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# AN EARLY VIEW OF VENEREAL DISEASE By The Hon. William Renwick Riddell, LL.D., F.R.H.S.,

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The terrible prevalence of venereal diseases has been forced upon the attention of the Canadian government and a national council has been formed to assist the central and local governments in combating the evil. As president of this council I was led to examine again what some of the older authorities had to say about these diseases.

From a somewhat extensive collection of ancient medical literature in my library, I select as one of the most instructive and interesting a volume of 516 pages, licensed September 2, 1664, and published in London in the following year. The title of the work is Medela Medicinæ, a Plea for the Free Profession and a Renovation of the Art of Physick. The author is given as M. N., Med. Londinensis, the motto Medice cura teipsum. It is known, however, that the author was Marchmont Nedham (or Needham), a versatile journalist (1).

Medela Medicinæ, healing of medicine, is an attack on the formal practice of the physicians of the time. It attacks the Methodists who strictly followed rule, Galenists who care not if a patient die so long as he has been treated secundum artem ("Let him die, if he will, so he die secundum artem.") (2), like Balzac's physician of Mantua, who "did not only not particularly inquire into the cure of diseases but boasted that he had killed a man by the fairest method in the world." The writer urges

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experiment, the use of the microscope, inquiry of smiths, grooms, farriers, cattle breeders, barbers, midwives, nurses, old women, as to their remedies. Spurning as mere chimeras the old doctrine of four elements attributed to Hippocrates, of four qualities and four complexions fathered by Galen, and also Galen's real "allopathic" principle that "contraries are to be cured by contraries," he himself accepts Dr. Willis's five elements : water, earth, salt, sulphur and spirit (3).

Nedham does not so much find fault with the practice of Hippocrates-he savagely attacks Galen -as try to show that however useful the practice was in Hippocrates's country and time, it was not useful in England in the seventeenth century, and "in plain English a Doctor bred in the Contemplative Philosophy of the Schools may be a Scholar and a very fine Gentleman, but what is that to the Curing of a Disease or the rousing of a Heartsick Man from his bed of Languishment." As an example of a drug with medicinal qualities elsewhere, but not in England, he speaks of "Coffee which Prosper Alpinus (the last of the Methodists) in his book De Medicina Ægyptorum relates to have abundance of vertues in that Country of Egypt, of which we find no effect in England save that it serves to make a Liquor harmless enough in Rheumatick Bodies. for ordinary conversation like other Drink but not for any considerable peculiar uses of Medicine as in Egypt."

His main thesis is that diseases have been much changed and that they "are of another nature than they were in former times." The main causes of this alteration he states as being the French pox (4) and the scurvy. It is his account of the former disease which is of interest to us in this connection.

At its first appearance in the world, the French pox was very different from what it had become. Fracastorius (5) and Benivenius (6) tell us that "it in the beginning broke (7) forth in odious pus-

tules of several kinds upon the privates, the head, the face, the neck, the breast, the arms and generally the whole body. Some also it disfigured after the rate of a leprosy; others had a kind of scurf, which scaling off discovered the skin underneath to be black or blue. Upon some, foul ichorous sores were continually running. And besides all these they had in the inward parts great tormenting exulcerations, as in the mouth, the throat, the nostrils, the urinary and spermatic passages which did eat off the penis, the palate, the lips, the nose in despite of all medicines, so that men being affected with the disease, their friends were frightened from looking upon them and spurned them as if they had been visited with the pestilence. These things being considered with the terrible pains that racked them it was rightly termed by a certain author Miserabile scortatorum flagellum."

But Fracastorius, who he observes was born before the introduction of syphilis into Europe, says that in twenty years it altered much and that there was after this another imitation within six years' time, the disease not raging as before in the external parts. This agrees with the account of Fernelius "who was born almost twenty years before it was discovered in Europe and lived to seventy-two years of age, saw it much changed in the space of thirty or forty years, in so much as he tells us in his time it was much altered, not defacing the bodies of men with pustules, scurfs, and virulent ulcers but tormenting them more with intolerable pains which though they might be increased by the ignorant and preposterous ways of curing them used, vet the disease itself also changed continually and seemed to decline and grow old-adeo ut lues qua nunc grassatur, vix illius generis esse putetur" (8).

Two or three generations later Sennertus (9) observed that, whereas in earlier times nearly all if not all infections took place in coition, now "where one person.gets this disease by the beastliness of

venery, many hundreds have it by traduction," for he says, "The French disease is now become hereditary, being derived from parents to their posterity by generation and communicated from infected persons to others by kissing, by sucking, by clothes and the like."

