Bronchocele, a beneficial physiological action.

W. L. Purves
1. A local symptom of constitutional disease.
2. Vig. imperfect blood.
3. Compounds with ordinary cause the eruptio form which are symptomatice, i.e. with ulcer and other clinical concern.
4. Are there not two varieties: A. Ulceratious & local
   B. Symptomatice
5. Interchange of variety A & B.
6. Eruption may be common in Attacks for acute yet known.
7. Treatment should be general and local; the latter,pls. see letter 2/18.
As Science advances, so enigmas arise, but as steadily do men come forward, willing to devote their time and attention to the solution of such problems, and as surely, and as steadily, does Science "creep on from point to point." But, though proceeding thus slowly, and without the hope of any science reaching perfection, at our time at least, it is not the less our duty, as bound by obligations to those who have gone before, and who have done so much to aid us in our researches, to do our endeavours, though that may be unsuccessful, to clear away some of the mists which hang around many of the disputed questions of Science, so that in time, successive growths may at least reach the climax to which it is possible to attain in this sublime creation. Impelled partly by a sense of this duty, and partly by
a Statistic of the University, I propose to devote a few pages to a subject of which I have seen something personally, and which has within the last few years been receiving attention from several of our most learned and scientific Physicians.
Nature not only shows her wonderful powers of contrivance, ingenuity, and foresight, in that grand universal round by which the Botanical world is enabled to supply its wants and necessities from the Elementary, and in its time to provide for the demands of the Herbivora, or with them to relieve the claims of omnivorous man, who again returns to his parent dust, but also has established more minute analogous physiological actions in the living body, which though not extending so widely and universally, are not the less admirable and wonderful. Neither the inactions of the human mind, the more we study and the closer we investigate the productions of nature, the higher do we find her power to be, the greater display of marvellous beauties do we discover, and the
the greater must our admiration become. The mechanical productions, and the inquisitive inventions of man are truly astonishing, but if put in the balance with the every-day actions of nature, they would yield the balance and be found sadly wanting. If a machine could be placed before it, which not only supplied itself with its own fuel, discharged its refuse by its own action, and performed its destined work regularly, but also could remedy any slight disorganization of function, which was not actually fatal to its existence, as a machine and the performance of its duties, and which remedy was called into action by the mere fact of its disorganization, we might then say that we had found a perfect instrument—such is a living organism, such is Man! This ever watchful physician, this universal acting remedy, called the life principle nature, is seen daily at labour, and to one of her most beneficial and wonderful appointments, I beg to call attention in the following brief Thesis.
This vitruvian nature is not only placed in each of the separate tissues of the body, by which each tissue is able, of itself, to meet any urgency which may arise, by supplying itself from the remedies which are placed within its reach: not only can a sister organ act and wake up for the deficiency in another; but one organ, entirely separate in character and function, may be influenced by, and, as it were, sympathize with, the necessities, and attempt to relieve the "ripe wants" of another. Examples of this may be found in the physiological actions of every day life. Dr. Beaumont has shown in his treatise on Digestion, that the amount of the gastric juice is regulated by the requirements of the frame, a greater supply being produced, when any greater demand is made for its action. It is also noticed as Hypertrophy of the left ventricle from Aortic obstruction, in the supplies of Masticators to the toothless gums of the Child, when this time comes for
Bronchocele apusco, Sperma Celli, Semenexemata, Hydrocele Celli, Hydrocelo Bronchocele, Sperma Gymnia, Sarcoma Cellulosa, Apunche Lipoidea v.
for its subsistence upon hardier food
than the hither's milk, or in the various
action of the skin and kidneys, of
such a nature, and for such a pur-
pose as I believe, the Hypertrophy of the
Thyroid Prand, of which we are about to
make a few observations.

