart, a character full of the ordinary principles of honor. That is more agreeable than presents placed on rich altars, on plates of gold, for the rotten tribe of Messalina."

Perseus never gave any explanation for the phrase that he called "*Lippa propago Messala*." But we know that the progenitor of the illustrious General was not only dishonored by the infamy of Messalina, but that there was, according to Titus Livius, Tacitus and Cicero, such

an ignoble personage; this Cotta Messalinus, who, stupefied by the excesses of debauchery, say all contemporary historians, bore upon her face all the shameful traces; her eyelids were eaten off by discharges."

This passage is yet a fact to join to the documents that Juvenal has furnished us, along with Martial as regards syphilis.

The third satire shows us a preceptor entering the chamber of his pupil about midnight. This pupil is still abed fatigued by the excesses of the night before.

"How is this possible?" says the latter. "Hallo! his bile comes up quick."

"Turgescit vitrea bilis."

The pupil complains of his ink, pen and paper. His preceptor reproaches him with idleness, pride, his manner of living, that is like that of a certain Natta, "whom vice has made demented and who no longer feels anything under the thick leprosy that covers him."

"Non pudet ad morem discincti vivere Nattæ?
Sed stupet hinc vitio et fibris increvit opimum
Pingue."

"I always remember," says the youth's preceptor, "that in my childhood, when I did not wish to learn a beautiful discourse by Cato, ready to give himself to death, I anointed my eyes with oil."

"Sæpe oculos, memini, tangebam parvus olivo."

"At once I wished to play with dolls, but thou art not a pupil of Portico or a young man who has submitted to a severe discipline of torture, and is nourished on herbs, broths and oat cake. Thy head, reeling so it can no longer rally thee, thy repeated yawnings, and thy jaws, betray thy very youthful age."

"Sertis adhuc? laxumque caput, compage soluta,
Oscitat hesternum, dissutus uudique malis!"

The preceptor, who appears to have received from Craterus some notions of medicine, continues thus: "The patient, when dropsy has swollen his limbs, asked for hellebore."

"Helleborum frustra, quum jam cutis ægra tumebit
Poscentes videas."

But he was too late; his affection was incurable and he promised, in vain, his heap of gold to Craterus.

“ Venienti occurrere morbo,
Et quid opus Cratero magnos promittere montes.”

Afterwards he adds: “ Prevent evil then, instruct thyself, poor mortal; study the laws of nature, know what thou art and why men are called to life. See what I am; I do not know from whence these heartbeatings come and why my breath rises from an infected and diseased throat; look at it, I pray thee—!

“ Inspice; nescio quid trepidat mihi pectus, et
ægris
Faucibus exsuperat gravis halitus, inspice,
sodes.”

“ The physician prescribes repose, but at the end of three days, the blood having taken the regular course, the patient wishes to go to the baths and also to drink a bottle of Sorrento wine.”

“ Qui dicit medico, jussus requiescere, postquam
Tertia compositas vidit nox currere venas.”

Is there any reason to suppose, after that, that the doctors of antiquity did not know something about the circulation of the blood? Know when its course was regular and in a physiological condition, when it was irregular and in a pathological state? They did not know, it is true, the mechanism and cause of the circulation, that which is the important point of this physiological function. Let us continue to read this interesting dialogue:

“ But, my friend, thou art very pale.”

“ That’s nothing.”

“ Pay attention to that nothing, for thy skin is yellow and swollen, without thou even perceiving it.”

“ Eh, thou! thou hast also a sad visage; if thou desirest to be my tutor. I once had one, remember, and buried him. So be on thy guard.”

“ Well, then, I hold my tongue.”

So this patient with the yellow tint and gorged with food, despite the mephitic exhalation that convulsively escapes from his mouth, goes to a bath.

“ Turgidus hic epulis, atque albo ventre, lavatur,
Guttore sulfureas lente exhalante mephites.”

But while he drinks a chill surprises him, the cup of hot wine drops from his hand, his teeth chatter. From then on comes the sound of the funeral trumpets.¹

¹ Funeral services were conducted to the sound of instruments—to the sound of the flute for young persons, to the trumpet for elderly parties,

Afterwards the cadaver, placed upon a burial parade litter and anointed by rare perfumes, is carried from his door feet forward. Here is, then, a curious description of the symptoms of excessive alimementation, grave indigestion, the consequences of which are dangerous, especially when in such a state the patient is given a hot plunge bath.

But this is not all; the young man, who was perhaps Nero, that he rotted also, to the mind of Perseus, might have only been Seneca. Tired of sermonizing, he says: “ Feel my pulse, place thy hand on my chest, touch my hands and feet. Am I cold?”

“ Tange, miser, venas, et pone in pectore dextram;
Nil calet hic; summosque pedes attinge manusque.”

And the preceptor replies to his pupil: “ Is thy heart in repose when thou covetest gold, when the young daughter of thy neighbor smiles at thee? When they serve thee a plate of vegetables and barley bread, dost thou eat? Thou hast in thy mouth an ulcer that thou fearest to scorch with vulgar beets.”

“ Tentemus fauces; tenero latet ulcus in ore
Putre, quod haud deceat plebeia radere beta.”

The ulcer that this glutton has in his mouth and that prevents his eating can only be one of those aphthous ulcers that develop under the influence of an alteration of digestive functions or under that of a bad general indisposition. Celsus also makes that remark very explicitly—

“ Ulcera oris quæ ‘aphthas,’ Graeci nominant.”¹

As for the *beta plebeia* or *vulgaris*, it is a species of *Chenopodiacea* that contains three alimentary varieties—the white beet, red beet and sweet sugar beet.

“ Finally, thou art in a chill when fear has bristled the hair on thy body and thou burnest when thy blood is lighted up and that thy eyes sparkle with the fire of thy wrath. Thy words and actions are such that thou seemest a fool even to Orestes himself.”

Here our poet seeks to prove that the study of wisdom is necessary for a political career. He argues against those young madcaps who assist in the direction of

¹ Celsus, I, 2, Cap. 1.

public affairs, and who do not even know how to govern themselves; they persuade themselves that they have talent, and are only the mere playthings of their own passions; they ignore the fact that a man is really superior by his culture of mind, by his virtue and character."

Perseus was made to develop these remarks by Socrates addressing himself to Alcibiades, at the moment when the latter goes on to become the chief of the Republic.

"Without doubt," said the grand philosopher, "thy intelligence and experience in public affairs come to thee even before thy beard: thou knowest when to speak and when to hold thy tongue; thou knowest how to discriminate, to discern the true from the false! In place of exhibiting thy plumage to the eyes of the peoples, why not purge thyself moreover with doses of hellebore?"

"Anticyròs melior sorbere meracas?"

Let us remark, in passing, the tendency of the ancients for evacuants, a tendency that we moderns have preserved and which is always the basis of our therapeutics—*purgare et clysterium donare*.¹ We know the medicine and gymnastics of the ancients answered an excellent hygienic purpose to develop the strength and prevent diseases; that kind of sun bath, too, where the body was previously anointed with oils and odoriferant essences. It is certain that this action of the sun on living beings is very favorable; especially so in certain forms of paralysis, on scrofulous children, in cases of tumors, Pott's disease and in general among all individuals enfeebled by diseases and excesses.