Nedham points out that the venereal distempers contracted in either of these ways differ externally from that gotten by unlawful contact, for they (i.e., those contacts in any of the ways mentioned) "usually appear in the form of other maladies," for which he vouches not only eminent authors but also his own daily practice "as abundance of people grow sickly and languish under the appearance, it may be, of a consumption (10), a gout, a dropsy, an ague, a slow fever and sometimes an acute one, sore eyes, green sickness and indeed all manner of diseases, which when the other ordinary means have long been used in same, have at length been relieved by an orderly, i. e., systematic, use of antivenerous remedies." He says further: "This disease falls sometimes but gently on the hair. sometimes on the nerves and causes all manner of palsies, cramps, convulsions, toothache, pains in the limbs, gout of all sorts, lameness, general debility, etc.: sometimes on the bones, sometimes on the fleshy parts whence come leprosies, scurfs, ulcers, knotty swellings, and the like; sometimes on the brain, whence come sore eyes, rheums, catarrhs, epilepsies, etc.; sometimes on the lungs, whence come asthmas, coughs, phthisical consumptions, etc., and so many other diseases too long to enumerate." He warns "strikers" (11) of their great danger and says of "women strikers" that there is scarcely any possibility of escaping infection because they are the receivers of impurity. The very carefully prescribed precautions for the "male strikers" are given in the "decent obscurity of a learned language"-Latin. They consist of immedizte and thorough ablution preferably with hot wa-

ter post coitum, for while "an internal taint (more or less) be scarce ever avoided by any, yet cleanliness ex post facto is a great means to prevent the virulent eruptions of a gonorrheal exulceration and other sad effects in and about the genitals." Such measures may be quite ineffective quo flagrantius libidine exardescunt et, equorum instar, igneo spermate stimulati rem ferocius affectant (12).

One cause of the impossibility of preventing contagion is the supposed fact of contagion at a distance. This our author firmly believes, and quotes learned authors in support. Zacutus Lusitanius (13) says: "I have proved the French pox is contagious at a distance." Minadous (14) considered that he had also proved the same and thought that natural spirits might carry contagions from one to another. Avicenna (15) is authority for contagion at a distance in leprosy, Zacutus in leprosy, scabs, scurfs, itches, sore eyes, catarrhs, etc.; and our author submits that there is no reason why it should not be the case in French pox. He does not indeed accept the theory of Minadous that "natural spirits carry contagion"; he has two other media which he advances explaining them on scientific lines, as science was then understood. True "the ordinary gross conceit (conception) of the world concerning corporeity renders doctrines of this kind very difficult to comprehend; but he who reads the finer philosophy of this wiser age and does not take measure of it by the beards of our ancestors but has digested the principles of the magnetic or sympathetic doctrine of our noble Digby (16) and others treating of the subject . . . of the truth of which daily experiments are a sufficient testimony, will soon agree upon the probability, the certainty indeed, of persons being seizable at a distance by virtue of the continual effluxes of atomical corpuscles which one may call bodikins instead of bodies, whereby the grosser substances, usually termed bodies, are touchable by each other and hold communication

with each other at remote distances and so operate upon each other by infection or qualification." The principles are plain and quite in accord with the science of the time. Every body struck by light has small atoms separated from its mass and then the light carries off these atoms, minute corpuscles, "bodikins," these flow with the light or without it, through the air at all times and in all directions and may be attracted by their like or may strike at random. Consequently, as "Fracastorius and Nicolaus Leonicenus" (17) two learned Italians do both contend that the French pox rambles . . . seizing folk that never had any carnal mixture with unclean persons." Fortunately perhaps the disease thus communicated is different in its effect from that caught by carnal intercourse-the latter is usually more visible in its dire effects upon the body by gonorrheas, buboes, ulcers, etc., while the former "is of a finer nature and dives not so deep at once into the blood and humors (fluids) as it insinuates into the spirits and ferments of the body and acts by time and stratagem, lying still till it has an opportunity, not but that the other many times lurks some years also, but this more curious (18) way of contagion for the most part after it has made entry proceeds leisurely and gradually to debauch (19) the whole habit of the body and seldom plays the tyrant till it has made a full and final usurpation which it seldom accomplishes without a revolution of many years. And then perhaps it appears not like itself but in the shape of some one or more diseases . . . So in this disease, the pox, may lurk, but the manner how with the reason why, we can only guess at." Sennertus is quoted with approval as saying that the lues passes under the name of many diseases, for the venom lurking in the body though it seems extinct will show itself after thirty years' time. "It will act all the diseases of the stomach, liver and spleen; it will appear in a headache, vertigo, falling sickness, catarrhs and distilla-

tions (20) of all sorts, strange arthritical pains, diseases of the lungs and of the womb, etc."

