The influence of Sex and Heredity in the causation of Mental Disease: and a short account of the Insanity of Adolescence.
In attempting to classify any collection of cases of Mental Disease in the present state of our knowledge, we find at the outset, that we are confronted with this great difficulty, that whereas in some, definite pathological changes can be ascertained in the brain itself, in others no such changes are discoverable, but they depend for their origin, either simply on some molecular alteration of the nervous tissue, or on the existence of bodily defect or degeneration. Thus then we are forced to base our classification either according to the symptoms which they present, and divide them into cases of mania, melancholia or dementia; or we may view them in relation to accompanying physical diseases, such as epilepsy, gout, heart disease be. But there is still a third, and what would seem to be a more complete method of according to the time of life, at which the Insanity makes its appearance, for
this not only indicates the period of its commencement, but points out at least one condition underlying its onset. In adopting the latter classification we are taken through the course of sexual rise, development, maturity, decline and death, and the influence of sex as a factor in the production of Insanity would seem to suggest itself. Sexuality or the desire to reproduce the species is one of the chief of human instincts, and it is not surprising considering the important position which it holds in the normal mind, that its beginning and ending should prove a source of danger to the unstable. But great though this source of danger undoubtedly is, it is perhaps much less than would a priori be expected, and that it has certainly been largely overestimated by the popular mind is amply proved by statistics, which show that it is at the period of fullest vitality, and not at these times that neural disturbance is
Most common.

For the purpose of the essay I have taken into consideration one thousand cases admitted during consecutive years into the Asylum to which I belong, and though from this number it would be impossible to generalize or draw any definite conclusions, yet a contribution of facts however small, is if not of much importance, at least of some value.

Of these thousand cases on which I shall base my results, and from which I have omitted all cases of Sedition and Epilepsy, I find that the sexes were in the proportion of 448 males to 552 females, and out of these numbers I have included 61 males and 161 females, as suffering from the various forms of Insanity caused in part by the rise and decline or operation of the sexual functions.

But before I enter into any more detailed account, perhaps it would be as well to describe in a few words the district from which the patients
were drawn and to indicate briefly their
social environment, before admission into
the Asylum, for no doubt any statistics of
Insanity is apt to apply more to the
particular district or county than to the
nation at large. The County is a purely
agricultural one, there are no large towns,
no manufactures worthy of mention, and
no mines, but the land and the sea
for the most part support the population
so that it may be said of the inhabitants,
that they live as close to nature as is
possible at the end of the 19th century.
Yet in this rural district, the ratio of
the insane is 34 per 10,000 of population,
compared with 29.68 for the rest of
England, so that here at least it is
shown that centralization, the crowding
into cities and towns, and the evils
attending on overcivilization are not
necessarily prominent factors in the
production of mental disease. Alcoholism
too, which as a cause ranks so high
in other parts of the country is almost
unknown. But ignorance and defective
education, by breeding and maintaining superstition, together with poverty and adverse circumstances take the place of those more apparent ills, and tell with greater effect, the former more especially in the time of sexual incidence, and the latter during its decline, and in the haguered state.
From the figures previously mentioned — 161 males a 161 females, it will be observed, that it is among the females not only relatively, but in the aggregate that the greater number of what scale sexual cases occur; and this is not to be wondered at, when it is considered that in the female in connection with the reproductive functions the changes are so much more numerous, and so much more important, than those in the male, and it would naturally follow that there is a greater disturbance at its rise, decline and especial activity. Up to the age of puberty there is little distinction between the two sexes, and during this period few
cases of neural disease are met with, but when differentiation takes place, when the sexual and reproductive functions begin and develop, during what has been called the Stage of Adolescence as many as go out of the thousand cases are found to have occurred. Of this 90, 41 were males, while 49 were females, so that at first sight it would appear that the female adolescents outnumbered the males, but when it is taken into account that there were only 448 males to 552 females, the proportion of the former (9:1) was found really to exceed that of the latter (8:9), so that among my cases, at least, for this period, the stress attending the female case was not in evidence. But when I further compare the two sexes at the climacteric or end of sexual life, I find that the balance is greatly to the side of the females, for in them during a long number of breeding years, a large proportion of their activity has been spent in connection with the sexual and reproductive functions, and
when their involution takes place, there is necessarily a great proportion of mental disturbance in what has been up to that period a normal mind. To fix any definite age or limit, as the time when a man ceases to be able to exercise the sexual functions, is impossible, and by many the male climatone is looked upon as non-existent, but when we meet with cases so clearly resembling in their characteristics those that have been recognized by all as climatone in the female, it does not seem to me that they should be discounted altogether. Thus I have included among my cases as many as 20 or 40 per cent, which I have set down as climatone in their origin, not merely from their commencing at any particular limit of age, but largely from their mode of onset, and particularly from the symptoms which they have exhibited. The female climatone is much more easily settled accompanying as it does the cessation of the menstrual phase, but the age limit varies considerably in different women, in some being as early as 45—
And in others as late as 55, so that a whole decade is included in this period.
But as with the males so with the females each case must be judged on its merits, and all women who become insane between the ages of 45 and 55 cannot be considered as cases of Climacteric Insanity. Thus we have to omit from our lists cases of recurrence, of organic brain lesion and many other of a complicated origin. But even after omitting all these I find that 53 women or a percentage of 13.5%—bad as far as could be traced one or another its conviction as to the main cause of their attack, this compared with the males at this period there is a difference of 6.1 per cent. To sum up then these figures it is seen that while one out of 448 men, 13.5%—per cent could be classified as adolescent or Climacteric, as many as 19.3%—per cent of the 55.2 women accrued during these periods. And to this last number must be added as being included under cases of Sexual Insanity 9.7%—per cent representing...
those caused by pregnancy, parturition or lactation, giving a total of 27 per cent.