In another satire Perseus permits us to assist at a conversation between himself and his master, Cornutus. Our poet invited all Romans to come to the same school of the science of life. Afterwards he tells them what one must understand by moral liberty, which is true liberty; for it is that which permits us to master the pas-

sions that tyrannize over us, that is to say, avarice, idleness, love, ambition and superstition.¹

He shows us men in different employments of life agitating, torturing, punishing themselves, forgetting how to live. But a day comes when man will groan over his errors and there is no time left him. "Calculous gout gnaws his articulations and breaks the branches of the dried tree."

"Sed quum lapidosa chiragra
Fregerit articulos, veteris ramalia fagi."

"It is an error of belief," adds Perseus, "that men can be masters of living as they desire. They have duties to fulfill that fools have not the intelligence to comprehend. All positive law and the natural law are in accord upon this point, that the ignorant should be interdicted acts which they are incapable of understanding. Wouldst thou administer hellebore if thou didst not know the dose and how to use balanced scales? That would be contrary to the elements of the art."

"Diluis helleborum, certo compescere puncto
Nescius examen; vetat hoc natura medendi."

"It is also an error to say we are free when we depend on so many masters, so many interior tyrants. Behold the freeman! an order cannot move him, and there is no longer anything outside himself that can intensely agitate his machine—*quod nervos agitat*." It has been observed that no one can understand this passage save in knowing that all philosophy carefully distinguishes the inside and the outside—*intus* and *extrinsecus*—mobile interior sensations and the mobile external sense. Let it be remembered that the ancients compared moral man, agitated by his passions, to wooden or cardboard figures, like those in the modern Punch and Judy show, that are moved by wires. From that the expression *nervos agitat*.

In the same satire Perseus wishes to

¹ The ancient philosophers all believed that hellebore was salutary for the mind. The best grew on the island of Anticyra, from whence that old proverb, "Naviget Anticyram," in speaking of an individual who goes insane. Hellebore, or ellabore, was of the white variety (*veratrum album*), and is a very violent purgative. Moderns draw their veratrine, that has emetic and sternutatory action, even in very small doses.

¹ Petronius did not write at much length on the moral affections, but he justly says: "The vulture that devours the liver up to the bottom of the entrails, that is not as poets claim the vulture of Tityus, but envy and chagrin those diseases of the soul."

"Qui vultur jecur intimum pereat
Et pectus trahit intimasque fibras
Non est, quem Tityi vocant poetæ
Sed cordis mala, livor atque luctus."

reveal to Cornutus the sentiments that inspire, his gratitude for him, and he says: "Strike upon this heart, thou who knowest how to distinguish a full sound, and the color of the glaze upon the tongue."

"Pulsa, dignoscere cautus
Quid solidum crepet, et pictae tectoria linguae."

It is evident that these expressions are merely employed by our poet as a figure of speech, and intended to convince Cornutus that his pupil has a heart and that the language of his tongue is not glossed over. Yet we must clearly understand, too, that these ancients well understood the symptomatic value of heart sounds and the colorations of the tongue, and the ideas of chest auscultation and percussion. Meniere claims that, although this may be the language of metaphor, the poet makes allusion to the practice of the art, to a procedure to make known the normal qualities of the heart, the physical condition of sonority appreciated by methodical auscultation and percussion of the thorax. We find, besides, in the edition Variorum the following words: "*Allegoria ab istis qui tinnitu et pulsu fictilium integritatem explorant.*"

It was known from ancient days that potters and keg makers had the knack of discovery in the values of their wares by percussion. To this day the best skilled ones can tell you how many gallons are in a barrel by mere percussion.

But our poet was to die early, at the age of thirty, A.D. 62.

"Soon," said he, "thou wilt be but a ghost, a vain name of ashes. Death approaches; think of me; time flies; the moment when I speak is no more."

"Fugit hora, hoc quod loquor inde est."

Let us add that Perseus was a great admirer of Horace and Virgil, and a friend of the celebrated Musa and Craterus, the physicians and medical confidants of so many good poets.

JUVENAL.

Decius Junius Juvenal was born at Aquinam, an ancient Italian town. Some historians claim that he was born in Celtic Gaul in the year 42 A.D., corresponding to the year 795 of the foundation of Rome. The fineness of his style and his independent character seem to afford good reason for this hypothesis.

The first years of his life were consecrated to observing the ignominies of Roman civilization, the servilism and corruption of the public men of his day.

He was forty years of age when he commenced writing his satires. Armed with the whip lash of Nemesis, he flagellated the ridiculous luxury of the rich, their insolent pride, the shameful vices of a peoples prone under the power of a monied despotism.

Where one is courageous enough to do high justice to the turpitude of his contemporaries he is naturally exposed, like Voltaire, to disgrace from a prince; like Paul Louis Courier, to trials before courts of injustice; like Victor Hugo, to exile. Juvenal died, then, far from his country, in Egypt.

His satires breathe neither hatred nor envy, but are impressed by a just indignation against evil and a profound love for the good. He could not view in cold blood the laws of nature publically outraged by men. He protested against the monstrous debauchery, whose morals, in his time, had arrived at such a degree of licentiousness that posterity, we may say, can add nothing to their depravation.

"Non erit ulterius, quod nostris moribus addat
Posteritas; eadem cupient facientque minores."

He nailed to the pillory of infamy tyrants, hypocrites, false statesmen, debauched aristocrats, parasites, and the whole school of bad-lived men. We can only sum all up by saying that Juvenal, poet, historian and philosopher, consecrated, following the expression of Titus Livius, all his life to truth.

In this struggle against all human depravations perhaps Juvenal might have come out victor and reached his object, the correction of Roman morals, if his genius had sufficed to anticipate the fall of rotten empires and the decadence of peoples. But if his immortal satire had not the power to suspend the law of fatality, it remains to us as a precious historical document, as a model of style and cleverness, as a literary monument remarkable for the elevation of ideas and energy in matters of self-conviction.

Despite all the interest that it presents for our information that Juvenal has given us upon some diseases, certain surgical affections, public and private hygiene, we will commence by a study, more philo-

sophic than medical, on the corruption of morals among the Roman peoples of the great poet's day. He commences with the Empire, and we find it formulated by these two words: *Pana et circenses*. The peoples desired anxiously two things, that modesty only permits us to translate by *panem et circenses*. But it was not bread that these depraved peoples desired; it was the lupercals, feasts of Cybele, floral plays; *Pana!* the cynical ceremonies of luxury, the bacchanalian revelries! All the ancient manuscripts of Juvenal testify this.

"Nam qui dabat olim
Imperium, fasces, legiones, omnia, nunc se
Continet, atque duas tantum res anxius optat,
Pana et circences."

This may be thus translated: "This peoples, who gave themselves up to the dictatorship, fasces, legions and all the dignities of life, now existed in shameful idleness and had but two aspirations—the lupercals and the circus."