So much for mechanical effluvia. The author is more interesting when he speaks of another source of infection not unlike the former. It is the conception of the famous Jesuit Athanasius Kircher (21) of Fulda, then living at Rome, which Nedham approves. The "new paradox" (22) of Kircher was that contagion was conveyed "not only by the volatility of such effluvia, atoms and corpuscles as were inanimate but such also as were animate, living creatures, and were a sort of invisible worms or vermicles which were visible only under the microscope. (Had he said bacilli, spirochetæ, or the like, he would have been modern.) Our author says that by the use of his microscope he discovered why sage unwashed is hurtful to those who eat it: for Nedham examined sage with his microscope and found what appeared to be animals exceedingly small on it-he gives a number of other experiments showing the marvel of the microscope and is perfectly satisfied that measles, smallpox, spotted fevers and purples (23) (purpura, petechial fever socalled) come from small worms or vermicles, and does not hesitate to say that much of the infection of the lues is due to these small animals, animalculæ. But more than the terminology is wanting to bring him up to our modern way of thought. He believed these small animals were flying all the time through the air retaining their vitality indefinitely. a conception contrary to our modern science.

As to the treatment and cure of venereal disease, he seems to give full credence to a superstition still prevalent, namely, that one recently infected may get rid of the disease by passing it along without delay to another of the opposite sex. He reprobates the practice indeed, but does not doubt its efficacy. "For at first taking the disease lodges in the out parts, viz., the urinary and spermatic vessels, and doubtless ought to be sent back the same way that

it came in, as is evident by the immediate cure that some as soon as they have been clap't have procured to themselves by repeated coitions with sound women: and some I have known to glory in this villainy of debauching that sex in order to bring about a cure."

He has no patience with the do nothing physician and he rightly deprecates the neglect of an infected person "to look out for a cure" and has nothing but condemnation for the custom "to run to any pretender for a cure for pox . . . for the pretended cure very often proves worse than the disease destroying the constitution." Some physicians are no better "because they make use of the common scope and remedies in curing." He condemns the cheap-poor-whore-cure by fontanels or issues derived from the practice of the poorer Spaniards. Mercurial unguent may serve for "carriers and porters and other robustious bodies" but "setting upon every venereous patient with this dreadful remedy" is unpardonable. The resulting salivation with other dreadful symptoms following its use show that Nedham was speaking of the unguent treatment carried to excess. The mercurial cinnabar fume was yet worse and to those with pectoral troubles it was pernicious for "use what care you can, the mercurial air will get into the chest." Salivation by internal medicine was quite as bad as managed by most surgeons, although it was the best of all ordinary ways-but care should be used to "do the work of salivation without those tedious and intolerable afflictions of swollen head, loose teeth, sore and swollen mouth, tongue and throat, etc."

Keep away from receipt mongers, for the "common sort . . . err not only in their pretended way of curing the pox when it is inveterate and confirmed but they stumble and do as much mischief in the very beginning when it is but a clap (as they call it) a virulent running of the reins, etc." There must be due temperance and rule of eating, drink-

ing, exercise and recreation; but when all is said and done mercurial salivation is the only cure.

I do not here follow the author in his remarks as to the treatment of scurvy and other diseases, or into his animadversions on physicians and their practice in general; these matters are not germane to the object of the present inquiry.

#### NOTES.

1.—Marchmont Nedham (or Needham) born 1620, educated at Oxford where he took his B.A. at the age of seventeen. He was afterwards an usher in Merchant Taylors' school, then an under clerk in Gray's Inn, of which he became a member in 1652. He also studied medicine, when, where and under whom does not appear. He found his true vocation in journalism. He was a supporter of Cromwell and his scurrility, vigor and boldness were not surpassed in any of the writings of the period. On the restoration of the Stuarts in 1660 he took refuge in Holland but soon obtained a pardon and returned to England. For the rest of his life (he died in 1678) he practised medicine with an occasional excursion into journalism.

