An essay on tobacco : comprising a brief history of that plant, and a view of its effects on the human constitution, when employed as an article of luxury : delivered as a lecture before the New-York Anti-Tobacco Society / by J. Smyth Rogers.

#### Contributors

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# ESSAY ON TOBACCO,

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#### COMPRISING A

### BRIEF HISTORY OF THAT PLANT,

AND A VIEW OF ITS

EFFECTS ON THE HUMAN CONSTITUTION,

WHEN EMPLOYED AS AN ARTICLE OF LUXURY.

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DELIVERED AS

## A LECTURE

BEFORE THE

## NEW-YORK ANTI-TOBACCO SOCIETY.

#### BY J. SMYTH ROGERS, M. D.

Professor of Chemistry, Washington College, Hartford: and of Materia Medica and Pharmacy, in the New-York College of Pharmacy.

PUBLISHED AT THE REQUEST OF THE SOCIETY.

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1836.





New-York, April 27th, 1836.

To Prof. J. SMYTH ROGERS,

DEAR SIR—As Corresponding Secretary to the New-York Anti-Tobacco Society, it becomes my duty to inform you that the Lecture which you delivered at the request of the New-York Anti-Tobacco Society at Clinton Hall, on the 21st. inst., on the "History of Tobacco, with a View of its Effects on the Human Constitution," was received with such general satisfaction by the Board of Managers, that they are desirous of obtaining a copy of the same for publication.

The following resolution was offered by Mr. Wm. MORGAN: *Resolved*, That the thanks of this Society be tendered to Professor J. S. ROGERS for his very able and eloquent Lecture, and that he be requested to furnish the Board with a copy of the Essay for publication. In view of the good which might be effected by its publication and distribution, I trust you will comply with their request.

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Yours, with much esteem,

# MARK STEPHENSON.

## MARK STEPHENSON, M. D.

DEAR SIR-In complying with the request of the "Anti-Tobacco Society," to furnish for publication a copy of the Lecture delivered before them on Thursday evening last,-which I shall do with much pleasure, if it can in any degree further the important object which has led to their association,-I must, in justice to myself, remark, that it was prepared without the most remote anticipation of its appearance beyond the circle in which it was first read. Having noticed among some of the students of Washington College, evidences of very serious injury to the constitution from the use of tobacco, I felt myself called upon to point out to them the consequences to be feared from their indulgence in this practice : this lecture was therefore hastily written, and delivered at the close

of one of the College terms. Since that time my engagements have not permitted me to review or arrange it: it is therefore put into your hands, with a few verbal alterations only, as it was delivered.

I am, dear sir, with respect,

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Your obedient servant,

J. SMYTH ROGERS.

April 27th, 1836.

## AN

## ESSAY ON TOBACCO.

It is somewhere recorded of a traveller from the torrid zone, who had passed a winter at the North, that on his return to his own country, in describing the wonders he had beheld, he told his fellow subjects that he had visited a region in which, at certain seasons of the year, the rivers and lakes became solid, and allowed man and beast to traverse their surfaces as on dry land; and that the clouds, instead of pouring out rain, showered down a white fleecy substance like cotton, which presently was converted into water. We are further told, that this retailer of wonders was condemned by his royal master to have his tongue cut out, for attempting to impose upon the credulity of his hearers by the assertion of such absurd untruths.

Suppose now, that another inhabitant of that country should assert, "that in the course of his wanderings, he had fallen in with a race of men, among whom a favorite pursuit was agriculture; but that instead of devoting their time and money to the cultivation of grain, and other esculent fruits of the earth, their chief occupation was to raise a plant which possessed neither beauty to delight the eye, nor fragrance to gratify the sense of smell, which was so bitter and nauseous as to be intolerable to every person who should taste it for the first time: a plant which possessed no medicinal powers sufficiently striking to render it worthy attention; and which could by no method of preparation be converted into an article of diet. " That after this plant had attained maturity, it was gathered and distributed among the people, some of whom delighted, notwithstanding its taste, to keep a portion of it constantly in their mouths; others found pleasure in powdering some of the leaves, and at frequent intervals thrusting it up their nostrils: others again employed whole hours in burning portions of it, and blowing its smoke from their

lips." "That on inquiry, he found these customs in nowise connected either with the religion or the superstition of the country: that they were neither found to prolong life nor to ward off disease; but that, on the contrary, thousands by their adoption shortened their existence;thousands more laid the foundation of disorders which rendered life miserable ;---and that the remaining thousands, who conformed to the habits of their countrymen, could at best only testify, that they were not conscious of any ill effects from falling in with the general practice." If loss of the offending member were the reward of the story-teller, to whose imagination was ascribed the marvellous tale respecting solidified rivers and lakes,-what ingenuity would be thought capable of devising an adequate compensation for one, who should so libel human nature as to assert the existence of a nation, a large portion of whose attention should be directed to an object from which no possible benefit, but a vast amount of evil, was to result! And yet, how far would this detailer of wonders have deviated from a straight account of the cultivation, and value of one of our staple commodities—TOBACCO?

The history of tobacco presents one of the most striking instances on record of the strange caprice which sometimes influences human affairs. "A plant," says an interesting French writer,\* "at the discovery of America known only to the savage tribes which inhabited that continent; nauseous and offensive to the unaccustomed senses, having nothing attractive in its aspect, exerting a paralyzing and sometimes a fatal influence on the system unused to its operation ;----is by accident or design transported to Europe, and in the course of a comparatively few years, effects a change in the manners and customs of the civilized world. Ere long its power is extended through Asia. The African too soon feels its influence. It creates, wherever it goes, a new source of enjoyment;-and in an incredibly short space of time, that which at first is regarded as a most disgusting weed, becomes an article of imperious necessity to the whole world." To obtain

\* Merât :- Dict. de Drogues.

it, we find the Laplander traversing his pathless snows, and the Arab disregarding the horrors of the boundless desert; for it, the savage islanders of the Pacific give in exchange the most valuable of their possessions: for its sake, the Mussulman has braved the danger of dismemberment and decapitation;-and it is on record that a whole nation has been divided by an attempt to interdict the use of this weed, and that thousands have sought refuge in the mountains from the tyranny which would have deprived them of what it would thus seem they esteemed the chief blessing of life. By its aid, the soldier endures without complaint, fatigue, and danger, and deprivation, and the sailor considers it a support under the labors and perils of his wandering life. The prisoner feels the loss of liberty a lesser misery than the deprivation of his accustomed tobacco; the beggar devotes to it a portion of what charity bestows on his sufferings; the laborer appropriates to it a part of his daily earnings; and all classes of society acknowledge its influence, and all rank it, in some of its forms of employment, either among their necessities or

their luxuries. In looking at the history of this plant, we shall see that it has thus advanced to universal sway against the united power of rulers both in church and state. Kings, and Sultans, and Emperors, have opposed its progress; ecclesiastics have thundered their anathemas at the heads of those who should seek in it a gratification which they pronounced unlawful; the bow-string, and the sword, and the faggot, have been unsparingly used in enforcing their authority; but in spite of edicts and anathemas, it has made its way, until triumphant over its bitterest opponents. Monarchs have now learned to enjoy in it a pleasure in common with their meanest subjects; and nations look to it as one of the most important sources of their wealth and power. "And thus," to borrow the words of a writer already noticed, "the whole world finds itself, if I may so speak, tributary to an acrid, filthy, stinking vegetable."