What can we say of their festivals, their athletic plays, where, remarks Lactantius, men and women consorted nude to the sound of a trumpet—a celebration of the cult of lubricity, established in honor of a famous prostitute who had left the Roman peoples the riches derived from her debauchery?

When we read these satires of Juvenal closely it would appear that venereal diseases, nymphomania, satyriasis, pederasty and saphism overcame the men and women of those dreadful days as epidemic, an outbreak supported, too, by an inordinate appetite for alcoholism in every form. This neurosis seemed to attack all alike, for we see the censors going alternately from the throne to the tavern.¹

At that time Juvenal informs us that adultery was a trifling fault. It was the law of Julia,² made by Augustus, *de adulteriis*, a law with most severe penalties against those convicted of adultery. Juvenal asks:

"Ubi nunc, lex Julia, dormis?"

"The time of marital faithfulness no

¹ From the end of the reign of Tiberius we see the human soul so degraded that it would astonish the majority at the present day, or rather we see manifest a degradation that had already existed, and only waits to be reproduced some day by the examples set of public immorality (Lammenais).

² The law of Julia punished adultery by death.

longer exists; concubinage is tolerated by the State itself. The latter has admitted *justæ nuptiæ et legitimæ*—that is to say, liaisons with concubines, provided such be not sister or daughter of those one has lived with, and are not of servile condition. Concubinage with incestuous women, foreigners or slaves, *injunctæ nuptiæ et illegitimæ*, is the only one that legitimate women hesitate to tolerate, and for which they may claim the soft severities of the courts. The time will surely come—it is not far off, besides—when women will take on the fashion of transparent robes, made of silks and linens, which courtesans alone dare to wear and which is the livery of infamy imposed on adulterous homes."

Seneca was indignant at this fashion: "I see," says he, "silk garments, if we can give the name of clothing to such stuffs, that do not protect the modesty of the body, and in which a woman cannot, *without lying*, swear she is not naked. We import these stuffs at great expense from unknown countries, to the end that women can no longer keep their secret charms from their lovers."

Juvenal says, in his sixth satire, that under the reign of Saturn modesty dwelt on this earth, but did not wait long to follow Sister Astræa, leaving this land for celestial space. If the age of silver saw the first adultery, the age of iron brought many other crimes. "In these days," adds our poet, "who will find a woman worthy to touch the strings on the sandal of Ceres?"

But adultery was not the only crime. Juvenal shows us the peoples were extravagant, proud, superstitious, cruel; the women poisoners. One poisons her husband with wine of Caleno, another uses the venom of mushrooms, like the poisons given to Britannicus and Claudius.

This somewhat explains the reason for which Juvenal advises his friend Ursidius to marry an honest woman, for even "doctors open the median vein."

"O medici! median pertundite venam."

This indication of the median vein proves that the ancients knew the different veins of the body, folds of the arm, and gave them the preference to the cephalic and basilar, although some writers seem to think they practiced bleeding the frontal veins.

The cause of all these disorders and this immorality of women must be attributed to the pernicious examples given by men, who in those days directed society and who are always the first to outrage nature.

Let us remark, in passing, that Juvenal always mentions the doctor and not the surgeon, for in Rome, as well as at Athens, the doctors practiced medicine and surgery at the same time. There were even alienists among them, and the most renowned for mental diseases was Archigenes, known likewise as a physician and surgeon, as is proved by this passage in the thirteenth satire—

“Et phthisis et vomitæ putres, et dimidium crus
Sunt tanti? Pauper locupletem optare podagram
Nec dubitet Ladas, si non eget Anticyra nec
Archigene.”

“What difference be it phthisis, ulceration of the lungs or fracture of the leg? That this unfortunate Ladas does not hesitate to prefer to a fresh attack of gout, if he is not tributary of hellebore and of Archigenes.”

From the proverb *Archigenis indiget*, to call a person crazy. To-day we are content to send lunatics to an asylum.

After the sexual excesses of the Romans let us pass on to their table excesses.

According to ancient Roman customs, the better class of society, when taking their meals, reclined upon beds similar to modern sofas. Their bodies were raised upon the left elbow, to the end of having a free use of the right hand in eating; behind their backs were comfortable supporting pillows. This fashion of eating was introduced after the second Punic War by Scipio Africanus. The women at first placed themselves by the side of the men, but did not recline, but afterwards they followed the masculine fashion. The children alone remained seated near their parents.¹

There were ordinarily three beds around the table, so that one side could remain

¹ Before dining they removed their sandals and donned a particular robe, *vestis canatoria* or *cubitoria*, that could be worn aside from meals. When they went to dine in the city they sent this robe to their host, so that the latter need not furnish one. The color of this garment was variable, yet those used in the cities were always made of white materials. Nero sometimes appeared in public with this festival robe, but this was considered a mark of his bad manners.

open for the servants. The master of the house reclined at the head of the table. This festal board was made of precious woods, having incrustations of gold, silver, ivory or of pearl. It was sustained by a tripod of gold or silver representing a leopard or some other animal. It was usually covered by a colored cloth bordered in gold and purple. The dining table was the most luxurious of Roman pieces of furniture. The number of tables was in proportion with the fortune of the householder. The table service was performed by several slaves. Those who arranged the table were called *Structor*. Another, named *Chironomon*, was the head carver; he cut the meats, sometimes an entire wild boar, with marvelous skill. *Artocopus* was the one who served the bread; *Pocillator* was the cup bearer and drink server. Seneca informs us that on gala days there were extra servants, one to wash the sputa off the floor, another received in a basin *ad hoc* the vomitings of those who were drunk, another finally mopped up all that dropped from the table.

“Alius sputa detegit, alius reliquias temulentorum
Subditus colligit,” etc.²

Juvenal furnishes us some curious information on Roman foods. A certain Hortensius had introduced the fashion of eating roasted peacocks, but Juvenal considered the fowl as a very indigestible food; he spoke about boar's meat in the same manner.

As all know, fish were much used by the Romans. A great delicacy esteemed by all epicures was the gray mullet, that they went to fish for in the most distant countries. The head and liver of the gray mullet were its most valued parts.

The best wines of the Romans were drawn from Campania, a province of southern Italy. The most renowned vintages were those of Albe Setia and Sorrento. Falerno was the Chambertin and champagne of the Romans. They preserved their wines in small casks called *cadus*, and in order to age the liquors they placed them in a high room exposed to the south.

In order to have an idea of the culinary

² Seneca: Letter lxxvii, liv. vi.

refinements of that epoch, it is sufficient merely to recall those three verses of the fifth satire—

“Anseris ante ipsum magni jecur, anseribus par
Altalis et flavi dignus ferro Meleagri
Fumat aper—Post huic radentur tubera.”