The Enlargement or Hypertrophy
of the Thyroid body, generally termed
in this country, Monochocal, or Goitre, or
Derbyshire keel, is also known by a
host of other Synonyms, only to be
equalled by the extent of its distribution
over the habitation globe, extending as it
does from 70° both Latitudes to 50° South,
and in all circumferences from the frozen
peaks of Arctic, Lapland, and the
Arctic's land, to Bataan, India and
Sriatara, but having its chief stations in
an intermediate Latitude, viz. in the Valleys
of the Rhine and amongst the Pyrenees,-
or by the attention it has received in
all ages, and from the physicians of
all countries, comprising amongst them, some
of the most celebrated Medical Men of their
day.
The forms of Bronchocele which are written or spoken of, nearly rivet the names in bumble, and we read of Vascular or Aneurysmatic Bronchocele, of Kernels Bronchocele, Dephanech Thyroid, Lericibus Bronchocele, Knox Cysts, of unhealthy and prevented action, adenitis formation, Endemic Bronchocele, Whewers Bronchocele, Cardiognosis, Congenital, Spinalic &c., but, though believing that all these may, and do occur, I think that by far the most common, easy that almost universally known as Bronchocele, is that noticed above under several different names, and which consists in a true Hypertrophy or enlargement in body, and increase in function of the Thyroid Gland, and it is of this fluid I will speak, not beating the subject in full, nor making any lengthened remarks on the points already fully ascertained and certified, but glanceing more particularly at those questions which are still in dispute, and endeavouring to elucidate them from the observations of others, and slightly by hastily observations made by myself in a district where Gatre may be almost said to be Endemic...
It will be necessary for the more easy exposition of the subject, to take along with us, for obvious reasons, a slight knowledge of the origin and development, of the secretion and functions, of the relations, and of the differences in the two sexes, of the Thyroid body.

Of its origin and development, Professor Gooden says, "it would appear that the supra-renal capsules, Thyroid and Thyroid are persistent portions of the Membrana intermediate of the germinal area of the ovum, retaining throughout their existence the original simple cellular constitution of that portion of the germinal Membrane. During the first stage of the development of the animal's ovum, digestion and respiration, the absorption and preparation of nutriment, are carried on by the blastodermic, a structure consisting of nucleated cells and of epithelium." And further on, he says, "The structure of these three organs, (the Thyroid, Thyрума, and supra-renal capsules), is identical with that of the blastodermic."

Of its minute structure, Todd and Bowman
Encyclopedia of Anatomy and Physiology
in describing the gland, say "back vessels," may therefore be described as consisting of a fleshy coat composed of acinar tissue, internal to which there exists a delicate basement membrane lined by cells of epithelium, which vary somewhat in character, but usually are seen as polygonal or almost circular cells of a faintly granular appearance and having a nucleus, which, however, is by no means invariably present - the most cases the nucleus can be seen to be lined with a single layer of this epithelium, and many the cells are usually found floating in the fluid contained in the cavity.+++

The blood vessels are exceedingly numerous, and form a capillary plexus round each vessel, and as to the contents, the field shows from the fact of its epithelial structure consisting of bare nuclei, and from the chemical nature of the secretion being of a simple fluid, composed with the products of the tendo or hepatic laboratories, think's that the change effected by the thyroideal epithelium on the liquor buminis supplied to it only as means considerable, and in another part of the
The same authors suppose that it is a congeries of (nuclear) particles which can only be regarded as solidified liqueus saigneuris, and not in anywise as a true secretion, and says Chemical Analysis confirms this, as the contents are identical in formulae with that of protein. These facts are confirmed by all the recent writers on the anatomy of this body.

The relations of the Thyroid to the structures in its neighbourhood are of much importance in considering the symptoms which may arise when it is enlarged, and the effects which such enlargement may produce on distant organs. Of these Huxley Jones in his article on the Thyroid above quoted says, "The lateral lobes, concave posteriorly, embrace and rest against the sides of the Trachea, the Archoid Cartilage, inferior and lateral lobes of the Thyroid Cartilage, and the lower part of the Pharynx and upper part of the Cricopharynx. This relation, one of great importance, explains how certain goitres flatten the Trachea laterally, hinder deglutition, and finally bring on a real Apoplexy."


Apoplexy from manipulation - The posterior border of the lateral lobe corresponds to the vertebral column, and rests upon the aortic arch; but if enlarged, it extends further outwards, and lies upon the jugular vein. The sternohyoid and omohyoid muscles pass in front of the lateral lobes.