But how is it that this weed should thus, against all probability,—against the very efforts of nature herself, have forced its way to the favor of all ranks and conditions of mankind?

We must look for an explanation of the fact, to that general principle of our nature by which we are prompted to seek enjoyment in objects which make a strong impression, either upon our minds or upon our bodily organs :---that principle, which causes one man to delight in the powerful excitement produced by a tragedy; another to listen with thrilling interest to the details of a high-wrought tale :---that principle, which awakens the enthusiasm of the soldier on the battle-ground; which rouses the energies of the sailor in the storm; which urges the traveller to disregard the horrors of the frozen North, or the sufferings of the torrid zone. We are so constituted, that excitement gives zest to life; and if our education and early habits do not lead us to seek for enjoyment in intellectual stimulants, the senses will become the objects of our chief attention.

It is the design of the present Essay to notice some of the more interesting facts connected with the history of tobacco; briefly to recount its general properties; to adduce the evidence of practical men in relation to its effects on the system; and to consider how far

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the universal custom of resorting to this plant as an article of luxury, is consistent with the preservation of what is certainly among the most valuable of earthly blessings, "mens sana, in corpore sano." In treating of a subject which presents some curious anomalies, not only in the physical, but in the intellectual history of man, we must be allowed a little license; and if in the survey we should seem to pass rather suddenly "from grave to gay; from lively to severe"-the rapid transition must be ascribed, in part at least, to the nature of the article of which we speak: an article which has alternately called forth all the exaggerations of unqualified praise-all the fluency of vituperation. Witness, for example, on the one side, the testimony of Burton, who, in his "Anatomy of Melancholy," designates it as " the divine, rare, super-excellent tobacco; which goes far beyond all the panaceas, potable gold, and philosopher's stone; a sovereign remedy for all diseases :"-and on the other, that of the royal author of the "Counterblaste," who describes it as "in the black and stinking fume thereof, nearest resembling the horrible stygian smoke

of the pit, that is bottomlesse." Hear also as our farther apology the puzzling, contradictory lines of a man,\* who was bidding farewell to what he seemed equally to love and to fear.

The native region of those species of tobacco which form an article of commerce, is AMERICA. Brazil and Florida may more especially claim the credit, such as it is, of its origin. When the Spaniards first visited this country, they found the herb in use among the aborigines, who designated it by the name "petun," or "petema," an appellation which was long retained in Europe. The modern title "Tobacco," was conferred on it by the

\* Lamb,-" Farewell to Tobacco."

Spaniards, from the town "Tabaco," in New-Spain, near which they first noticed it; or, as some writers say, from "*Tabac*," the name of the utensil in which it was smoked.

Originally this plant was not used by the native Indians, as an article of luxury ;-but the idolatrous priests availed themselves of its peculiar qualities, to aid their impositions upon the credulity of their countrymen, and to support their own claims to the right of intercourse with their deities. By inhaling and swallowing its smoke, they sometimes produced violent excitation, at other times a stupor of several hours' continuance, --- and declared these states of the body to be trances, during which they held conference with the devil, (who was one of the objects of their worship,) and derived from him a knowledge of future events. Their physicians too, knew its value in enabling them to extend their practice; they intoxicated themselves with its fumes, and asserted, that while under its influence, they obtained admittance to the councils of their gods, and learned from them the event of diseases amongst their patients.\*

\* Harriot.

Europe is indebted for the first appearance of this plant within its bounds, to Jean Nicot, or Nicotius, ambassador of Francis II. of France, to the Court of Sebastian of Portugal. Having become acquainted with its properties about the year 1558 or 1560, on his arrival at Lisbon he presented a portion of it to the Grand Prior, head of the monasteries in that city; and on his return to France carried it also to Catherine de Medicis, the king's mother. The reception it met with from these personages gave it reputation; and as in the case of the crooked-mouthed prince, all the courtiers, from sympathy, distorted their visages, and "grinned horrible a ghastly smile;" so, in imitation of these high authorities,-despite of nausea and disgust; in heroic disregard of life itself, when so glorious an object was to be attained,-as a resemblance, even in their follies, to heads that wore a crown, a mitre, or a coronet,-all mouths united in chewing, if not in praising tobacco; all nostrils snuffed the powdered weed. From Nicot, the Prior, and the Queen, were derived the titles "Queen's Herb,"-"the Grand Prior's

Plant,"-" Nicotiana ;" and subsequently to one of its preparations, "the Powder of the Queen." Lofty example and the sanction of high life, give currency to any custom, however absurd; hence no long time elapsed before the use of tobacco became general through those countries. About this time the Cardinal of Santa Cruce, the Pope's Nuncio to Portugal, and Nicholas Tornabon, his legate in France, returned to Italy, and carried with them the new custom, where the people in return for this addition to their pleasure, entitled its cause, "the Herb of Santa Cruce, and of Tornabon." Though the name, tobacco, or some modification of it, is now a general one, it was then called, as the faith or fancy of its advocates ascribed to it virtues or excellencies-"Antarctic Panacea;" "Holy or Sacred Herb;" "the Plant for all Evils; "The Henbane of Peru."

Though the account I have given of the introduction of tobacco from the new world into the old, is that which is most generally received, there have been other stories told of its transportation. By some writers, it is said to have been carried into Spain by Roman Pane,

a Spanish monk, nearly a century before Nicot made it known in Portugal. The French give Sir Francis Drake the credit of first carrying it to England, whence it found its way into France. Jean Libault contends that it is a native of Europe, and was found in Ardennes, before the discovery of America; and one writer, the Abbot Nyssens, asserts, that the devil first introduced it into Europe; - truly a most heretical account of the cause of its appearance among civilized nations; and one which in these tobacco-loving times, will only be considered a proof that the Rev. Abbot, like the poet whom we have already noticed, railed at it, because he and his brother monks had felt the effects of too free an indulgence in a luxury, against which the Bull of their ecclesiastical superior had been launched.

But leaving the important question of the origin of tobacco to be settled by those who are skilled in antiquarian research, we will look for a moment at the reception it met with from some of those who were set in places of authority and power.

Among the first of its opponents we find

Queen Elizabeth. During her reign it was, that tobacco was introduced into England by some of the companions of Sir Francis Drake, and rendered fashionable in high life by Sir Walter Raleigh. The queen caused an edict to be enacted against it; and Camden, who wrote her life, takes a view of its effects similar to that which, probably, led the subject of his biography to raise her arm against it. He says, that "men used tobacco everywhere, some for wantonness, some for health's sake; and that, with insatiable desire and greediness, they sucked the stinking smoke thereof through earthen pipes, which they blew out again through their noses, so that Englishmen's bodies were so delighted with this plant, that they seemed, as it were, degenerated into barbarians." It was previous to Elizabeth's edict, that a laughable incident is said to have occurred to Sir Walter Raleigh : - One of his domestics opening the door of the room in which he was sitting, and seeing the smoke issuing from his mouth and nostrils, concluded he was on fire, and dashed a pitcher full of water into

his face, in the hope of saving the life of his beloved master.