“They served before him a fat liver, a capon as large as a goose, and a wild boar worthy of the knife of Meleagre.” Afterwards come truffles perfectly clean. The wild hare and young chicken come in at the end, with the mushrooms, preferred fruits from the garden and pastries, *dulcearia et bearia*, described by the famous Apicius, who kept a public school for gourmands at Rome and wrote the learned treatise, “*De Gulâ irritamentis*.”¹

The feast is ended. They have crowns of flowers and myrtle upon their heads, but they had neither the suave perfume of coffee nor the delicious odor of a fine Havana. What will they do? “They first take an emetic,” says Seneca, “to the end of better eating, and they eat to the end of taking another emetic.”

This was Cæsar’s habit, and history tells us that Nero knew how to renew the hunger in his stomach surcharged with foods and when his lungs were burning from Falerno wine.

Can we add anything more to these examples? Yes; the patients themselves were given to intemperance. “The largest number of patients,” says Juvenal, “died at Rome from loss of sleep, and also from indigestions and affections provoked by themselves.”

Table excesses with alcoholism on one hand and venereal excesses on the other, gave them the gout, *podagra*. Galba was so gouty that he completely lost the use of his limbs: “*Pedibusque manibusque articulari morbo distortissimis, ut neque*

¹ Our poet has forgotten to mention a much esteemed dish among the Romans, called *matteæ*. This was kind of a salmis or game hash, into which partridge, fat pigeon, young chicken, with vinegar or sour grape juice dressing. Turtle-doves, thrush and hare were sometimes hashed up in this same dish.

“*Piget esse singula, coguntur in unum sa-
pores, in coena fit quod fieri debet saturo in
ventre; exspecto jam ut manducata ponantur.*”

“They are no longer content to eat meat separately; they collected all tastes in one.”

The pastries for table dessert were made of figures of Priapus, that, in opening, one found all kinds of fruits. These Priapes were cooked pastry and could be eaten if desired.

calceum perpeti, neque libellos evolvere aut tenere omnino valeret” (Suetonius).

The gout, of which it is only necessary to seek the cause in the incomplete elimination of the nitrogenous principles and their accumulation, under the form of urate of soda, in the small articulations, was only the result of the excessive alimentation to which the Romans gave themselves up. They were the subjects of venous plethoras, hemorrhoids, and perhaps apoplexies. Fatty infiltrations enfeebled the organs of life of relation, completing the symptomatology of the gouty diathesis produced by a too animalized nourishment and the excesses acquired by habit.

As the pathological equivalent of gouty arthritis, they had then, as we have now, gravel and affections of the kidney. Augustus had gravel. Horace, small and obese, had gout, that disease which, according to Daremberg, was so common in ancient Rome.

Juvenal, in his description of old age, shows us, in all its sad details, the senile cachexia of the high livers of his time. “A deformed visage, covered by a hideous leather instead of a skin, cheeks hanging in wrinkles, toothless gums, deafness and impotency. One complains of his shoulders, another of his back and legs, the blind envy the one-eyed, and servants’ hands place the food on withered lips.”

“*Ille humero, hic lumbis, hic coxa debilis; am-
bos
Perdidit ille oculos, et luscis invidet, hujus
Pallida labra cibum accipiunt digitis alienis.*”

“The dulled palate no longer finds a bouquet to the wine, nor the same taste to the food. Who will attend on this exhausted old man? Only fever gives a little heat to impoverished blood in an icy body; all diseases assail him at the same moment.

“And in order to achieve the list of misfortunes that await old age in their high livers, most injurious of all infirmities comes dementia.

“*Sed omni
Membrorum damno major dementia.*”

This takes away memory. They forget the faces of friends and cannot even recognize their own children, “*nec illos quos genuit.*”

So cerebral softening possesses them.

Like all peoples of the Orient, baths played a great rôle in the lives of the Romans. They bathed almost every day. Their baths were for the purpose of cleaning the body of natural soilings.¹

In general the public baths were open about five or six o'clock, when the business of the day was over. Baths were open to most of the public from morning to night, some all night. Hydrotherapy was well understood in every branch. Rich persons had baths in their residences, and often bathed after taking their meals. The price of bathing was very moderate; it was one *quadrans*, the quarter of an *as*; there were baths that cost very much more, baths frequented by the very wealthy. Once in the *piicina*, each took his wash rubbing cloth, *strigilis*, instrument in horn or ivory to scrape the skin, and that also served as a curry-comb.

Spartien reports the following anecdote "The Emperor Adrian, who often bathed with the common peoples, one day perceived an old soldier, who, having no one to scrape his skin, was rubbing his back against the wall of the bathing pool. The Emperor rendered him the service needed and gave him the wherewith to purchase what was wanted. The next day several old men attempted to attract the Emperor's attention and the liberality of their Prince in the same manner as the old soldier. This time the Emperor distributed curry-combs among them and ordered them all to scratch each other."

Originally the women's baths were separate from those of the men, and the mingling of the sexes was severely prohibited. But when public morals commenced to be corrupted the temples and baths had the same entrances; they likewise, in time, became places of public

¹ All ancient peoples considered coitions as a pollution that might injure the organs and functions, and it was only bathing and lotions that sufficed to remove such soiling. This is why Herodotus states: "Every time a Babylonian cohabits burning incense is placed each side of the couch, and at dawn of day man and woman take a bath, for they must touch nothing before bathing."

The same proscriptions were made by the ancient Egyptians and Hebrews.

No Roman could enter a temple before bathing after the act, even after making ordinary ablutions. The consecrated expression was *aquam sumere*. They even had slaves called *aquarioli*, whose duty it was not only to carry water for this use, but also to wash all public women after the act.

débauchery, and women frequented these baths at night.

"Callidus et cristae digitos impressit aliptes,
Ac summum dominae femur exclamare caegit."

Our readers can translate these words for the benefit of anatomists, and the sense will be more exact.

The satires contain some information relative to the public hygiene of Rome.

The Municipal Council of the city were called *ediles*, kept an eye on the monuments and habitations. Their functions covered the whole ground of civil police service; they fixed the price of commodities, prescribed all sanitary measures, censored theatrical performances, presided at public reunions, and were supposed to watch over public morals. Their administration was not always as serious as they assumed; they were often mocked by satirists—for instance, by Perseus.

The ediles had the preparation for public hygiene relative to sepultures. Graves were free; a Roman could be subjected to cremation or inhumation, according as the relatives desired. They had no cemeteries; their tombs were placed along the public roads. Cremation was only permitted after the time of Sylla, who ordered his body burned, in fear that some one of his enemies should do as the enemies of Marius had done. According to Juvenal, the earth received the bodies of children too small for the funeral pyre; Pliny likewise confirms this fact—

"Hominem priusquam genito dente cremari mos
Gentium non est."

Among the maladies mentioned by Juvenal we may cite scrofula, *struma*; and goitre, *guttur*.

"Quis tumidum guttur miratur in Alpibus?"

It is the same to-day; the etiological conditions of this affection have not changed.

After mentioning phthisis and jaundice, that were considered incurable diseases, he speaks of the varices, to which the priests were subject from too long standing on their feet; of quartan fevers that lasted many years.

We terminate here this medical study of Juvenal, and in order to respond in advance to any criticism that may be adduced for seeking in Latin poets historical notes on the medical sciences, let us merely

cite that superb definition of health that is found in the 355th verse of Juvenal's tenth satire.