The functions which have been ascribed to the thyroid body are numerous. It has been thought to have been placed there "as a protection to the larynx and the other delicate parts of the neck," but its different site in birds, ranging as it does in them, and not being constantly found over the larynx, a indeed on the neck, negates this idea. Again, it has been thought to supply a fluid to the larynx, but we find no duct or connection with that structure for the conveyance of such a fluid. Galen held that it was placed to fill up the hillocks and hollow in the neck of the female, and give the neck its rounded elegant appearance, but nature has provided a far more suitable agent for such in the adipose.
adejove little which we find giving to
the female, the graceful, mild, and to much admired. Of the suggestion that
it takes up certain moisture from the recurrent
nerve, we may merely mention it. Another
opinion, which has been much insisted
on, is, that it acts as a stimulant to
the cerebral circulation. Harvey thought this
probably, as he found it enlarged in con-
nection with diseases of the heart, but we
know that Parry had not the means of
making a diagnosis of cardiac disease
which we now profess, and could not have
said whether the disease was functional or
structural, and that the means at his com-
mand were wholly inadequate even to allow
him to tell what part of the heart or
indeed to be certain that it was that
agam for so that was at fault. In sup-
port of this it has also been said, that
the relation of the sigmoid arteries to the
central arteries as they do, in close proximity
to these vessels support it, and also, that
the secretion of the glands is merely a
modification of albumen, and that it
seems
secretes quickly. So here we should ask, why it secretes venous blood? Nature is never prodigal in her supplies, and she would never make the change which does occur serve no good purpose. Or why should the gland, so of such immense disproportion in the Male and Female, finding it as we do the only organ common to both, in which that of the Female predominates so much in weight and bulk over that of the Male, while the very opposite would have been expected from the greater size of, and greater demand of action on, the brain of the Male, and also its proportion in relation to the Brain is much larger in the female than at any other period of life, put the time at which there is no sleep, put upon the action of the Cerebral Liqueur, — but nature has remodelled of the means at her command has provided much easier and more certain means of avoiding any prejudice on that important organ, the 'soul's fruit dwelling house,' by constructing the braincase, so that it cannot hold at one time, more than a certain fixed quantity of fluid.
Jones admits that it is a secreting gland of some kind, and if so, that its secretion must be capable of absorption. Linnaeus thought that it was for secreting a large amount of nutrient material on any diminution of the nutritive force in the brain, and Goodier says, speaking of the Thyroid gland and supra-renal capsules, "Their principal function, namely to prepare by the action of their nucleated cells, and to throw into the vascular system a matter necessary for the nutrition of the Animal during the period of its active growth; a function which the observations and opinions of the majority of physiologists have assigned to them; is also essentially the same with that of the blastodermica, differing from the function of the blastodermica only in this, that the blastodermica not only elaborates nourishment for the Egg, but absorbs it also from without, that is from the Yolk, whereas the three organs in question, only elaborate the matter which has already been absorbed by the other parts, and is now circulating in the Vessels of the more perfect individual;"
but Professor was the first to point out that the blood corpuscles were derived from the lymphatic glands, and this view is confirmed by Professor Brunswik, who in the summary of his work on hemocyanin concludes "that the blood corpuscles of vertebrate animals are originally formed in the lymphatic glandular system, and that the great majority of them on joining the circulation become coloured in a manner that is yet unexplained. Since the blood corpuscles may be considered as a secretion from the lymphatic glands, although in the higher animals that secretion only becomes fully formed after it has received colour by exposure to oxygen in the lungs. That in mammals, the lymphatic glandular system is composed of the spleen, thymus, thyroid, suprarenal, pituitary, parietal and sympathetic glands," and some would also add the pia mater. That in certain hypertrophies of the lymphatic glands in man, these cells elements are multiplied to an inordinate extent, and, under such circumstances, find their way into the blood.
blood and constitute an increase in the number of its colourless cells.