For all female cases.

Further if we take the two cases together, I find that out of the thousand cases as many as 2.2 or 22.2 per cent, can be classed as occurring at one or other of the sexual periods and due either to the rise, decline, or the result of the activity of the sexual functions. So that sex is its

leading especially as a predisposing factor in the production of insanity is found to be of considerable value, for there is no other cause with the exception of heredity that can at all approach it in importance and it is at these various periods that the so-called moral troubles have the

greatest effect, acting as they do frequently do, on a mind already undergoing an upheaval from sexual strain. Thus

just as religious emotion, love, and nervous shock are often given as the causes of mental disease at the period of adolescence, so insanity, climacteric trouble, and adverse circumstances rank
largely as the forerunners of mental break-
down, during the menstruation or at the
delirium. But these causes, though no
doubt potent, would in many instances
be of themselves quite insufficient to
initiate a complete loss of mental balance
were it not that to a certain extent
they act along with and are secondary to
those sexual changes; for if the mind were
not already weakened by those peculiar
effects, it would soon rebound and regain
its former vigour. Thus it is that
the many symptoms of Sex, both from
their physical and mental aspects, acting
and reacting on each other, bring
about those abnormal changes, often
accompanied by sexual perversions
of a most marked kind, which
are so commonly met with, and
which are of such a distinctive nature
that they have been separately
described under the heads of hystero-
elirium and phrenopleural insanity.
In addition to the influence of Sex, which I have in some manner endeavoured to estimate in the preceding pages, there is another factor which we dealt with is of greater importance, and which I shall afterwards show is often at work side by side with those sexual causes in the production of Insanity — I mean Heredity. For although it is extremely difficult to be sure of the part played by inheritance, yet it is tolerably certain, that a large proportion of the insane, are insane because of the Insanity of their parents. Thus I find that among my thousand cases as many as 24.2 or 24.3 per cent had a distinct ascertainable hereditary taint, and that the proportion large though it may seem is much too small is shown by the fact that whereas in the earlier years of my statistics, only 14.3 per cent are mentioned as having this predisposition, as large a number as 33 per cent was discovered in the later. And such a discrepancy may be accounted for partly by the greater perseverance of the relatives from their anxiety
to hide what was formerly more considered a social stigma and disgrace, but perhaps it is more due to the fact that year by year we are better able to ascertain and trace the history of the patients, their families and immediate progenitors. But that much remains to be done in this direction is evinced by the following:

On the 19th April 1890 E. E. was admitted into the Asylum, on the 24th Rh. B. and on the 6th of May B. S. the two letter being sisters, and the former their niece, and as these cases all exhibited the same somewhat stuporous condition, and rarely spoke or took notice of anything, it was months before their relationship to each other was known; and yet this family was as might be expected saturated with Insanity.

In looking at the question of Heredity, the truth of which is admitted to a certain extent by all, it is seen that Heredity is not a single, but a many headed monster, and includes within its domain, not only the results of
direct transmission, but also of consanguinity and intermarriage.

The transmission of bodily defects or monstrosities is well known in the animal world, both among the lower animals and in the human species; thus for example it is not unusual to find that the deformity known as hare-lip has affected several members of the same family, and further to have recurred in the children of those thus affected. And Bland Sutton quotes a case occurring among the inhabitants of a certain isolated district in the South of France where "at the end of the last century asceticism, both of the hands and feet, suddenly appeared, and in 35 or 40 years, almost the entire population was thus affected." It is well known too that children often bear the physical characteristics and even features of their parents or of some more remote progenitor, or may inherit from them some trait or peculiarity and thus there is often found a family resemblance not only in appearance, but even in gesture...
Handwriting or other manifestation of a complex nature. And as these depend no doubt on some special arrangement of nerve tissue, of a subtle and elaborate kind, especially when compared with the gross changes that underlie Insanity, such as may be taken for granted that since the one can be transmitted by inheritance, the other can also.