"Orandum est, ut sit mens sana in corpore sano."

MARTIAL.

Marcus Valerius Martialis, known to the world of literature as Martial, was born in Spain at Bilbilis, near Saragosa, about 30 A.D. He left his native land at the age of twenty-three and went to Rome in search of a fortune. Modesty was not one of his qualities. In his memoirs he distinctly states: "I am called Val Martial, the favorite poet of the Romans." Despite this, he accused his contemporaries of not rendering full justice to his talents, and so his Spanish friends might be convinced of this fact, he wrote these lines: "Think of me and be just; your renown you owe to me. Mantua is proud of her Virgil, Padua boasts of Titus Livius, Cordova of Seneca and Lucan, Verona of Catullus, Bilbilis owes its renown to Martial."

This Spanish poet from Bilbilis wrote only epigrams. He passed most of his life flattering the courtesans of the Emperor Domitian, and insulting those who had a contempt for them.

Here is the warning he gives his readers, that has a certain physiological interest for doctors. "If thou posest for austerity, gentle reader, thou mayest as well take a promenade. My poetry is written altogether for worldly peoples, for only light verse amuses me. In reading me watch out for venous rigidity—

"O quoties rigida pulsabis pallia vena!

"And thou, also, young lady, should'st thou hail from Padua city with the most chaste women in all Italy, better drop these pages or take the sad consequences.

"Tu quoque nequitas nostri lususque libelli
Uda puella leges sis patavina licet.

"But when Lucretia closes the book blushing it is because Brutus enters, when he has withdrawn she will pick the volume up again."

Different from other Latin poets, the author of the "Epigrams" loved not medicine and hated the doctors. So he did not spare the profession in his sarcasms. He was jealous of every one who arrived at fame or fortune. "I have dis-

covered," he remarks, "that Diaulus, before being an undertaker was a surgeon. He is then able to hold a clinic as he is capable thereof."

"Chirurgicus fuerat, nunc est vespillo Diaulus
Coeplit, quo poterat, clinicus esse modo."

Zoile is ill; it was hot bed coverings that gave the fever. "What hast thou been doing, tangling up with doctors?" says Martial. "Send away these Machaons, sons of Æsculapius and pupils of Chiron. If thou dost desire health take my coverings."

"Zoilus aegrotat; faciunt hanc stragula febrem,
Quid tibi cum medicis? Dimitte Machaonas
omnes.
Vis fieri sanus? Stragula sume mea."

Apropos of the sudden death of Andragorus, he was taken to his physician, who had no time to care for him. Andragorus went to bathe with us and we dined gayly together. The next morning he was found dead. Dost know Faustinius the cause of such a sudden death? He probably saw his physician Hemocrates in a dream.

"Lotus nobiscum est, hilaris caenavit; et idem
Inventus mane est mortuus Andragoras.
Tam subitae mortis causam, Faustine, requiris?
In somnis medicum viderat Hemocratem."

After accusing physicians of ignorance and immodesty, he charges dishonesty. "The practitioner Herodes stole a medicine goblet from one of his patients. Caught by the latter in the act, he exclaimed, "Would'st have taken a drink from it?"

In another epigram he accuses Hemocrates of stealing everything he can find—napkins, cloths, etc. "He holds one of your hands," observes Martial, "and robs with the other. He would steal beds, curtains, anything."

For the physician Carus who died, he reproached him in an indirect way, of robbing his patients by prolonging their fevers.

"Nequius a Caro nihil unquam, Maxime, factum
est,

Quam quod febre perit; fecit et illa nefas.
Saeva nocens febris saltem quartana fuisset;
Servari medico debuit illa suo."

Another physician, Hylas, was killed by one of his patients who was suddenly attacked by renal colic and insanity at the same moment. Martial considered this

crime wholly natural. His funeral oration on this unfortunate physician, assassinated by a lunatic for whom he was caring tenderly, may be rendered thus: "He was not so crazy after all."

"Invasit medica sica nephriticus, Aucte,
Et praecidit Hylas; hic, puto, sanus erat."

Let us note, in passing, the case of symptomatic insanity from nephritic disease. Was this delirium acute or apyretic? It is of little importance; dependant functional troubles of intellectuality are provoked by arthritic affection; it is the essential point for those who see in insanity only a chapter to add to general pathology.

Martial never let any occasion pass to be disagreeable to physicians. Yet Martial had no contempt for health. Like all the detractors of medicine, like all hypochondriacs such as Moliere and Voltaire, he feared death.

A word more for the oculists, for Martial has not forgotten to mention these gentlemen. He thus addresses one of them telling how he called in a bad doctor. "Thou art gladiator to-day; in other times thou wert an oculist. Thou followest thy old profession yet."

"Hoplomachus nunc es, fueras ophthalmicus
ante;
Fecisti medicus quod facis hoplomachus."

Martial is too concise to say what the specialist did, but it is easy to divine; "He closed his patient's eyes." When our poet wishes, however, he knows very well how to dot his *i*'s.

It is fortunate that this bilious poet from Bilbilis had the medical services of those who were vastly his social superiors and were also men of fortune. Martial's venom was inexhaustible; he also agreed that his profession was a sad one, *i. e.*, to flatter those for whom he had a contempt, to insult those who feared him, to hate everything high and low, and all to finally die in hunger. Yet at this time he was not in poverty; he possessed a small place in Rome and a little farm outside the city, bought with moneys given him by the Emperor Domitian. So his flatteries are often extremely stupid and his abuse very insipid. He compared this Emperor to Jupiter and his palace to Olympus; he also went so far as to say that his virtues would check Roman immoralities.

Romans were not all Adonises and were subject to numerous infirmities. Martial had an epigram on one Fabianus, that greatly amused the populace at the public baths and places of amusement. This Fabianus was troubled with hernias and hydrocele.

"Derisor Fabianus herniarum,
Omnes quem modo colei timebant
Dicentem tumidas in hydrocelas."

He said to Phebus: "Thy legs resemble the increase of the moon; thou mightest, Phebus, take a foot bath in the horns."

"Quum sint crura tibi, simulent quae cornua
lunae
In rhytio poterat, Phœbe, lavare pedes."

Martial states: "There is no lack now for doctors for all diseases. Cascellius pulls or cures a tooth that he has made bad; Higinus burns the hair that interfere with sight; Fannius removes, without cutting, an uvula; Eros effaces the marks from slaves; Hermes passes for the Podalirius of those who have hernias; show me, Gallus, who mends ruptures?"

"Eximit aut reficit dentem Cascellius aegrum;
Infestos oculos uris, Higinus, pilos.
Non secat, et tollit stillantem Fannius uvam.
Tristia servorum stigmata delet Eros.
Enterocelorum fertur Palaririus Hermes;
Qui sanet ruptos, dic mihi, Galle, qui est?"

Hermes, according to Martial, was a hernia specialist, which goes to prove it must have been common in that population.