But the most noted among the enemies of this weed, was James I. of England. This sagacious king, not contented with promulgating laws against its use, thought fit to devote his precious time and talents, to the hopeful task of writing it down, and has left us in an essay, which he published under the quaint title of "A Counterblaste to Tobacco," a proof that, though there be no "royal road to learning," there may be a "royal style of writing," and one which royalty might long enjoy, without fear of rivalry or competition from any aspiring candidate for literary fame.

The king commences his "Counterblaste" by declaring, that this habit of using tobacco, which he terms "a vile and stinking custom," "comes from the wilde, godless, and slavish Indians." "It was introduced," says he, "neither by a king, a great conqueror, nor learned doctor of physicke; but by some Indians who were brought over," and who left to the English this savage custom, after their death. In considering the subject, King James cites the four following arguments, which were usually advanced in its favor : - "1st. That it is an aphorisme in the physickes, that the brains of all men being naturally cold and wet, all dry and hote things should be good for them, and therefore, among others, this stinking suffumigation." 2dly. "This filthy smoke, as well through the heat and strength thereof, as by a natural force and quality, is able and fit to purge both the head and stomach of rhewmes and distillations, as experience teacheth, by the spitting and avoiding of fleame immediately after the taking of it." 3dly. "That the whole people would not have taken so general a goodliking thereof, if they had not, by experience, found it very soveraigne, and good for them." 4thly. "That by the taking of tobacco, divers and very many doe find themselves cured of divers diseases; as, on the other hand, no man ever received harm thereof." Having considered and refuted, - to his own satisfaction, at least, --- these arguments, our royal author proceeds to detail "the sinnes and vanities committed in the filthy abuse thereof." . These he considers; 1st. "As being a sinneful and shameful lust." 2d. "As disabling both persons and goods." He proceeds to denounce the habit of smoking, as unfit for decent society, causing men to indulge in pleasures which are offensive to others. He declares that if he were to invite the devil to dinner, he would be sure to provide three things as best suited to his guest :" "1st. A pig; 2d. A poll of ling and mustard; 3d. A pipe of tobacco to help digestion." "Tobacco," continues the king, "is the lively image and pattern of hell; for it hath, by allusion, all the parts and vices of the world, whereby hell may be gained, to wit: 1st. It is a smoke; and so are all the vanities of the world. 2d. It delighteth men that like it; and so do all the pleasures of the world delight the men of the world. 3d. It maketh men drunke, and light in the head; and so do all the vanities of the world, men who are drunkards therewith. 4th. He that taketh tobacco, cannot leave it: it dothe bewitch him; even so the pleasures of the worlde make men loathe to leave them: they are for the most part enchanted with them. And further, besides all this, it is like the infernal region in the very substance of it, for it is a stinking, loathesome thing, and so is that." In dignity, and elevation of style and sentiment, the conclusion of the "Counterblaste," is worthy all that has preceded: — The smoking of tobacco "is a custom loathesome to the eye, hateful to the nose, harmeful to the brain, dangerous to the lungs, and, in the blacke and stinking fume thereof, nearest resembling the horrible Stygian smoke of the pit that is bottomlesse." What a stiffnecked set his majesty's subjects must have been, to withstand such a "Counterblaste," backed as it was by a special edict against this " bewitchinge," " loathesome," " stupifying," " stinking weed !"

But unfortunate tobacco was not yet to be left at rest, when the king ceased to blow his blast. Under his successor, Charles I., new laws were made, and fresh prohibitions were promulgated, to check the increase of indulgence in these habits, but, so far as we can learn, without effect; as, indeed, it was hardly to be expected that so general a custom, as this had then become, could be restrained by laws.

We must not omit here to notice the aid his

literary majesty derived from one of his subjects, in his attempt to stem the torrent of popular taste. A quaint writer, Joshua Sylvester, put forth a poetical tirade against this luckless plant, under the title of "Tobacco battered, and the pipes shattered (about their ears, who idly idolize so base and barbarous a weed, or, at least-wise, over-love so loathesome a vanity) by a volley of holy shot from Mount Helicon." In this he compares tobacco to gunpowder, and pipes to guns, and estimates their effects as equally to be dreaded.\*

A few years after this time, (1638,) Dr. Venner, in a work, entitled "Via recta ad vitam longam," published in London, in speaking of the effects of tobacco, says: "It drieth the brain, vitiateth the smell, hurteth the stomach, destroyeth the concoction, disturbeth the humors and spirits, corrupteth the breath, induceth a trembling of the limbs, exsiccateth the windpipe, lungs, and liver, annoyeth the milt, and causeth the blood to be adusted. In a word, it overthroweth the spirits, perverteth the

\* Bigelow, Med. Bot.

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understanding, confoundeth the senses with sudden astonishment, and stupidity of the whole body."

In Italy, also, tobacco found a potent enemy in Pope Urban VIII.; though it would seem, that his Holiness did not so much contend against its use *in general*, as against the practice of taking snuff in churches; which he considered so sacrilegious an act, that he pronounced sentence of excommunication against every person who should be guilty of it. Innocent XII. also arrayed himself against snuffing, but directed *his* anathema only against those who should thus desecrate the walls of St. Peter's.

The penalties for transgression in tobacco were excessively severe in Russia; the knout was the punishment for the first offence; and death for the second. Against snuffing, the laws were more lenient; the offender, if discovered, was merely prevented from repeating his fault in any ordinary manner—by slitting up his nostrils!

In Switzerland, the laws rendered the use of this plant penal. In Appenzel, a council was formed for the express purpose of trying offenders in this way;—it derived its name from its office, "Chambre du Tabac," and punished severely all who were convicted before it. In Berne, the laws of the Canton were divided into two tables, and different crimes were classed according to the ten commandments. In those tables the use of tobacco was considered so heinous a crime, that it was ranked immediately after the grossest, and most inexcusable sin forbidden by the decalogue.

The Persians seem to have verified King James's remark, "Tobacco bewitches them that use it;" for when Shah Abbas forbade its employment, and attempted, by severe punishments, to enforce his law, his subjects rather chose to forsake their homes than to relinquish the pleasures of this indulgence, and fled to the mountains, that they might smoke in peace !

In Constantinople the poor Turk, who sought in tobacco a substitute for the wine which the Koran interdicts—if caught exhaling its smoke, was led through the streets with his pipe thrust through his nose.

But this war upon the tastes and fancies of mankind, was not confined to the Old World : its native country, America, also raised up enemies to tobacco, though these were by no means so inveterate in their hostility as their Transatlantic brethren; they rather sought to discountenance its general use, as an article of luxury, than to banish it altogether; and accordingly their laws were mild; and restrictive, rather than prohibatory. In the "OLD MASSACHU-SETTS COLONY LAWS," is an act laying a penalty upon any one, "who shall smoke tobacco within twenty poles of any house;" or who "shall take tobacco in any inn, or common victualling-house, except in a private room, so as neither the master of the said house, nor any other guest shall take offence thereat." In the records of Harvard College, there is a regulation, which was made soon after the foundation of that institution, "that no scholar shall take tobacco, unless permitted by the president. with the consent of their parents, and guardians; and on good reasons first given by a physician, and then in a private and sober manner."\*

\* Bigelow, Med. Bot. 7.