It is not however the actual Insanity itself that is handed down, but rather a condition of instability in the neural fabric, and that this instability is due for the greater part to Inheritance need not surprise us, when it is borne in mind that every man must be to a large extent the outcome and product of his ancestry. For although circumstances and environment do play a part in molding the character and modifying the tendencies transmitted to the individual, yet when the long preceding ages during which the character has so to speak been built up are taken into account, and compared with the comparatively short period, during
which circumstances can act, the influence of the former must of necessity be much less than of the latter. Now in Insanity, where there is a disorder or arrangement of the highest nervous centre, there must either be a great force producing those immense changes, or the underlying tissue must be of an unstable character, for in the mental world as in the physical the amount of disturbance required to upset any arrangement depends largely on the stability of that arrangement. Thus it is constantly seen that an almost similar train of circumstances acting on two different individuals, in the one case where there is a condition of stability, the equilibrium is unaffected; while in the other where there is a strong Neurotic Hereditary predisposition, there is a complete mental upheaval and the balance of reason totters and it may be is overthrown.

But just as in the case of Leucodystrophy already alluded to, where as soon as the district was opened up by more frequent communication with the outside world,
and intermarriage among its inhabitants became far common the abnormal almost entirely disappeared; so in the case of insanity, transmissibility would in the course of time cease, were it not for another factor which must be duly estimated in our consideration of the influence of heredity. For if each marriage meant the introduction of new elements, progressive degeneration would be prevented, for gaps would be filled up, strains and races be blended out, and union of kindred would be established, and instead of a collapse of some cells the substitution of others producing a race of weak-minded and insane, the successive blendings would rapidly efface any particular characteristics and bring the individual back to the general health type. But strange as it may appear, it is no doubt a fact that those with a hereditary predisposition to insanity frequently intermarry with others with a similar family history, and I have often found on admission to the asylum that
a patient was related, both on the father's side and on the mother's to those already suffering from mental disease. But not only is this peculiarity frequently noted, that the two tainted cells do to spread and divide again, but we find what is generally known as Inbreeding, where the population of a certain district freely intermarry with each other, and as no new blood is admitted, the stock becomes exhausted and in the end there is a mental weakness or defect, often producing Idiocy or Insanity. In this county the result of this inbreeding is well seen particularly in two districts where the people are mainly engaged in stone quarrying, and where as this trade this trade is a close corporation, none being allowed to work unless natives, free intermarriage takes place. For these mental infirmities are common, and if a case of ordinary mania occurs the tendency is more in the direction of dementia than of Recovery. Heredity then reared in relation to mental disease would seem to act, at one time
from direct inheritance, and at another
from incongruity, and in the Southern and
Western divisions of the County, the latter
would appear to be the main cause of
the hereditary insane, while in the East and
North, persons who have already suffered
from mental Disease, apart from any
question of inter-marriage, are the accredited
propagators of predisposed cases.

Another point might be mentioned as
of great interest, especially to Asylum
Physicians, that in reference to the offspring
of recurrent cases, for unfortunately it
is quite in the ordinary sequence of
events to chronicle an addition to the
family, during the periods between the
recovery and relapses of one or other parent.
For naturally at these times, especially a
condition of instability must be handed
down, and in those children it is
the particularly found that the ordinary
stresses met with in the struggle for
existence will prove too much for their
unstable nervous tissue.

In these ways the hereditary acts as
a potent factor in the production of Insanity, and on further consideration of the cases in which the Hereditary taint was discovered, it was found that in those cases which I have called sexual that it was by far the most common. For out of the 122 cases in which sex was indicated, Heredity was also ascertained in 102, giving a percentage of 45.9 which is large when compared with 24.3 for all cases, and very large when compared with the remaining 778, where it was only accredited in 148 or 17.9 per cent. Thus it would seem that it is in these cases, which have already been as a distinct relation, that Heredity too is more often a factor. But while this is so, it is not true equally in all kinds of sexual Insanity, for at the Clinicore the Hereditary taint was only found in 35.3 per cent, while at the time of pregnancy, the precancer or lactation it was met with in 44.4 per cent and at the period of Adolescence in as many as 55.6 per cent.
From these few enunciations then it is seen that while Heredity so often plays such an important part in the causation of Insanity, that it does so most prominently at the periods of sexual stress, and of those particularly at the time of Adolescence which is as might be expected, seeing that the rise and development of Sex is the first great strain met with in life's history. And when to this strain there is added a brain already in a condition of mental instability a considerable disturbance or even a break down would be the natural result.

Before leaving this question of Heredity, and as illustrating the results of direct inheritance and the intermarriage of tainted individuals, I shall sketch shortly the history of one family, several members of which are at present in this Asylum and of which there has been at one time four generations known to be mentally afflicted.
Some fifty years ago there was admitted into this Asylum A. B. a pale, anxious, careworn widow, about 55 years of age, who had had a large family, many of whom died in childhood, and who was said to have had several relatives similarly affected. She never really picked up either mentally or physically and died five years later from brain degeneration & bronchitis.

Within a few months of her admission her eldest son B. B. a young man aged 33, married & with 3 children, was brought to the Asylum, suffering from melancholia with delusions. He made a fairly good recovery, and was discharged only to be readmitted and again discharged on three different occasions until finally he remained until he died a hopeless & emaciated about four years ago.