They told of remarkable cases of hernia cures in those days. A pagan priest had a scrotal hernia, and recommended to a peasant, who wished to sacrifice a buck, to remove the animal's testicles, to the end that the flesh of the buck might not be fetid.

"Dixerat agresti forti rudique viro,
Ut cito testiculos peracuta falce secaret,
Teter ut immundae carnis abiret odor."

The recommendation was good, and the peasant soon returned with the animal. The priest knelt at the altar of Isis, showing behind him an enormous scrotal hernia, and the peasant, believing it his duty to go on with the sacred rite, cut off the scrotal mass with one clean cut, so that the poor aurspice was castrated, who from a Tuscan became Gallus (Gallus or priest of Cybele).

“Ingens iratis apparuit hernia sacris.
Occupat hanc ferro rusticus, atque secat.
Hic modo qui Tuscus fuerat, nunc Gallus
auruspes.”

Let us recall the fact that the priests in the temple of Cybele were all eunuchs. Martial cannot let this occasion pass without having his word. He makes it well understood, meantime, that the aurspice may change his religious corporation. He had been operated on *cito et tuto*, if not *jucunde*, because that this improvised surgeon used a good instrument, *falce peracata*, whilst the priests of Cybele followed more desperate surgical procedures.

What will appear extraordinary to many surgeons is that the operation of castration among the Romans was very common and rarely fatal, and there was scarcely any hemorrhage.

The ancients knew little or nothing of auscultation and pathology, that to-day permit us to make an exact diagnosis between bronchial affections purely inflammatory and pulmonary tuberculosis. So they considered a cough as a symptom always having an unfavorable prognosis. Martial relates a curious history of a certain Gemellus. He was going to marry in hopes his wife would not live long and would bequeath him her fortune. He made assiduous court, he pressed marriage, he sent presents to his sweetheart, Maronilla. Was she pretty? An error; she was horribly ugly. What charm had she then? Why was she so pleasing to him? She coughed.

“Petit Gemellus nuptias Maronillae,
Et cupit, et instat, et precatur, et donat,
Adeone pulchra est? immo fœdus nil est.
Quid ergo in illa petitur et placet? Tussit.”

Thus she was condemned—she coughed.

In another epigram, Næria is pthithical, for she also coughs, and although the malady progresses slowly, Bithynicus, her husband, believes it is all over. In fact, Nævia breathes with difficulty; she has a dry cough and her sputa flows over her chest.

“Quod querulum spirat, quod acerbum Naevia
tussit
Inque suos mittit sputa subinde sinus.”

A husband of the same kind as the two others says to one of his friends: “That must be a female friend of my wife’s; she also coughs.”

In the modern practice of medicine one never hears of hemitritee fever, a form of intermittent fever. It is to be believed that it was not a rare malady in former times; Martial often mentions it. He addresses Mathon: “Thou declaimest, Mathon, despite thy fever. Knowest thou not it is from madness. Thou art insane, my friend Mathon. Thou declaimest and thou art sick; thou declaimest and thou hast hemitritee,” etc.

“Declamas in febre, Mathon; hanc esse phre-
nesim
Si nescis, non est sanus, amice Mathon.
Declamas æger, declamas hemitritæus.
Si sudare aliter non potes, est ratio.”

“Thou art wrong to believe that thou givest proof of great courage; when the fever burns in the blood it requires great courage, Mathon, to know how to hold one’s tongue, Mathon.”

Here is another example: Maron has publically made a vow for his friend, an old man who is attacked by an acute hemitritee fever; if the patient escapes death he will sacrifice to Jupiter a great offering. The physicians cure the patient.

“Cœperunt certam medici spondere salutem.”

Then Maron makes a new vow not to keep his first promise. Happy patients!

This ancient fever, called hemitritee, was an intermittent demi-tertian, and was considered a very serious disease. When Martial is no friend to a patient he makes a diagnosis in his own fashion and gives way to fantastic considerations of etiology.

“They say Tongilius is attacked by a hemitritee fever. I know the habits of this good man; he is hungry and thirsty.”

“Uri Tongilius male dicitur hemitritæo
Novi hominis mores; escurit atque sitit.”

“He takes a filet of fat thrushes, he throws a hook to the mullet and pickerel. We give him the wines of the best vintage, those made under the consulate of Opimius. We fill him up with a few glasses of Falerno. All the doctors prescribed baths for Tongilius. O ye fools, ye believe it is fever that makes him ill! It was gourmandizing.”

“Omnes Tongilium medicî jussere lavari
O stulti febrem creditis esse! gula est!”

Martial does not give the name of hemitritee to all fevers.

His epigram to Lentinus does not per-

mit us to doubt that he knew how to distinguish between it and gastric fever; for example: "Thou wilt see many days, Lentinus, before the fever leaves thee. Thou wilt be desolate and wish to know when it disappears."

"Quare tam malis a te, Lentine, diebus
Non abeat febris, quæris, et usque gemus."

"Now she goes to promenade with thee; she goes to the baths; she eats mushrooms, oysters. She drinks Falerno and Setia continually; she drinks Cecuba that is iced; she only rests on amomum;¹ she only sleeps on feathers and purple."

"Gestatur tecum pariterque lavatur,
Coenat boletos, ostrea, sumen, aprum,
Ebia setino fit sæpe, et sæpe Falerno;
Nec nisi per nivem Caecuba potat aquam
Circumfusa rosis, et nigra recumbit amomo;
Dormit et in pluma, purpureoque toro."

"She has the air of pleasing thee; she is so well treated by thee, wish thou by chance that thy fever were given to Dama?"

"Quum si pulchre, quum tam bene vivat apud te,
Ad Damam potius vis tua ferris erat?"

Who was this Dama? A poor devil, one who went barefooted, an incomparable artist, a starved poet, who had no fever, and whose stomach well digested all it got.

Martial says to citizen Parthenopeus: "Thy physician has prescribed honey, sweet almonds, bon bons and all that quiets children to soften thy throat and relieve thy obstinate cough, that is slowly destroying thee."

"Leniat ut fauces medicus, quas aspera vexat
Assidue tussis, Parthenope, tibi,
Mella dari, nucleosque jubet, dulcesque plac-
entas,
Et quidquid pueros non sinit esse truces."

"Despite this thou coughest all day; it is not a cold, Parthenopeus, that makes thee ill; it is gourmandizing."

It is certain the Romans were gastronomics, and the gout did not spare them, as we know. If it was not the gout it was chiagra—

"Litigat et podagra Diodorus, Flacce, laborat.
Sed nil patrono porrigit; hic chiagra est."

Martial makes us see at once that he knows full well that chiagra in the hands

¹ Amomum is an herb, of an aromatic kind, originally derived from hot climates.

is the same that podagra, or gout, is to the feet.

To prevent gouty arthritis the Romans were in the habit of having the articulations massaged before and after meals.

We find in an epigram upon Zoile these two verses:

"Percurrit agili corpus arte tractatrix,
Manumque doctam spargit omnibus membris."

Was this sensuality? In all cases their gouty diathesis came from the very refinement of their cooking, and their habits of alcoholic intemperance. One or two examples will suffice to prove this.