My copy of the Medela Medicinæ is bound in contemporary calf, not tooled or gilded. It seems to have at one time belonged to a Dr. Mudd (not the Dr. Mudd who looked after Wilkes Booth's fractured fibula and paid so dear for his humanity). Some previous owner had made a memorandum on the page opposite the title page, "There is an answer made to this book by Dr. Spraddin," referring to Dr. Robert Spracklin's Medela Ignorantia, 1666. There were two other answers, one by Dr. John Twysden, Medicina Veterum vindicata, 1666, and the other by Dr. George Castle in Reflections on a Book called Medela Medicina, printed with The Chymical Galenist in 1667. Nedham himself says, "Four champions were employed by the College of Physicians to write against the book," and adds

that two died shortly afterward, the third took to drink and the fourth asked his pardon publicly. See D. N. B., Vol. XL, Pp. 159-164: Athenæ Oxon. Vol. iii, 1187.

2.—This reminds one of the skit on the well known Dr. Lettsom, who flourished in London toward the end of the eighteenth and the beginning of the nineteenth century. One very usual form runs:

> "When patients sick to me apply I physics, bleeds, and sweats 'em;

If after that they please to die,

What's that to me?

I. LETTSOM.

3.—Dr. Thomas Willis (1621-1676), M.A., Oxford 1642: M.B. 1646: M.D. 1660: F.R.S., F.R.C.P. 1664. He was the first to distinguish diabetes mellitus and was physician in ordinary to King Charles II.

4.—Nedham calls this disease by many names pox, French pest, French disease, French ferment, French pox, pocky disease, pocky lues, pocky ferment, pocky infection, lues venerea, lues, French lues, French infection, venereal disease, venereal distemper, never syphilis. Gonorrhea is mentioned but, of course, it was then supposed that gonorrhea was a form of pox, an error which was later confirmed by Dr. John Hunter's classic experiment on himself and which gave way only after the investigations of Ricord and his school. Neisser, of Breslau, placed the specific identity of gonorrhea beyond question in 1879 by his discovery of the gonococcus : but it was not till 1905 that Schaudinn and Hoffman identified the Spirochaeta pallida of syphilis.

5.—Girolamo Fracastoro (latinized Fracastorius) 1483-1553 of Verona, physician to Pope Paul III: he revised the old theory of "critical days" and rather gave it a new lease of life. It was in full vigor in England in Nedham's time and is attacked by him. Fracastorius, among many other works, medical and poetical, wrote a book on *Contagious Diseases* 

but is best known by his famous poem Syphilidis sine Morbi Gallici libri tres, Verona, 1530, often reprinted and translated into French and Italian. (The Latin form is very rare, I have seen only one copy.) The hero of the poem was a swineherd, Syphilus, i. e., the swine lover (without apparently any implication of unnatural vice, although that form of crime has been not infrequently suggested as the original of syphilis) and his sufferings from the Morbus Gallicus were the theme of the poem. The Italians charged the French with being the originators of the infection, whence Morbus Gallicus. while the French not to be behind in international courtesy gave the honor to the Italians, whence Mal de Naples. The almost universal use of the term syphilis seems to be largely due to Sauvages-Francois Boissier de la Croix de Sauvages (1706-1767) the animistic mechanician who made a system of diseases on the lines of Linnæus' System of Botany in his Nosologia Methodica. Sauvages makes ten classes of diseases, 295 genera, and 2,400 species. (Linnæus had 325 genera of plants).

6.—Antonio Benivieni (ob. circ. 1502), of Florence, a Hippocratic of a somewhat rigid school. He is of some note as an obstetrician and pathologist.

7.—I modernize the spelling, capitalization, punctuation, etc.—archaisms in these are apt to draw the attention away from the substance. There could not be said to be a standard English orthography until Dr. Samuel Johnson's time, every one following his own judgment, taste or caprice and not infrequently two or more spellings of the same word would be found by the same author in the same book, the same paragraph, sometimes in the same sentence. Capitalization did not become thoroughly standardized until well into the nineteenth century—often the nouns were written with a capital as is the custom still in German; other important words were often capitalized while adjectives generally received a small letter as in French.

8.-Jean Francois Fernel (Fernelius) was born in 1497 by which time syphilis had been recognized in parts of Europe. The celebrated siege of Naples by Charles VIII of France which was the cause or at least the occasion of spreading the infection took place in 1495. But Nedham gives his age at death as seventy-two; Fernel died in 1558, therefore Nedham must have thought that he was born circ. 1486. and indeed 1485 is given as his birth year by some authorities, e. g., Bass in his History of Medicine. Fernel was a great mathematician but turned his full attention to medicine at the age of thirty-five; he was the most distinguished physiologist of his age but thought the blood originated in the liver and the "elements" were actual bodies. Nedham quotes from Fernel's De Lue Venerea and part of his work De abditis rerum causis. The Latin with which the quotation ends means: "So much so that the lues which now prevails can hardly be considered of the same kind."