Among the provisions of the celebrated code of Connecticut, in the year 1650, commonly known as the "BLUE LAWS," care is taken that offenders in tobacco shall not escape the reward of their misdeeds. The following preamble and regulations are from this code:

"Forasmuch as it is observed that many abuses are crept in, and committed by frequent taking of tobacko - It is ordered by the authority of this Courte, that no person under the age of twenty-one years, nor any other, that hath not already accustomed himself to the use thereof, shall take any tobacko until he hath brought a certificate under the hands of some, who are approved for knowledge and skill in physick, that it is useful for him, and also that he hath received a lycense from the Courte for the same. And for the regulating of those who, either by their former taking it, have to theire own apprehensions made it necessary to them, or uppon due advice are persuaded to the use thereof."-" It is ordered, That no man in this colony, after the publication hereof, shall take any tobacko, publiquely, in the streets, highwayes, or

any barne yardes; or uppon training dayes in any open places, under the penalty of sixpence for each offence against this order in any of the particulars thereof, to be paid without gainesaying, uppon conviction by the testimony of *one* witness, that is without just exception, and before any one magistrate: and the constables in the several townes are required to make presentment to each particular Courte of such as they doe understand and can evict to be trangressors of this order."

In another section of the laws providing for the due punishment of unprofitable waste of time, there is the following item :—

"It is ordered by this Courte, and the authority thereof, that no person, householder, or other, shall spend his time idly or unprofitably under paine of such punishment as the Courte shall think meete to inflict; and for this end it is ordered, that the constable of every place shall use speciall care and diligence, to take knowledge of offenders of this kinde, especially of common coasters, unprofitable fowlers, and tobacko-takers, and present the same unto any magistrate," &c. After enumerating so many edicts and regulations in regard to this universal luxury, there is but little time allowed us to devote to its fur. ther history. I must not however omit to say, that polished society—which oftentimes passes laws more efficient than monarchs can promul. gate—has not neglected to notice the practice of tobacco using, as inconsistent with its admitted customs. King James, who, whatever may be thought of his talents for governing a great nation, must be admitted by all, a good judge of what belongs to polish and etiquette, thus notices the practice of smoking in company, as a violation of good manners:

"It is a great vanitie, and uncleannesse, that at a table, a place of respect, of cleanliness, of modestie, men should not be ashamed to sit tossing pipes, and puffing of the smoke of tobacco one to another, making the filthy smoke and stinke thereof to exhale athwart the dishes, and infect the aire, when very often, men that abhor it are at their repast."

The last notice of this matter, which I shall present, is a singular calculation of Lord Stanhope, on which he founds one of his objections to the use of snuff—the fact of its causing a prodigious sacrifice of time.

"Every professed, inveterate, and incurable snuff-taker," says he, "at a moderate computation, takes one pinch in ten minutes. Every pinch, with the agreeable ceremony of blowing and wiping the nose, and other incidental circumstances, consumes a minute and a half .---One minute and a half out of every ten minutes, allowing sixteen hours to a snuff-taking day. amounts to two hours and twenty-four minutes out of every natural day, or one day of every ten; one day out of every ten, amounts to thirtysix days and a half in a year. Hence if we suppose the practice to be persisted in forty years-two entire years, of the snuff-takers life will be devoted to tickling his nose, and two more to blowing it ! !"

In the course of our inquiries thus far into the history of tobacco, we have been led to consider the value annexed to it, only as estimated by the fondness for it, which is exhibited by all classes of society. Its price has not come under our notice; but I cannot forbear to give the barter value, as stated by Malte Brun, in his system of geography. He tells us, that "at the early period of the settlement of Virginia, in consequence of fatigue, exposure, and other causes, wives became scarce among the emigrants. In order to obviate this difficulty, a number of merchants determined to make a regular importation of young ladies, in the course of trade, as wives to the settlers." In 1620 there were ordered from England ninety of these singular articles of merchandise; and in the next year sixty more. These were sold, or rather bartered for tobacco. "The first importations being valued atone hundred pounds' weight of tobacco; but the price of those afterwards brought over, rose to one hundred and fifty pounds apiece."

In a recent number of a foreign periodical (Scotsman, 1830,) there is a brief article under the title of "Taxation Illustrated," which is designed to convey an idea of the magnitude and severity of British taxation, by exhibiting a few comparative facts : this article I have extracted for the view it affords of the additional burden,—men who are crying out under an oppressive load of imposts on the *necessaries* of life

are yet content to bear in order to gratify, what is well termed a "depraved appetite," which indulgence has rendered too imperious in its demands to be disregarded. "The gin, whiskey, and British spirits," says the article, "which exhilarate John Bull, yield a sum to the government equal to the revenue of the Spanish monarchy ;---the tax levied on the beer, which slakes his thirst, exceeds the revenue of Bavaria;-he pays as much on the tea which refreshes his wife, as Francis I. draws from six millions of Neapolitans; --- as much nearly on the sugar that sweetens it, as twelve millions of Americans pay on all objects whatever ;---as much on the soap that washes his hands, as suffices to support the pope, with all his soldiers, cardinals, and priests ;---as much for the privilege of having day-light in his house, as would fill the coffers of the King of Hanover ;- the tax levied on his thirst alone, as it variously inclines to brandy, rum, whiskey, beer, or wine, exceeds the money paid by fifty millions of Russians for the blessings of paternal despotism; -and finally, he pays as much on the stinking tobacco, which gratifies his depraved appetite, as four millions of Italians pay to Charles Felix." Might not Dr. Franklin have well said here, "Alas! poor fellow, he pays too dear for his whistle!"

We have thus far considered our subject, not in reference to its properties nor its uses;—but simply as a matter of historic record, and of curious research. We have seen in the course of our observations, the futility of attempts to regulate tastes and fancies by edicts, or to restrain their indulgence by threats :—in vain have Emperors and Kings promulgated laws ;—in vain have Popes thundered their Bulls;—in vain have philosophers reasoned, and sage doctors counselled ;—in spite of Emperors, and Kings, and Popes, and philosophers, and doctors, our plant has forced, or won its way to almost universal acceptance.

Did our time permit, very many more curious details might be given; but as there are other and more important points of view, in which I have yet to present the subject to notice, I must be content to refer to some of the works, to which I am indebted for much of what has already been stated;—to the voluminous "Dictionnaire des Sciences Medicales"—to the "Dict.
de Drogues," among the French works;—to Dr. Thompson's (London) Dispensatory; Dr. Bigelow's Botany, among the more accessible writers in our own language, and to an interesting and amusing article in the North American Quarterly Review. I must now ask your indulgence, while I proceed to consider tobacco as regards its remedial, or, to speak more properly, its *poisonous* qualities. In doing this, I shall use as much brevity as is consistent with the importance of the matters to be treated of.