Phryx, the celebrated drinker, was blind in one eye, and sore eyed in the other. Heras, his physician, said to him: "Be sober, for if thou drinkest wine thou wilt become blind."

"Potor nobilis, Aule, lumino uno
Luscus Phryx erat, alteroque lippus.
Huic Heras medicus; Bibas caveto;
Vinum si biberis, nihil videbis."

Phryx responded laughingly: "Then farewell my last eye," and immediately drank round after round of liquor. Phryx drank the wine, his eye the poison.

"Ridens, Phryx, oculo, valebis inquit:
Misceri sibi protinus deunces,
Sed crebos jubet. Exitum requiris?
Vinum Phryx, oculos libit venenum."

In the middle of the night Panaretus, who was drunk, demanded, by snapping his fingers, the indispensable vase. They brought him a demijohn that had contained the Spolete wine—a demijohn he had emptied without trouble. Our good man had emptied his bladder and filled the demijohn again, putting back in the bottle all he had taken therefrom. "Thou askest me Rufus how that demijohn could contain what he had taken; he drank it pure.

"Desine mirari, Rufe; merum esse."

So we see Falerno was one of the factors in the gout of the Romans, and that fat goose livers, salmon and truffles did their work, too. It is with good reason, then, that gout is considered the disease of rich men. Sydenham, who was horribly gouty, consoled himself for his pains by saying:

"Divites plures interemit quam pauperes, plures
sapientes quam fatuos."

It attacked the rich oftener than the poor, bright minds rather than stupid peoples. This great English doctor could never ignore those two aphorisms of Hippocrates:

1. Eunuchs never become gouty or bald.
2. A child never has the gout before its first enjoyments.¹

To a too succulent nourishment and old wine add Venus, and there was the complete receipt for gout, that Sydenham knew so perfectly, as many of the rest of the celebrated Academicians or simple general practitioners.

"For the guard that watches the palace gates
Cannot defend e'en his king."

All modern authors draw a sad picture of gangrenous stomatitis in children, that it is better to consider as rather the expression of a particular state than a form of stomatitis. Towards the end of the first septenary gangrenous points show themselves on the mucous membranes that very soon slough, while a fetid sanies flows from the mouth. The teeth are movable, the bone is necrosed, the slough appears at the exterior, the gangrene invades all the soft parts and the cheeks are perforated. The general symptoms aggravate, strength is exhausted, complications come on in all the organs and towards the fifteenth day, when energetic treatment does not stay the malady, death peacefully enters to put an end to this terrible disease of childhood. Martial speaks of this affection in writing an epitaph for a child: "This day has veiled my pen in mourning. Here lies Canace, young Eolienne, whose seventh year was the last. Profane abomination! Passerby, hold back thy tears, for one needs not weep on the shortness of life.

"Æolidon Canace jacet hoc tumulata sepulcro,
Ultima cui parvæ septima venit hyems.
Ah scelus, ah facinus! properas quid, flere,
viator?

Non licet hic vitæ de brevitate queri."

"The death was sadder than its life even. A horrible sore destroyed its face, extending from its delicate mouth. Ulcers devoured those sweet lips and the funeral pyre has only received their fragments. If cruel death must wing its rapid flight why did it not take some other road?

¹ Hippocrates, "Complete Works," xxviii and xxx, Section 6.

But it chose to close the utterance of that voice so full of childish charms," etc.

In his epitaph on Festus, who stoically awaited death, refusing to take poison to relieve his suffering, the disease of the man is thus described:

"Indignas premeret pestis quum tabida fauces,
Inque ipsos vultus serperet atra lues."

We translate literally. "A putrid ulceration is localized in his throat and extends to his face."

What was the nature of this affection? It is difficult to say. By reason of the advanced age of Festus it was probably a cancer.

After so many diseases¹ among the ancients, let us say a few words about convalescence.

It was the custom among Romans to make presents to those convalescing. Polycharmes seems to have abused this custom, for Martial says: "Every year thou art sick at least ten times. This is not displeasing to thee, Polycharmes, but it is to us. For each time that thou art healed, thou claimest from thy friends the gifts of convalescence (*Soteria*). Have some modesty, Polycharmes, and have but one disease."

"Ægrotas uno decies, aut saepius, anno;
Nec tibi, sed nobis hoc, Polycharme, nocet.
Nam quoties surgis, soteria poscis amicos.
Sid pudor; aegrotâ jam, Polycharme, semel."

So Martial permitted him one more disease, the last, the only one we know not how to cure!

We have mentioned, in our chapter on Juvenal, the considerable place held by baths in the matter of Roman hygienics. These baths were constructed on a magnificent scale and were annexed to public gymnasiums for the exercise of the body, and for courses of public instruction in declamation and philosophy.

¹ The translator has omitted from all consideration the epigrams of Martial bearing on venereal diseases amongst the ancients. A very curious and interesting chapter, but, considering its erotism, unfit for publication in an English journal. Besides, Dupouy's "History of Prostitution" has already been translated and reprinted from the LANCET-CLINIC; at least, those portions of the work needed for a perfect understanding of the subject. Rosenbaum's "Histoire de la syphilis dans l'antiquité," will afford the student any amount of curious information on points that need no further mention herein.—
TRANSLATOR.

These *thermes* were composed of six principal pieces. The first, called *Spoliatorium*, served as dressing rooms, where employes (*Capsarii*) guarded the clothing of the bathers.

The second, *Sudatio* or *Laconicum*, held a dry stove in circular form, furnished with steps, with a domed ceiling above filled with warm air. In this dry air furnace one could submit himself to the influence of a hot atmosphere.

The third had the name of *Caldarium* or *Balneum*, composed of a shallow basin (*Labrum*), and a still deeper basin where one might swim (*Piscina*). These two basins were filled with hot water and were in common. For those who desired to bathe apart there were particular bath rooms (*solia*) placed on the sides of the bathing hall.

The fourth was the *Frigidarium*, a large pool not warmed, where one found cold water, into which a bather plunged for a few instants after leaving the *Caldarium*.

The fifth had a moderate temperature and was designated by the name *Tepidarium*. It was destined for scraping, rubbing and massage. After this the bather wrapped himself in wool coverings and induced a second sweating, milder than the first, followed by dry frictions destined to dry off the transpiration.

The sixth was the *Unctuarium*, destined for inunction of oils and perfumes, but every one did not patronize this department of the bath.

Such was a complete bath for the ancient Roman and it was used daily. The opening of the baths was announced by the sound of the trumpet and bells, as Martial says: "*Sonat æs Thermarum.*" Now a certain Oppianus made it an exception to the rule about bathing and never frequented the public baths. Martial reproached him bitterly for this uncleanliness. "If thou goest not to bathe thyself in the baths of Etruscus, thou wilt die Oppianus in thine own filth.

"Etrusci nisi thermulis lavari
Illotus morieris, Oppiane."