9.—Daniel Sennert (Sennertus) 1572-1637, the son of a shoemaker in Breslau, studied at Wittemberg where he received his degree in medicine, Leipsic, Jena, Frankfort and Berlin. He became a professor in Wittemberg and introduced the study of chemistry in that university. He died there of the plague in 1637. He was one of the first to describe scarlet fever (1619); he was an "atomist" and held that each element had primary particles, corpuscles or atoms peculiar to itself. His works are in six large folio volumes, the last edition published at Lyons in 1696; the quotation is from Book VI, part IV, chapter 5.

10.—It must be borne in mind that consumption until very recently had a wide connotation. See Note 7 to my article in the New YORK MEDICAL JOURNAL of September 27, 1919, on Medical Theory and Practice of an 18th Century Doctor of Divinity. Nedham himself speaks of three species, hectick, phthisic, atrophic.

11.—This word is no doubt akin to the German Streicher; while it was not in very common literary use before and at Nedham's time it had been used by Nash and some others. The New English Dictionary, p. 1136 sub voc. Striker 2 d quotes this very book Medela Medicina for its use. The word is synonymous with scortator or what Nedham bluntly calls whoremonger. A woman striker is the female of the species.

12.—"Where they are too passionately inflamed with desire and, like horses, urged on by burning semen attempt their aim too fiercely." The precautions to be taken are given in Latin "locked up from the eyes of common readers partly for modesty's sake and partly because such cautions may prove an encouragement to wickedness." The reasons for avoiding all reference to such diseases and prophylactics against them are only now beginning to yield to terrible necessity. Zacutus Lusitanius (Abraham Zacuto), 1575-1672, a learned Portuguese Jew born in Lisbon, an ardent follower of Galen and the Arabians and a pathologist of some merit, is quoted for preventive rules but even Zacutus admits their failure in some cases.

13.—See Note 12. The works of Zacutus cited are his *Praxis admiranda*, Book II, obs. 134; and *De Medicinæ Principalium Historiæ* 73.

14.—Thomas or Aurelius Minadous, 1554-1604, a celebrated practitioner and professor at Padua, one of Harvey's preceptors—the work of Minadous cited is *De Lue Venerea*, Chap. V.

15.—Avicenna (Ebu Sina, Abu Aliebu Abdallah ebu Sina) 980-1037, "the Prince of Physicians," too well known to require further notice here.

16.—As to Sir Kenelm Digby and his powder of sympathy see my article in the New York Medi-CAL JOURNAL for February 19, 1916.

17.—Nicholas Leonicenus (1478-1524) was the first to write on anything like modern lines on syphilis (1497); he was well acquainted with the

symptoms and many of the effects of the disease which he considered infectious and epidemic: he did not believe in the American origin of the disease but thought it had existed in antiquity. He was a fine classical scholar and occupied with lustre the chair of medicine at Ferrara. He was largely responsible for the reinstatement of Hippocrates and the loss of influence of Pliny.

18.—"Curious" in the seventeenth century hadcertain meanings now rare or obsolete; it means here ingenious, clever.

19.—"Debauched the whole habit of body"—"debauched" was a new word in English at that time, having been imported from France about 1600 the French *débaucher*—it meant corrupt or pervert: "habit of the body" was the same as our late "diathesis," valde deflendus.

20.—"Distillations" are fluids forming in minute drops from any tissue—not distinguishable from catarrhs except that the catarrh is rather flowing and *en masse*, the distillation stationary and minute.

21.—Athanasius Kircher, (latinized Kircheus), 1601-1680, entered the Jesuit order at the age of seventeen; he became almost an Admirable Crichton. He lectured at the University of Wurzburg on philosophy, mathematics, Hebrew and Syriac, afterward he taught mathematics and Hebrew at Rome, where he died. He was one of the first to study the hieroglyphics of Egypt. It is his work *De Peste* which Nedham makes use of; it was written in 1658 and afterward printed at Leipsic with a preface by John Christian Lange.

22.—"Paradox" in the proper and etymological sense of an opinion opposed to that commonly held. cf. De Morgan's *Budget of Paradoxes*.

23.—Nedham says that Drs. Lange and August Hauptman even before Kircher's investigations were troubled over "that terrible disease, the purples, which so frequently befalls women within the month after childbearing" and laid their heads to-

gether to determine the cause. They found under the microscope petty vermicles spread upon the whole superficies of the characteristically rough skin and concluded them to be the cause. It is perhaps better not to know things than to know things that are not so.

24.—We know that Lange ascribed syphilis to microscopic worms and Hauptman to small insects —a mere difference in terminology.

OSGOODE HALL.