Tobacco is known to botanists by the generic name "NICOTIANA," for which it is indebted to the already noticed agency of "Nicot," or "Nicotius," in introducing it into Europe. The specific name of one of the most common of the several known species—tabacum—is derived—not as is commonly said, from the island "Tobago," (which in truth owes its appellation to the culture of this plant,)—but to the city TABACO, in the province of New Spain, where the Spaniards first noticed its growth; or perchance, as formerly suggested, to the tube or pipe used by the aborigines in smoking it. The question of its existing in some of its species as a denizen of other regions of the globe besides America, has been settled by Sprengel, in his late edition of Linnæus,—he enumerates seventeen species: of these he gives one,—the Nicotiana fruticosa to the S. of China; one the N. Suavolens, to New-Holland;—one, the N. Rustica, to the South of Europe; the N. of Africa, and to America in common: the remaining fourteen to this continent exclusively. Notwithstanding this distribution, however, there is no evidence that the plant was used in any way in Europe, until its introduction from the New World.

Tobacco,—those species of it at least which are of commercial importance,—is naturally found in the warmer regions of the earth; it has, nevertheless, been cultivated in all temperate climates, but with considerable variety in its qualities,—according to the average temperature of the country where it grows. In warm latitudes, its flavor is mild, further north it becomes more acrid, and pungent: the Bengal tobacco, which is used in making the sheroots, is the weakest and most mild in its properties : next to this, is the West India tobacco, of which the Havana segars are manufactured : then that which is raised in the Southern States. The Northern tobacco is the strongest, and most acrimonious of all the varieties. Culture too, has much influence on the sensible properties of this plant :---when the seeds are sown (for it is an annual) on virgin soil, it is mild in its flavor; but when the ground is richly manured, its growth is rank and luxuriant; the dry leaves will even burn with flashes and scintillations, as though impregnated with nitre, and its taste is harsh, and irritating in a correspondent degree.

The natural family of plants, to which Linnæus refers tobacco, is that of the "LURIDÆ," a name which is designed to convey an idea of the repulsive, gloomy, ominous aspect of the objects to which it is applied. But at the same time, the title may well be employed to characterize the properties of this noxious tribe. To it belong, not only the subject of the present essay,—but also the Deadly Night-shade; the Henbane; the Hemlock, Aconite, Foxglove; the Atropa Belladonna; the Stramonium, and many other plants of analogous character. By physicians, and writers on the Materia Medica, tobacco is ranked among that class of remedies to which they have applied the term NARCOTIC;—a term derived from the Greek, and denoting the operation on the human body of the various substances included under it. It would be out of place here, to enter into an explanation of the qualties and effects of medicines; but a general idea of the symptoms to which narcotics give rise, is essential to the success of our attempt to point out the consequences, to those who indulge in the use of tobacco, of thus resorting to it, as an habitual gratification.

It is a remarkable law of our nature, that the system may, by degrees, become so habituated to the action of various agents, that their primary operation will finally cease to be perceived; so that what is at first offensive, deleterious, and in a concentrated form, or in considerable quantities, would even be *fatal* in its effects,—by use loses its power of exciting any unpleasant sensation, and in many cases may even be made to minister to our gratification. There is no one among us, whose memory will not supply him with numerous illustra-

tions of the truth of this observation, in reference to the senses of taste and smell. The remark is no less true in relation to substances, which are naturally so hostile to human life, as to render it necessary in their administration, even as medicines,---to employ them at first in minute quantities, and with the greatest caution. Our medical records furnish us with innumerable facts in proof of this assertion. A few only can be noticed, within the limits assigned to the present lecture. Among the oriental nations, and especially among the Turks, to whom the Koran forbids the use of wines, and the liquors which are resorted to by other people, as a means of exhilaration, — OPIUM is employed as an excitant, as is well known. In the opium shops of Constantinople, this drug is kept prepared, and mixed with rich syrups and the juices of fruit, to render it more palatable, and to diminish its intoxicating effects: thither the Turks resort for their

\* A recent work by one of our own countrymen, gives us an assurance that these shops are no longer the

daily dram ;\* and take it thus mixed, or

put up in the form of lozenges, on which, as an evidence of the esteem in which they hold them, are stamped the words, "MASH AL. LAH," "the work of God." The quantities employed by each individual, though sometimes as low as ten grains, frequently exceedone hundred grains daily. These are usually taken in two portions, one in the morning, and the other after dinner. It may be well here to state the fact, that there are recorded instances of four grains having proved a fatal dose to an adult.\* Dr. Anthony Todd Thompson, in his work on the Materia Medica, informs us that he was consulted by a lady as to the best method of relinquishing, with safety, the use of this article, of which she was then taking, in the form of laudanum, to the extent of a pint-anda-half every week, a quantity equivalent to more than one hundred grains of solid opium

places of common resort, which they appear to have been, during the visits to Constantinople of the writers, to whom we owe much of the information in relation to opium, detailed in the preceding pages.

\* Vide Duncan's Edinburgh Dispensatory.

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daily. But this account is far less remarkable than one given by Dr. Smith, in the Philosophical Transactions. (Vol. 19. p. 287.) He informs us, that Mustapha Shatoor, an opium eater in Smyrna, took daily the enormous quantity of three drachms, (one hundred-andeighty grains,) of solid opium, as his luxury; and that he found the desire of increasing his portion becoming constantly more urgent. He was unable to move until he had swallowed half a drachm.

But we are not to suppose, that because habit enables the system for the time to accommodate itself for the agency of this poisonous drug, it is thus used with *final* impunity: as justly might we infer the ultimate escape of the constitution from the consequences of that shocking vice, which has spread like a pestilence through our land,—because we hear of persons, who for years have not retired to their beds but in a state of intoxication. Our great Creator has established his laws in the physical, as well as in the moral word; and a day of retribution will as surely come to the daring violator of the one as of the other. Nature may for a time be silenced and oppressed, but sooner or later her power will be felt; and just in proportion to the violence she has suffered, will be the violence of her re-action. But we shall presently have occasion to notice, somewhat in detail, the consequences of these deviations from the rules of temperance and moderation; we will therefore for a moment turn our attention to the phenomena, which follow the administration of narcotics. As the symptoms produced by the different subtances belonging to this class of medicines, though varying with each article in some of their minor particulars, bear in their general course a close resemblance to each other,-I shall select OPIUM, as a type of the whole, and from its effects we may learn those of the others.

The effects of opium on the unaccustomed systems, vary with the dose. I. In small quantities, it augments the force, the frequency, and the fulness of the pulse; increases the heat of the body; renders the respiration more rapid; produces increased muscular energy; gives vigour to the mental powers; and particularly excites the imagination. In a short time, however, these evidences of increased action begin to subside, and are followed by symptoms of depression—such as languor, lassitude, and an inclination to sleep; to these feelings very frequently succeed nausea, faintness, head-ache, general tremor, great depression of spirits, and the general phenomena of debility. In all these consequences of its use, we may remark the close analogy which exists between its operation and that of intoxicating liquors.