Of A. B.'s other children C. B. is at present in the Asylum, a case of incurable mania with many fixed delusions, and D. B. who married
A man various members of whose family have been insane, had several children all of whom as far as can be learned, were either weak minded or died from decline.

Of B. B.'s children 4 are still living, 3 of whom all females are at present in the Asylum. Two of these are married and the third is a spinster the subject of delusions of a hypochondriacal nature. Of the two that are married S. R. is law, morose, suicidal and superstitious and E. D. is a case of Climacteric Insanity. On further tracing this history I find that S. R. has one child an epileptic, & another married to a man with a strong Hereditary predisposition to Insanity has already an idiot girl, and her other children bear the stamp of their doubly neurotic parentage. In the case of E.D. who is married to a strong healthy labourer, and who has & children, one only J.D. has as yet shown signs of breakdown, and he was in the Asylum for 3 months.
In 1890, suffering from the mania of Adolescence, and made a good Recovery.

Having now concluded the first part of this essay, in which I have endeavoured in some manner to set forth a few points in relation to the working of the two factors—sex and Heredity—in the causation of Insanity, and after having incidentally alluded to the fact that these two are so often met with side by side, and that near markedly at the period of sexual development, I shall next proceed to consider the general characteristics of and the prognosis in Mental Disease recurring during Adolescence.

Adolescence is the period extending from Puberty to Maturity, but the age at which the former begins, and at which the latter is arrived at, shows great variance with different individuals, yet if it is necessary to fix any arbitrary limit, most authorities are agreed upon 15 to 25 for males, and some two or three years earlier for females.
During this stage of existence many changes peculiar to themselves, both bodily and mental, make their appearance, and although it is with the latter that I am chiefly concerned at this time, yet it may not be out of place to mention briefly a few of these latter.

In the male the sexual organs undergo increase and development, various parts of the surface, especially the chin and puckers, become covered with hair, and the voice becomes lower in pitch as well as rougher and more powerful — in the female the external and internal organs of generation undergo a considerable increase in size; the mammary glands enlarge; and a deposition of fat takes place in the mammary and in the buccal, as well as over the whole surface of the body (Carpenter).

In the Adolescent Insane it is frequently noticed that these changes are very imperfect, and that their boyish or girlish appearance is most striking, and further that coincident with their recovery there is often the assumption of a more manly or womanly figure and development.
At this time in the nervous and muscular systems are being completed, but in the brain the direction is more towards development than actual growth, for it is generally agreed that no increase in its bulk takes place after the age of 17 and histologically no difference can be observed between the nerve cells of the boy of 17 and the man of 37. But when we look at and compare the functions, what a vast difference is found, for it is during this period that all the higher intellectual and emotional qualities, all the desires and passions connected with sexual love and reproduction first make their appearance, and it is only after years of development that complete maturity is attained.

Of the male adolescent the mental characteristics have been summed up so trenchantly albeit so unkindly by Carlyle that I cannot do better than quote from the Sarton Horatius, where he says “such gawkish are they and foolish savages, and yet with such a voracious hunger for self indulgence; so obstinate,
Obstinate, vain glorious, in all senses so forward and so forward. Life everywhere is the most manageable matter, simple as the rule of three. Multiply your second and third terms together, divide the product by the first, and your quotient will be the answer, which you are but an ass if you cannot come at. But though this description may be to a large extent true to life, and though the male adolescent may be so obnoxious to the sound sage, that he thinks that invisibility under barrels during this time, might be of advantage to the rest of mankind, yet to the adolescent himself, this period with its physical and objective side is often one of intense pleasure. Instead of these aggressive and self assertive young men, however, we often meet with those more given to day dreaming and introspection, shy and retiring youths, who if they should become insane are most apt to drift into hopeless dementia.

The female adolescent compares favorably with the male, though she to
Her mature sister may be at times as objectionable as the male to the elder brother. She is often given to dreaming and castles building, and the emotional side of her nature is much in evidence, she is capricious and variable, at one time perhaps unduly elated with the mere pleasure of living, and at another easily moved to tears on the slightest pretext. But while the male at this period is selfish and self-sufficient, the female is frequently stirred at the sight of suffering, and a jot of charity it may be indiscriminate, and soon at an end, is the outcome of her more kindly nature—she too is more easily influenced by the opinions of others, in fact dependence might be said to be the leading feature in the female in contrast with the self-reliance of the male.