"Never shall water charm thee again; neither the springs of Aponus, forbidden young girls, nor of the soft Sinuessa, the bubbling waves of Passer, nor the baths of Apollo, nor those of Baiæ, the first of all spring waters. No part of the sky is

purser, nor the sun shines brighter and rests longer in the horizon. There one sees the marbles of Taygetes with green reflections, with rocks of more colored shades than that of the Phrygian mountains and the grottoes of Libya. A dry vapor warms the thick onyx, and the opHITE is there penetrated by gentle heat. If thou wishest, following the example of the Lacedæmonian, after resting a moment in the warm atmosphere, thou may'st plunge into the pool of the Virgin or of the Martius, of which the transparency is such that one doubts even seeing water. They might be taken for marble of Lygdos. Alas! thou payest no attention to my words, and the cavern of thy ear has not even the appearance of hearing me. Thou wilt die in thy filth, Oppianus."

"Non attendis et aure me supina,
Jamdudum quasi negligenter audis.
Illotus morieris, Oppiane."

All the world knows the Romans used enamels and artificial methods for beautifying. Ovid has left us an entire poem on cosmetics. The toilette of the Roman ladies was the most important part of their existence. The care of the hair required the attention of several slaves—the *fusca*, or chamber maid; the hair-dressers, *ciniflones*, who did up the tresses of the fair ones; the *pectades*, who perfumed them; the *ornatrix*, who artistically arranged all the flowers on hair and costumes. When they were not satisfied with their hair-dresser they wore a wig, either blonde or blue. They also used pomade or philocomes, into which entered lentils, wort, Venus-hairs and sage, that darkened it. Saffron tinged it yellow. The blonde shade of hair was obtained from the use of vinegar and lentil oil, or, better still, with quince juice mixed with that of privet. The women of the Roman aristocracy were epilated by *sagæ* (midwives good for anything). They elongated their eyebrows and tinted their eyelashes with a needle blackened in smoke. Some took baths of asses' milk. They put mouches patches on the face as in the days of the French regency, when the duchesses and demoiselles disguised *en Pompadour*. We could not finish were we to enumerate all that served for the coquetry of Roman women. Let us now see what Martial says of all those different arts.

"They have not deceived me," says our poet, to Lydia, "when they boasted not of thy beautiful face, but of thy striking complexion. Thou art a wax figure."

He addresses Polla: "It is in vain that thou strivest to efface thy wrinkles with face powder, Polla. Thou seekest to delude but thou canst not deceive mine eyes. Accept thy defects."

He remarks to Gellia, one of the best customers of Cosmus the perfumer: "Everywhere thou enterest one would think to have met Cosmus, with all his perfumes escaping from broken bottles. All these superfluities please thee, Gellia, but thou knowest I might with them give the same qualities to my dog."

"Quod quacumque, venis, Cosmum migrare putamus,
Et fluere excusso cinnama fusa vitro.
Nolo peregrinis placeas tibi, Gellia, nugis.
Scis, puto, posse meum sic bene olere canem."

He accuses Lelia: "Thou hast no shame to wear false teeth and false hair! Why not wear an eye, too, Lelia?"

"Dentibus atque cosmis, nec te pudet, uteris emptis.
Quid facies oculo, Laelia? non emitur."

Of Fabulla he remarks: "She pretends her hair is her own; she does not lie, it is surely hers; Paulus paid for it."

"Jurat capillos esse, quos emit, suos,
Fabulla, numquid, Paule, pejerat? nego."

To one of the Old Guard, by the name of Galla, he offers the following compliment: "Whilst in thy home, Galla, they prepare thy dresses and friz thy false hair. At night thou removest thy teeth like thy robe, and then place thy charms in a hundred different boxes, so that thy face doth not go to bed with thee."¹

¹ It is necessary to remark that Martial had for his object only a criticism of the abuse of wigs, the bald heads—"calceatum caput," as he remarks in another epigram. For the use of wigs became general in the latter days of the Republic, and we find the proof in Ovid, Tibullius and Propertius. "It was a necessary ornament for the Roman head," remarks the Abbe Nadal, "and required an infinity of other heads, while the hair floated over the shoulders at the will of the wind, or dropped in tresses across an alabaster bosom." Sometimes it was arranged in crown shape, again raised to a peak so it disclosed a pretty ivory back. It was the Empress Plotina, wife of Trajan, who introduced wigs,

It was especially on festive occasions that the wig was displayed. On the calends of January—that is to say, the first day of the year—the best received gift was a wig. If the *matronales* were the festivals of the Summer they were likewise the festivals of wigs. German and French hair was much sought after by the Roman wig makers, on account of their golden color.

The ancients, like moderns, knew the hearts of women well enough to see that no love could be made without obstacles, so used every charm that might captivate. Men in those days, like women, epilated, using generally an ointment made with the juice of the bryony root. The barbers used razors, too, then as now; it's an ancient art forsooth. One day our poet from Bilbibis wrote these lines: "Let those anxious to preserve themselves from crossing the Styx be wise and avoid the barber Antiochus. The priests of Cybele use a less terrible knife in their castrations. Alcon, the physician, has a lighter operating hand when he treats a hernia or reduces a fracture."

"Mitior implicitas Alcon secat enterocelas
Fractaque fabrili dedolat ossa manu."

"He shaves the chins of poor cynics and stoics and cuts off the powdery hair of horses. He shaves the unfortunate. Prometheus, chained on a rock, would prefer the vulture that ate his liver to Antiochus. Behold his mark on my chin!"

"Haec quaecumque meo numeratis stigmata mento."

"No old woman could use her fingernails better. What do I owe Antiochus

a' l' Andromaque, raised by stages above the head and forming a kind of turban in three rolls. Of fourteen Roman medallions in possession of Adrien Valois, each head exhibits a different wig. Other medals, says De Guerle, show us the Imperial heads of Commodus, Poppoea, Julia, Lucile and Otho, ornamented by *capillaments*, the Roman name for wigs. They wore a *galerecon* of chenille; it was a kind of small cap that gave their features, with cavalier air, a peculiar charming appearance. The *corymbion* was for visits of etiquette, for promenades and the theatre. The Emperor Commodus wore a *corymbion* covered with gold powder. Caligula and Otho hid their baldness under a *galericon*. Cæsar, although bald, never wore a wig. His soldiers often joked him on his denuded cranium, and marching behind his chariot cried out: "Here comes the bald head, look out!" "*Calvum maechum diximus, mariti serratæ uxores.*"

and his murderous razor? Of all living animals, one alone, the billy goat, has common sense; *he lives with his beard*, for fear of being shaved by Antiochus.

Under ancient Roman customs the least pretext served to break marriage by divorce. The dissolution of connubial bands required but few words: "*Res tuas tibi habeto*," or *Res tuas tibi agito*." Women carried their license further than men. Seneca complains ("Seneque De Benef," liber iii, cap. xvi) that in place

of dating from the Consulates they dated from the different husbands they had changed from, and Juvenal affirms that women divorced on the least neglect on the part of a husband ("Juvenal," satire ix). Let us hope our modern juriconsults will never invoke that old Roman law, for which they ever profess a profound admiration.

And now let us conclude by saying, like Horace, "*Verum non amplius addam*."

[The End.]