2. When larger doses of this drug are administered, the effects observed are different: what has just been described as the primary operation, either does not take place at all, or is so quickly succeeded by the more urgent symptoms, that we have no opportunity to notice it : the pulse is at once diminished; fulness of the head, drowsiness, and stupor, immediately come on. In spite of the great tendency to sleep, the patient experiences vertigo and nausea; vomitings take place; a species of intoxication and delirium supervene; the pupils of the eye are dilated in a very remarkable manner: sighing, stertorous breathing; apoplexy; cold sweats; convulsions ;-are the formidable symptoms that attend the operation of this substance; and

death soon closes the scene. It will be remembered, that these are the effects of this narcotic upon an individual not habituated to its use. But are such phenomena exhibited in cases in which opium is employed as an article of luxury? By no means: habit has, as we have already hinted, a most potent agency in controlling and modifying the primary action of all narcotics; and although the consequences which flow from their employment in this way are most lamentable, they develope themselves slowly as the functions of the animal machine are gradually deranged, and the powers of life undermined. The opium eater finds in his drug a resource against the cravings of appetite; it exhilarates his spirits, quickens his imagination, and rouses him to action; it supplies courage in danger; gives him fortitude in suffering; it soothes his sorrow; it enhances his joys; in solitude it is his companion: his solace in misfortune. But are these advantages obtained without any sacrifice? Truly, none other is required than that which the drunkard makes to his bottle; or which every person, who habitually indulges in unnatural and undue excitement, makes to his senses; a sacrifice of all that distinguishes man from "the beasts that perish."

Take from the opium eater his drug, and you render him at once the most wretched of human beings; you not only deprive him of all motive to exertion, but you literally incapacitate him from any effort either of mind or body. But continue to him his indulgence, and what is the ultimate result? First, the corporeal powers are shaken; the digestion is destroyed, and with it the appetite fails; the body loses all its vigour; the skin becomes yellow, shrivelled and cadaverous; the limbs shrink, and are no longer able to perform their functions; the eyes are sunken, and except when under the influence of excitement, have a vacant and idiotic stare; the gums are eaten way; the teeth drop out; the hair falls off, and external objects have no more the power of making an impression on the senses; the muscles become loose and flabby; and the face acquires an expression of sottishness and stupidity.

The decay of the mind is no less complete than that of the body; the memory fails; the judgment is lost; the degraded being no longer

takes an interest in any of the concerns of the world around him. In the very prime of life, premature old age comes on, and he sinks into the grave an object of scorn and loathing to the very men, who, less advanced in their career, are running the same course with himself.-These are the effects of opium: a substance which we have selected as the representative of the class of Narcotics; and although the other articles of this class have each, as I have said, some peculiarities of operation-in their leading characters, they bear a close analogy to this their type. To this same class, as already stated, belongs TOBACCO; and such in the main are the effects which it is capable of producing. That we do not observe such results from its general employment as a means of indulgence, is to be ascribed in part to the fact, that the vocations of civilized, and the restraints of Christianized society, leave no opportunity for an excessive devotion to this weed, at least to an extent in any degree comparable to that of some of the oriental nations to opium; we must also in part look for the cause of the deviation, to the modifying influence of external circum-

stances. If we may draw any inference as to the exhilarating powers of tobacco, from thepraises which its advocates have bestowed upon it, we should certainly conclude, that in activity it is inferior neither to opium, nor to any other of the innumerable means which mankind have devised to produce physical excitement. We have already attended to some of the testimonies in its favour; we will here, as connected with this branch of our subject, cursorily notice one or two more. Chamberet, in his Flore Medicale, (tome 6, p. 205,) says, "Tobacco makes upon our organs a strong and lively impression, which is capable of being frequently, and at pleasure removed. Man devotes himself with so much more ardour to the use of this stimulant, because he has found in it at once the means of satisfying that craving for strong excitement which characterizes human nature, and that of diverting for the time his thoughts from those painful and sorrowful emotions, which are so frequently the portion of our race, and thus tobacco aids him in supporting the otherwise overwhelming troubles of life. With tobacco the avage endures.

without shrinking, hunger and thirst, and all the vicissitudes of climate and of the seasons; the slave bears patiently his servitude. Among men who call themselves civilized, its succour is often invoked against ennui and sadness. It produces at least a momentary relief from the torments of ambition disappointed of its aim, and brings consolation to the unhappy victim of injustice." Could a Turk, even while under the influence of his darling drug, expatiate more warmly on the value of his favorite excitant, than does this author on the virtues of tobacco?

Again: Dalloway, in his history of Constantinople, (p. 78. Quoted by A. T. Thompson, Art. Opium,) states that the Tartar couriers, who travel great distances, and with astonishing rapidity, take nothing with them to support life during their journeys but opium. Analogous to this fact, is that stated by Herne, the celebrated traveller along the extreme Northern coasts of this continent. He tells us, that he has frequently wandered without food for five or six days, in the most inclement weather, and yet found tobacco a support.

I presume we must construe his expressions in a liberal manner,-not that he was strictly without any other sustenance than this weed; still, however, with all the allowance we may make, the analogy is striking. I say nothing here in relation to the obvious expenditure of the vital powers, in either of the two cases. Further: Dr. Rush informs us that the soldiers who marched under General Arnold, from Boston to Quebec, through the wilderness, in the year 1775,-though they were so distressed for food as to be obliged to kill and eat their dogs,-yet complained less of their sufferings from hunger and exposure, than from the deprivation of their accustomed stimulus, tobacco.

But it has not been left to writers of prose alone to celebrate the praises of tobacco; we have in the collections of our virtuosi, poems in different languages, designed to immortalize the virtues of "the glorious weed." There are extant among others, two productions in verse, in the Latin language, by Castor Duranti, and Dr. Raphael Thorius: the latter of whom in his poem, entitled "Potologis, or a Hymn to Tobacco," styles it "the gift of Heaven and the ornament of earth." In our own language it has given a name to several—what shall I call them ?—*effusions in rhyme*; and afforded opportunity for eulogy, to some whose imaginations—to judge from their verses—appear to have been excited at least as much by the physical properties of the plant they were celebrating, as by their faith in its virtues. Take a single example:

"To sing the praises of that glorious weed— Dear to mankind, whate'er his race, his creed, Condition, colour, dwelling, or degree ! From Zembla's snows, to parch'd Arabia's sands, Loved by all lips, and common to all hands ! Hail, sole cosmopolite ! Tobacco, hail! Shag, long-cut, short-cut, pig-tail, quid, or roll, Dark negro-head, or Orinooka pale; In every form congenial to the soul."

But our time will not admit of further quotations. We have now cited a few of the testimonials, which are recorded in favor of this plant: we see that the effects ascribed to it, when employed as a means of indulgence, are strikingly analogous to those which attend a similar employment of opium, and such as fully to justify their union in the same class of medicinal substances. It now remains to notice the primary effects of tobacco upon the unaccustomed system, and to give evidence of its eminently poisonous properties; adducing briefly the testimony of a few of those persons,physicians and others,-who have enjoyed peculiar opportunities of observing the operation of this narcotic, both on those whose susceptibility of impression remained unimpaired; and on those whose sensibilities had been blunted by its habitual use. If the analogy we have pointed out still be found to hold good, it will not be unfair to infer, that in their ultimate effects on the constitution, opium and tobacco run a parallel course; and that, if the opium eater purchase his present enjoyment by the sacrifice of constitution, and the abridgment of life, the devotee to tobacco cannot expect with impunity to subject his system, during a series of years, to the habitual excitement of a no less powerful narcotic.