Between these characteristics above described and those of actual insanity there is no broad line of demarcation, for the normal or physiological shades off by almost imperceptible gradations into the abnormal or pathological, and if once self-control be lost, a due sense of the fitness of things
will soon be at an end, and mental alienation will take place.
Adolescent Insanity or as it has been well named the Hereditary Insanity of Adolescence, owing to the large number of cases in which Hereditary predisposition can be ascertained - is caused for the most part to the commotion accompanying the evolution of the sexual characteristics and the attainment of the power of reproduction, acting especially on nervous already unstable. Thus too it is often found in these cases that the parental training instead of fostering a moral self-control, necessary to the unstable and developing mental life, encourages pattern by its teaching and example, a state of vicious self-indulgence, or a condition of giddy sentimentalism. Gowing to this then we find at this period frequently arise these pernicious vices of masturbation and alcoholism, which if unchecked lead to mental and moral perversion, and the acquisitive so much desired or the golden mean is never reached.
Another cause frequently assigned, but
which has been unduly overestimated is Religion and to tell the laity that a patient is suffering from Religious mania, is sufficient and even looked upon as not so very much out of the ordinary state of affairs. But this so-called Religion so frequently plays such an important part in the life of the normal adolescent, that it must be looked upon rather as the outcome or as a symptom, than as an actual cause of Insanity. Of other causes Alcoholism and Sexual Vicefulness, especially of an illicit kind, are mentioned, but the former in this country is rare, and the latter must more often as in the Case of Religion, be considered as a result than as a true cause.

In the previous part of this essay I have alluded to the fact that 90 cases out of 100 admitted into this Asylum during consecutive years, were suffering from Mental Disease arising during the period of Adolescence, and that out of the 90 cases were males and 49 were females.

Among these cases I have included all
patients of either sex between the age of 16 and 20, whose attacks would seem to have been simply due to the evolution or development of the sexual functions, and not those complicated with Epilepsy, Childbirth, or any cause of a more complex origin. When we look at and compare the age of the two sexes as admitted in the following table.

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We find that among the males 12 or 29 per cent were under the age of 20 while among the females as many as 26 or 53 per cent took place before this time. But if
it is considered that the female reaches a state of maturity sooner than the male, the age of 18 for the former will more nearly correspond to 20 in the latter, and the per centage for the female sex in the earlier years will in this case be reduced from 5.3 to 3.2.6. And further if we take the two sexes together, and divide the age limit into two parts, the first to include from 15 to 20 for males, and from 16 to 18 for females, and the second from 20 to 25 for males, and from 18 to 25 for females, it will be seen that only 31 per cent had their commencement in the first part, compared with 69 per cent in the second, so that it is during the latter period, in the after years of gradual coming to maturity, that the greatest danger to mental health is found.

In the two sexes the symptoms presented by the insane at this period may considerably as might be expected from the great divergence in their normal characteristics, so that it will be
necessary to view separately the changes met with in the male from those which occur in the female. But before I do this I propose briefly to quote a few extracts from the certificates of admission, for the facts detailed therein would seem to me to be often of much interest. These descriptions bring as they do to a certain extent the manner in which the patient has behaved in his or her own family circle. For no doubt the whole process of the bringing to the Asylum, attended as it is with a complete change of surroundings has often a most marked immediate effect, and thus it is frequently found that patients brought strapped down or wearing a straight-jacket, and who have been quite unmanageable outside, on being placed in the Ward become at once quiet and tractable.

Male.

Excited, violent and abusive, wanders aimlessly about, violent dislike to relatives.

Excitable, crouches about in corners, spitting
Sweating and destructive.

Sullen and morose, says he is bewitched by his mother, and must draw blood, that his food comes out of his ears.

Says there are people under the bed, that he has seen God, threatens to drown himself, is sullen, morose, and aloged.

In the male the chief general characteristics may be summed up as motor restlessness, mental confusion, incoherence of speech, absurdity in behaviour, and in a large proportion a tendency to destructiveness, in fact the symptoms are more commonly maniacal than melancholic in nature. But depression also is frequently met with accompanied by suicidal inclinations, visual and auditory hallucinations, and allusions which are as a rule subjective indefinite, non-persistent, and frequently of the nature of persecution of that he is to be strangled, that he is bewitched, that his food is poisened etc.
The chief point about these delusions are their incessant change. For as Goethe puts it: "No persistent ego is as yet formed in which there could occur a lasting radical change: the mobility of the age does not allow single insane ideas to become persistent and systematized as at a later period, but on the other hand the various primary mental diseases having the character of irritation taken of a certain duration lead almost certainly to a state of confusion and dementia." Another and what is always a grave symptom if indulged in to any extent is the habit of masturbation, which is most frequently found in the melancholic type and which would seem to be due not so much perhaps to any sexual desire, but rather to ennui, anxiety and the impulse to change temporarily the painful mental condition. That however if long continued it will soon lead to a secondary degeneration is shown by the fact that out of the 13 cases of adolescent insanity now in the
As examples of the two most common types, the one of acute mania leading to recovery, and the other of mental confusion, accompanied by delusions of a subjective nature, and ending in secondary degeneration, the following may serve as illustrations.

J. D., aged 20, single, an actor, admitted November 1890. Grandfather died demoted mother and two aunts are at present in the asylum, and many other relatives have been insane; or suffered from the allied nervous. He had always been a quiet and well-behaved youth, until a few months ago when he became excitable, strange and irregular in his mode of life, and occasionally indulged in alcoholic excess. When admitted he was well nourished and in good general health, but mentally was in a state of acute excitement, shouting, singing, swearing, and using obscene...
language. He had no idea where he was, took no notice of his change of surroundings, could not answer questions and was quite incoherent. He was also extremely restless, continually grinning and frowning in the most absurd manner. For several nights he slept but little even with a hypnotic, and practically remained in the same condition for about 10 days, when he became quieter though still irrational, rude and abrupt and impatient of all control. Several weeks passed with but little improvement, and during this period he was very variable, occasionally somewhat more collected and even doing a little work in the Ward, but generally remaining dull, listless and apathetic, unless interfered with, when he became ill tempered and aggressive. About the middle of January a change for the better took place. Physically he became stronger and more manly, and mentally more settled and in better times, and as this improvement was maintained he was
Discharged. Recovered 3 months after admission and up until now has continued well.

Mr B aged 21, a clerk in a surveyor's office admitted September 1886. Father died paralyzed, and various nerves have occurred in other members of the family, but no actual history of mental disease could be obtained. He had always been a quiet, retiring youth, religious and fond of reading, but scarcely ever taking part in physical exercises, and generally inclined to be solitary in his habits. On admission he was undersized, pale and anaemic, and with a purpurea eruption on the forehead & shoulders. He was quiet, but displayed much confusion, and though willingly answered questions was rambling & uncertain in his statements, and abnormally abrupt in his manner. It was said that he was a masturbator, but this he denied.

For several days he was fairly well
beloved, but silly and irrational, smiling in a purposeless manner and frequently showing signs of irritation, when spoken to. When however he became more accustomed to his surroundings, he was less careful, and on being caught in the act of masturbation, shamelessly confessed to it, and said that he must get rid of it - the seminal discharge - in some way. He now began to consort with his most degraded companions, and unless restrained, openly indulged in this evil habit, and was extremely disagreeable and even obnoxious when interfered with.

After remaining much the same for some weeks, delusions of a hypochondriacal nature made their appearance, and he at one time complained of stoppage of the bowels, at another of pain in his heart, and again refusing to walk owing to fancied stiffness of his knees. He then imagined that he was changed into a bear, a dog, a cat and other animals, and endeavored to turn trees like these and to imitate their sounds.
Signs of physical improvement in the mean. time had taken place, but mentally he gradually got lower and more morose, fancying that everyone was against him; then imagining that his food was poisoned, and so again became thin and out of health. For over a year he showed little change, but by a course of extra feeding, tunes, and cold baths, he again began to get stronger and mentally brighter. He is now after seven years a hopeless chronic, doing a little work in the tailor's shop, and interesting himself in the petty details of the asylum, but in a condition more or less approaching dementia.

Some of the facts mentioned about the female patient to admission as gathered from the medical certificate were as follows.

Constantly on the move, said she was very well off, used obscene language, very destructive and threatened her mother.

Said that her father was the devil, that she could see what rising from the dead was
and that she was saved, prattling and screaming, saying she was lost and attended by Jesus. Very excited and constantly talking, laughing loudly and singing hymns, very destructive, smashes everything in her way.

"Says she is Jezebel and too wicked to live, that men swear at her, that she cannot sleep being so far from Heaven.

"She refuses to take food or medicine, declaring they are poison, and talks of imaginary objects believing they are going to harm her.

In the female as in the male maniacal symptoms are by far the more common, while states of depression though met with are much less frequent, and insanity at the period is essentially an acute delirium, excitement and excitement being usually the more marked features. But when depression does occur there is accompanying it as in the male hallucinations and delusions, but these delusions while
chiefly of persecution and so like in character to those of the other seas are generally of a more definite and fixed kind. The feature observed in nearly all the cases of an acute kind, more particularly in this sea, is their returning nature. For the patient, perhaps after a few days, becomes quieter and rational, this change only to be followed by another period similar to the first, and intermissions of almost perfect sanity may take place several times, before she begins to recover or drift into secondary dementia.

At times in this sea instead of violence excitement the attack is more of what is called a hysterical nature, and difficult to distinguish from true hysteria, which if it cannot be technically included under the term of Insanity is after all dangerously near to it. In this condition the patient is frequently erotic and obscene, completely self centred, and apparently oblivious of all external circumstances, though really taking notice of everything and perhaps drawing conclusions in her own inverted way.
In this type delusions and grandiose and largely religious in character are frequently associated with suicidal ideas and impulsiveness is a common feature. For the impulse is more often in the direction of cruelty or destructiveness than in attempts at self-injury, though suicidal tendencies are often mentioned in these cases. But these merely to a large extent to the discontent, for they are more often threatened than real, and it is rare to find as we do in other forms of mental disease, any very premeditated or deliberate endeavour to take their own life. Thus for example one of my patients threatened in what was called a fit of temper to drown herself, and even jumped into a shallow pond apparently with the intention of the river was only a wetting, and another occasion the same way woman wandered on to the railway track, but was careful to avoid a passing train.