First, then, let us notice the effects which this drug produces, when it acts as a *direct poison* upon either men or the lower orders of animals.

The activity of tobacco is derived essentially from two products, which it yields when exposed to chemical agency ;---an essential oil, and a proximate principle, termed " Nicotin, or Nicotianine." The Nicotin is obtained by the action of solvents; it is distinguished by the peculiar smell of tobacco: it excites, even in minute quantities, the most violent sneezing and vertigo. Taken internally, it causes excessive vomiting, dizziness, prostration of strength, cold-sweats, convulsions, and all the symptoms of narcotic poisoning. Yet this substance is dissolved in the saliva of the person who chews the leaves of the plant; and more or less of it passes into the stomach, even of the most inveterate spitters. The experiments of Macartney, Orfila and Brodie, have shown, that nicotin, and even the infusion of tobacco, in which this . article is not contained in its most active form, tend to suspend the action of the heart.

The essential oil of tobacco, rises in distillation with water, and may be collected separately. In the process of smoking too, this oil is volatilized :—if a pipe be employed, part of it lines the interior of the stem, giving it the

dark colour and peculiar odour which are observed in pipes that have been used; part of it passes with the smoke, and is deposited in a state of minute subdivision in the mouth, the fauces, and a portion even in the lungs of the smoker. The same indefatigable physiologists have ascertained, that this oil acts by paralyzing the energies of the brain. Both Orfila and Vauquelin found,\* that a single drop, placed on the tongue of a middling-sized dog, caused convulsions and speedy death. The effect was still more sudden when it was introduced into the stomach, and it was no less energetic when injected into the veins; -when applied to a surface where the muscles had been laid bare by dissection, and even when it was rubbed on the excoriated skin.

Barrow, in his travels into Africa, informs us that the Hottentots use this substance for the purpose of destroying serpents. In his presence, a Hottentot applied a minute quantity, from the small end of his wooden tobacco-pipe to the mouth of a snake, which was in the act

\* Dict. de Sciences Medicales. Orfila on Poisons, &c.

of darting out his tongue: "the effect," says he, "was instantaneous as an electric shock: with a convulsive movement that was momentary, the snake half untwisted itself and never stirred more, and the muscles were so contracted, that the whole animal felt hard and rigid, as if dried in the sun."

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But we need not resort to the experiments which have been made on the inferior animals, to show the deadly effects which these active constituents of tobacco are capable of exerting, when obtained in a separate and concentrated state. Medical writers abound with cases of deleterious, and even fatal effects, from the plant employed in ordinary forms, by persons who were unaccustomed to its action. We are all aware of the three different modes of using this narcotic, which prevail according to the taste or fancy of the individual indulging in it: each of these has its peculiar operation. Among the French, the most general employment is in the form of snuffs-and accordingly French writers have accumulated instances of the most direful effects fromt his practice of snuffing. PA-TISSIER, in a valuable treatise on the maladies of artisans, ("Maladies des Artisans,") states that "not only do the manufacturers of snuff, while yet unaccustomed to the narcotic operation of this substance, experience vertigoes, pains in the head, continual sneezings, and various other distressing symptoms-but that even the inhabitants in the neighborhood of the snuffmills, and especially in summer, when their windows are open, experience all these inconveniences, though in a minor degree,-and in some cases complain of continual nausea."-He gives likewise a case of hemorrhage from the bowels, traced to the same cause, in one of the younger workmen. "Even the horses which turn the mill," continues he, "give evidence of the pernicious acrimony of this powder, by their continual tossings of the head, coughing, and snorting." The same author remarks "that workers in tobacco" "are generally pallid, sallow, and asthmatic." Among the instances which he gives, in illustration of his remarks on the poisonous operation of tobacco, is that of a child, who, dropping asleep in a room in which the preparation of snuff was conducted, was in a short time seized with the most frightful convulsions, which speedily terminated her life. He also narrates the cases of a number of individuals who perished by a gradual wasting disease, termed by physicians "marasmus," brought on by the undue expenditure of saliva, from the practice of *chewing* tobacco, and the consequent loss of the powers of digestion; added to the paralyzing operation of this powerful narcotic.

BONETUS, in a learned work on the appearances presented by bodies after death by various diseases, ("Sepulchretum Anatomicum,") gives details of the most dreadful affections of the lungs and brain, resulting from the use of tobacco, both in snuffing and smoking.

MERAT, an able French writer, bears his testimony to the deleterious agency on the human frame of this powerful plant. "Every one knows," says he, "that the habit of snuffing weakens the sense of smell, by the constant recurrence of irritation to the olfactory membrane; that it destroys the power of distinguishing tastes, in consequence of a portion of the snuff finding its way to the mouth and tongue." "It impairs the memory; produces vertigo, headache, and even apoplexy.

LANZONI, an Italian writer, gives the cases of two soldiers, in one of whom, at the age of about thirty, vertigo followed by fatal apoplexy; and in the other, blindness and ultimate palsy, were the effects of snuffing.

In the German Ephemerides (2 Dec. Anno 8. Obs. 106) an account is given of a number of individuals who were nearly destroyed by eating some stewed prunes, which had been rendered poisonous by some person mischievously throwing into the pot in which they were cooked a small piece of tobacco.

The celebrated poet SANTEUIL, died in the most horrible agonies, after swallowing a glass of wine into which some Spanish snuff had been thrown.

In the course of my own observations, I have known vertigo, loss of appetite, tremors, and prostration of strength, produced by the practice of snuffing. Some of the most violent and distressing cases of dyspepsia, which have fallen under my notice, have been consequent upon the revolting practice of cleaning the teeth with snuff.

In regard to other forms of indulgence in the use of tobacco, besides that of snuffing, which has principally received our attention, we have no less powerful testimony against the safety of their adoption. MURRAY, ("Apparatus Medicaminum,") gives an account of two brothers, who perished by apoplexy, almost immediately after free indulgence in smoking. The celebrated DR. CULLEN tells us, that he " has known a very small quantity of tobacco, snuffed up the nose, to cause giddiness, stupor, and vomiting; and larger portions used in this, and other ways, productive of more violent symptoms, sometimes even proving a mortal poison." Persons habituated to tobacco, he has observed to be most dangerously affected by going a little beyond their usual dose. He tells us too, that he has found loss of memory, and even fatuity, brought on by the use of this herb.

Many of my hearers are not aware of one powerful cause of injury, which is connected with the practices both of smoking and chewing. The saliva is essental to the process of  $8^*$ 

healthful digestion: and a statement of the quantity poured out during the day, by the various organs concerned in that action, would appear, to one unacquainted with the animal economy, almost incredible. The stimulant operation of tobacco on the salivary glands, excites them to a greatly increased secretion, and the habit of expectoration, during its use, wastes this important fluid; of course the functions of the stomach cannot be duly performed, and although in persons of robust habit the expenditure of the vital powers, by this constant drain from the system, may not be immediately perceived, yet in others of a slighter frame, of a lax fibre, or slender constitution, great and alarming emaciation often take place. Should it be contended, that in many cases the discharge of the saliva from the mouth is avoided, and the dreaded waste thus guarded against, the alternative remains, of the introduction into the stomach of a fluid loaded with those principles from the tobacco, which we have already seen to be most paralyzing, and deadly in their nature and tendency.

But I will not tax the patience of my hearers

with a further detail of the opinions of authors in regard to the use of this vegetable, as an article of luxury; suffice it to say, in general terms, that there is scarcely to be found a practical writer on medical subjects, who does not bear witness to the frequent occurrence of the most grave and alarming consequences from its employment: and they all unite in declaring, that the general tendency of tobacco in any form, is to prostrate the powers of life, and to bring on ultimate disease, however true it may be, that there are to be found cases in which the resulting evils are not obvious until the lapse of years; or that there even may have been instances known, in which no ill effect has followed. Much may be inferred too, in favor of the view we have taken, from the fact, that in those rare instances in which the narcotic powers of tobacco are called in, to aid the physician in the treatment of disease, it is rarely resorted to until after the failure of other means : and when our medical works point to it as a remedy in the few cases which admit of its use, the greatest cautions are thought necessary to guard against the death-like exhaustion, which it is liable to produce.

Before I bring this subject to a close, I would take a moment to show, that the virulent effects of tobacco, are not confined to its internal use. A leaf of the plant dipped in brandy, and applied to the pit of the stomach, of a person unaccustomed to its action, will often induce nausea, vomiting, vertigo, prostration of strength, cold sweats, and the perfect appearance of approaching dissolution.

FOURCROY relates cases of dangerous consequences resulting from the employment of a decoction of tobacco as a wash for an eruptive disease. FOURQUIER gives an account of a man, who to a cutaneous affection applied a wash of tobacco, and was seized with vertigo, nausea, vomiting, and a train of distressing symptoms, from which he could only be relieved by discontinuing the wash.

MURRAY, the author before quoted, details the cases of three children, who were seized with vomiting, dizziness, profuse sweats, and who died in convulsions, in twenty-four hours after their mother had applied a lotion of tobacco to their heads, to cure a disease of the scalp. DR. PARIS gives an account of a London practitioner, who employed, in a case of rupture, an infusion of tobacco, as a last resort from the necessity of a surgical operation, and had his patient conveyed to the Westminster hospital for further relief; he reached the building, but from the violent action of the tobaccojuice, expired as the attendants placed him on a bed.

DR. CULLEN tells us, that he has known so many instances of the juice being absorbed when used as a lotion, and proving a deadly poison, that he desires to discourage its employment.

MERAT, the French writer, some of whose remarks I have already noticed, states, that in his youth, having been taken into a room in which three or four smokers were enjoying their pipes, he was in a few minutes violently affected by the narcotic qualities of the weed: vomiting came on, attended by violent pains in the head, confusion of vision, vertigo, and other distressing evidences of the poisonous operation of the fumes.

We cannot admit the soundness of that rea-

soning, which would conclude that, because there are individuals who have for years given themselves up to this indulgence, without being conscious of its injurious effects,-no such injurious effects are therefore to follow. That there are constitutions of such vigor, that they perceive no immediate ill consequences from the gratification of their taste, I am not disposed to deny; nor yet that many others, who have long used it, have had such slight notices of its unfriendliness to their health, that they have found these inconveniencies more than counterbalanced by the gratification of their tastes. But that these facts afford any proof that the general tendency of the habit is not eminently injurious; or that there is evidence that those who at first escape, will not ultimately find, in injured constitutions, or premature decay, the consequence of neglecting those slight warn ings-is by no means fairly to be inferred. As well might we contend that, because there are well authenticated instances of persons reaching, and even passing "threescore years and ten," who have not known a day of entire sobriety for half a century; and of others, who

have continued to struggle on for even a longer period, under the operation of so much ardent spirits as just did not incapacitate them for labor-that habitual intemperance does not tend to destroy both soul and body. There are, perhaps, no poisons to which, by cautious beginning and gradual increasing, the human frame may not, in certain instances, become so far accustomed as to allow a continuance of life to a tolerable maturity, notwithstanding their daily employment. The case of Solyman of Constantinople, surnamed the Corrosive Sublimate Eater, furnishes us with a most striking illustration of this truth. This man, from some cause not detailed, had so habituated himself to the action of corrosive sublimate-of which the ordinary dose in disease is but the 1-16th of a grain-that his daily allowance, at last, amounted to 20 grains; a portion sufficient to cause the death of ten or a dozen ordinary men. There is recorded, also, (I think in the German Ephemerides,) the case of a soldier who had, in like manner, so hardened his throat and stomach by habit, that he used as his dram, nearly half a wine-glass-full of sulphuric acid

(oil of vitriol) daily. We have seen, also, what enormous quantities of opium the oriental nations consume, as an article of luxury. So in the case before us,-it is to habit, very slowly and gradually formed, and against every effort of nature, who, at first, invariably and vehemently resents the violence done to her, that the devotee to tobacco owes the insensibility of his system to the present effects of this pernicious drug; but it is most certain, that the consequences of indulgence in this article are, in innumerable instances, most deplorable: dyspepsia, with its dire train; atrophy, consumption, palsy, prostration of the mental with the bodily powers, are recorded as having been again and again among the effects of tobacco: nay, worse,-the annals of our large cities can testify, that the awful scourge,-more to be dreaded, more fatal in its effects, than the plague or the Eastern Cholera, --- INTEMPE-RANCE—owes thousands of its victims to indulgence in tobacco. And thus, we have a weed, which possesses no one valuable property not existing in as great, if not in a greater degree, in some other article, uniting with the numberless unavoidable "ills that flesh is heir to," in hurrying annually thousands to the grave, and rendering the protracted existence of thousands more, wretched and almost useless.

Enough has now been said, I trust, to show that the energies of this plant are not to be disregarded, and that even where habit, or constitution, for the present so far conceals its natural tendencies as to make its devotees fancy that they may safely gratify their taste, they do it with as great a certainty of ultimate suffering, as the intemperate in any other way may anticipate from his habitual self-indulgence. One thing more, I must be permitted to say that the moral tendency of this habit, especially in the young, is no less to be deprecated than its physical effects. To say nothing of the evil to be apprehended in this view, from habitually resorting to unnatural excitement as a means of gratification,-the direct effects of tobacco are to produce a love,-a craving I may say, for strong drinks. This is the testimony of writers, by no means noted for their rigid morality; it is the result of my own experience and observation; it has been the confidential confession to

me of more than one young man. The causes which lead to this result are easily traced ;smoking, which among us is a common form for this indulgence, not to insist on its proneness, to cause hilarity,-and from its being regarded as a social custom-to invite to indulgence in other means of excitation :---smoking has the effect of stimulating unnaturally the salivary glands ;- they pour out their secretion in excess, during the continuance of this irritation; by an unvarying law of nature, a deficient supply follows undue discharge,-a dryness of the mouth and throat succeeds: in addition to this, the smoke itself has a heating, irritating effect. Similar consequences flow from chewing. Here then we have urgent thirst excited. But after the powerful operation of this acrimonious substance on the membranes of the mouth, water produces no sensation-affords no relief. Even wine is, in most cases, insipid and unsatisfying; BRANDY, diluted perhaps at first-can alone remove, even for a time, the uneasiness. Need I point out the consequences to be anticipated ?