Associated with the cerebral disturbance as a physical accompaniment there is often found in the hysterical type
Uterine ovarian irritation causing menstrual irregularities or amenorrhea. This condition of amenorrhea occurs also in another class of cases, where stupor is the most prominent feature. In these stuporous states the expression is dull and vacant, saliva dribbles from the mouth, the extremities are cold and haid in appearance, and anaemia is often profound.

The two following cases illustrate respectively the relapsing nature of recurrence in, and the stupor met with in the mental disease of the female adolescent—the two forms resulting in Recovery and the latter in secondary Amenorrhea.

C. M., aged 18, single, a domestic servant was admitted in October 1885. Her family history was decidedly neurotic—her father having died insane, and her mother was the subject of epileptic fits. Patient's personal history was however good, and on admission she was stout, well built, with a florid complexion
and the general appearance of a healthy constitution, although at the same time her pulse was rapid and irregular, her tongue much furled & her bowels constipated.

She was restless, excited, noisy & generally incoherent, but would occasionally answer a question, though more often when spoken to, simply grinned or laughed in a silly manner.

For five days she was much the same continually talking the greatest rubbish—a mixture of religion and obscenity—when suddenly she became calm and melancholy, scarcely ever spoke at all but was dull and listless, though emotional and affectionate. In the course of a few days she was brighter and more herself, but soon again became restless and talkative, noisy & obscene. This relapse lasted only a few days but after being followed by short intermissions of depression and more or less sanity a second relapse took place. This time she was much worse, more obscene & filthy in her language, very
destructive, and extremely dirty in her habits—
and the process of recovery was much slower,
but did not follow as on the previous
occasion, a period of depression. But very
gradually she became quieter, and
though at first slightly and unstable,
yet when once improvement set in, she
soon became tidy and in attendance, and
after seven months, residence was
Discharged Recovered.
Menstruation, which had been in
abeyance, set in a week after her
return home.

M.J.P. aged 16, single, a domestic
servant, admitted December 1885. Family
and personal history as far as known.
Rather good, but was the eldest of eleven
children, and had always to work
dward, perhaps often without sufficient
food.
On admission, she was thin, pale and
much out of health. Tongue dry and
furrowed, pulse rapid and irregular, and
a well marked Haemorrh.
Premenstruation had taken place previously on 3 occasions, but at irregular intervals, and not during the preceding 6 months. The onset of the attacks had been sudden, and she was restless, incoherent, restless, refusing to answer any question, or to take notice of anything that was said to her. Some days afterwards, she passed into a more acute stage, shouting and screaming, abusive and violent, impulsive and destructive, and very dirty in her habits. Chloral hydrate and potassium bromide in large doses, only produced little sleep and had practically no sedative effect.

At the end of a fortnight she was quieter and more rational, although excitable, persevering, and emotional, but from this time improvement set in, and she was discharged 4 months after admission, still and in good health generally, although the menus had not made their appearance.

On April 1887 she was admitted for
a second time, with much the same history as on the previous occasion, and in much the same condition. This attack, like the former, was characterized by the acuteness of the symptoms, and by the shortness of its duration, for at the end of a month she was quiet, rational and well-behaved, and at the end of 6 months was sent out again having made a good recovery.

Menstruation, which had never been regular, made its appearance about 6 weeks after admission, and continued each month until her leaving the Asylum.

A longer interval elapsed between the second and third attacks, than between the first and second, for it was not until January 1850 that she was once more readmitted. On this occasion she was in better health, and was, at first, quieter and better behave; but soon, like in the same old condition, and gradually became even worse, more filthy and degraded, and much more
impulsive and destructive. This time too she was much longer in beginning to recover, and the recovery was much slower so that she remained a patient for over nine months.
The menses which were suppressed on admission, made their appearance about 3 months afterwards, and improvement was coincident with the state of the menopause.
Now three years have passed, and to this day she has remained well.

M. H., aged 19, single, dressmaker, admitted May 1886. Father was a drunkard and her mother died from decline while she was still a child, so that her early training was very defective. The exciting cause of the attack was said to be seduction, but of this there was no proof except that the menses were suppressed.
On admission she was in good general health, but mentally was dull & stupid, passive and resistive & absolutely refused
to speak at all. She gradually became more stuporous, until she was in a condition almost amounting to catalepsy, standing immovable all day, and keeping her limbs for a considerable time in any position in which they might be placed. For some weeks she remained in this frozen attitude, but after the continued use of cold baths and the constant current, she began to show signs of improvement, and by the end of July was fairly bright and cheerful, though mental aberration was not entirely absent. She next passed through a stage of emotionalism and impulsiveness, only to be followed by another period of stupor. On the same treatment being applied, she again became brighter, but now instead of a return to comparative sanity, degeneration set in, and she is at this time a lazy, slow and indolent chronic, fast drifting into a state of hopeless dementia. Menstruation first appeared about
seven months after admission, and then there was some slight improvement in her mental condition for a few days, but since that time, though the meausos have continued regularly, there has been no apparent change in the periods.

Having thus described their leading characteristics, and having given cases illustrative of the different types of Insanity as found respectively in the male and in the female Adolescent, I shall now point out that there are several features common to both sexes. Thus maniacal states predominate over melancholic, intemperate and delirious are frequent, hallucinations both auditory and visual are not rare, and delusions mostly subjective and of the form of persecution are met with, and lastly in both sexes, there is a high percentage of recovery. This latter fact is well shown if we compare the Recovery rate for my Irish and Patients generally with
that of the 70 Adolescents in particular, and the following figures indicate in a graphic manner the great difference.

Recovery out of 1000 cases 379 o. 37.9 per cent.

" 90 " 54 o. 60 "

Thus the period of Adolescence though it is a time of grave danger to the developing and unstable brain, yet from the above figures it is evident that compared with other forms of Insanity that of Adolescence has a much more favourable chance of Recovery.

In giving our opinion however as to the ultimate result in any case, four factors will materially guide us, for although as has already been shown the Recovery rate is high, yet in individuals, our prognosis will be much influenced by the age and sex of the patient, by the type of the disease, and at a later period by the length of time that has elapsed since the date of admission.
Age. From the following tables it will be seen that, while it is in the earlier years of development, that liability to mental break down is most common, that it is in the earlier years that the larger percentage of cures takes place: for while more than half of the recoveries among the females are met with before the age of 19, and nearly half among the males before the age of 20, of the chronics 12 out of 14 of the one sex, and 14 out of 16 of the other, occur at a later age.

Of males:

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Recovered</th>
<th>Chronic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between 16 and 17</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>17-18</td>
<td>3</td>
<td>10 1 2</td>
</tr>
<tr>
<td>18-19</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>19-20</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>20-21</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>21-22</td>
<td>3</td>
<td>12 5 1 14</td>
</tr>
<tr>
<td>22-23</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>23-24</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>24-25</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Total for all ages</td>
<td>22</td>
<td>16</td>
</tr>
<tr>
<td>Age Groups</td>
<td>Recovered</td>
<td>Chronic</td>
</tr>
<tr>
<td>------------</td>
<td>-----------</td>
<td>---------</td>
</tr>
<tr>
<td>16-17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-19</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>20-21</td>
<td>14</td>
<td>1</td>
</tr>
<tr>
<td>22-23</td>
<td>12</td>
<td>4</td>
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<tr>
<td>24-25</td>
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<td>2</td>
</tr>
<tr>
<td>32</td>
<td>32</td>
<td>14</td>
</tr>
</tbody>
</table>

As already mentioned, the percentage of recovery for adolescents, as compared with all cases in my statistics, was as 60 to 37.9, but this percentage is not made up in equal proportions by the two sexes, for while of the males only 63.1% were deemed as cured, as many as 65.7% of the females were discharged recovered, so that it is evident that in the case of the former our prognosis must be
More guarded than in the case of the latter.

Type of Mental Disease. I have already shown that mania as a symptom of mental disease in Adolescence is much more common than Melancholia, and just as states of excitation are more frequently met with than states of depression, so of these the former evinces a greater tendency to cure than the latter, for out of 59 cases of mania 73 per cent. ended in recovery, while out of 31 of Melancholia, only 57 per cent.

Duration of Attack. The last factor which has to be taken into consideration when we estimate our prognosis cannot be said to be of equal value with the others, for it is not until a much later date in the duration of the disease that it comes into operation. But it will be seen from the following facts that recovery took place that after the first few months...
our prognosis can to a large extent be guided by this element—six of the male cases more than a half recovered before the 6th month, and of the females the same fraction before the seventh, while of the remainder of each sex all with 4 exceptions were discharged within a year of residence.

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under two months</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>From 2 to 3 months</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>&quot; 3 to 4 &quot;</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>&quot; 4 to 5 &quot;</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>&quot; 5 to 6 &quot;</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>&quot; 6 to 7 &quot;</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>&quot; 7 to 8 &quot;</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>&quot; 8 to 9 &quot;</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>&quot; 9 to 10 &quot;</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>&quot; 10 to 11 &quot;</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>&quot; 11 to 12 &quot;</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>&quot; 12 to 13 &quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot; 13 to 14 &quot;</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>&quot; 17 to 18 &quot;</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>&quot; 27 to 28 &quot;</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>32</td>
</tr>
</tbody>
</table>
In conclusion and to sum up the history of the 70 cases of Adolescent Insanity, which I have considered in the foregoing pages, I find that 54 recovered, 16 died, and that 30 still remain under Asylum treatment.

Of the 54 who recovered, 15 have already relapsed, but of these 10 have again been discharged as cured, while of the remaining 5, one is still deemed hopeful for the other 4 help to swell the chronic ranks.

Of the 30 who remain, 8 may still make a recovery, and of the others 9 have acquired a more permanent form of Insanity - Atypical, or Recurrent, and 13 have drifted into a state of Vegetation or more or less Alzheimia.