On consulting Gall and Sharpey's Anatomy, I find that the Thyroid body is in the female of the average weight of two ounces, while in the male it is only one ounce. The other blood glands mentioned, the Spleen and Supra-renal capsules, have the same average proportion as the two liver, that the other organs of the body common to both sexes, maintain, i.e., those of the male in all cases, predominate over those of the female. This single exception to such a universal rule surely points directly to some connection with the different genital organs of the sex, and if we look at the prevalence of the enlargement of the gland amongst females, or at the age at which such is most apt to be developed in them, or at the causes assigned for its appearance, we will, I think, find abundant proof, that there is some very close connection between the functions of this gland, and the functions or Diseases of the genital system of the female.
Of the relative frequency of breechceils in the Female, I need say little, as it is admitted by all hands and has been noticed by all writers on the subject. Without brouching with wearisome particular statistics, I may merely mention, that of 601 cases gathered from reliable sources in the different works I have consulted on the subject, only 77 were males, the remainder being females, and I thought this above the usual proportion, 1 in 10 being female child by some to be the average, and some go even higher than this. But I find that Continental observers in the localities where it is seen to such an extent that the want of the yoke is the exception, tell us, that the proportion of males is much greater here, being about as much as 1 Male to 2 Females.

Of the Age at which the breechceil is developed, we have not such accurate statistics, but we have a few. Some have seen congenital cases, but they are from all the researches I can make, few, and ten cases have been the whole...
I can find ... of these we get no description of the state of the child in relation to its vigour, or whether it survived for any time.—of the other four, recorded by Professor Simpson, we have the following: two died shortly after birth, and two of them were hydrocephalic.

Of 111 cases recorded by Angleis, 63 occurred between the ages of 10 and 20, 24 between 20 and 30, and the remaining 24 at different dates before 60 years of age. In the Cases of Myelisation, he says, in females, it occurred generally between the ages of 20 and 30; and in males from 30 to 35.

In the Edinburgh Medical and Surgical Journal for 1834, 23 cases are mentioned, of which all except one, occurred between the ages of 20 and 30. Dr. Brittain says of a collection of 23 cases of which accurate accounts have been given in British journals, 20 to 30 was the most frequent age for the development of the Broneholec. — Copland, who saw a great amount of it, thinks that it never occurs before puberty, and many circumstances point to the general correctness of
Methland, Balby, Highs
of this observation. It will therefore be noticed that the enlargement almost universally occurs during what may be called the reproductive period in females.

The causes assigned for the enlargement of the Thyroid Gland are multi-farious, but we need only mention here so as to make our deduction from a general view of the whole. The popular opinion, and that supported by many medical and non-medical investigators, is, that it is caused by the water drunk in those parts where it is endemic, containing some substance which has the effect of producing this action on this particular organ of the body, and the substance generally thought to be present in lime, and so universally is this acknowledged to be one of the great causes of Bronchitis, and by some thought to be the only cause that in one of our newest British Handbooks on the Practice of Physic, Francis Murchison defined, as "a specific affection" of the Thyroid Gland, induced by the persistent use of water, which has percolated through Mafrian limestone rocks or Shata, containing the soluble,
soluble salt of lime in solution.

Magnesian lime-stone (English), Alum (Coventry), Sika (Glover), Sodic (Saline), Copper - oatmeal
(Food), Snow Water (Purig), Action ofCold (Carlisle), Humidity (Fred. Clarke), Deep Valleys, Spring Water
more than surface Water, Changes of habits of life, carrying heavy loads, congestion of blood
result of climbing hills, confined state of the
atmosphere, have all been thought to cause it.

Of the more specific and immediate causes noted by British and Continental observers, we
may mention, Parulisation and Menstruation, (Boitard
day always in his practice), Renuncia
Menorrhagia, Dyspepsia and Urinary derangement,
Hemorrhoids, imperfect performance of the
functions of the ovary, in short any uterine
derangement or lack of blood is apt to
cause it. Others again have attributed it to
the same cause as Intermittent fever,
and thought the one negatives the occurrence
of the other - while others hold that Atrophie
and Torpe Direct looks to the same origin,
including us these poverty, dirt, impure
atmosphere, humid exhalations, bad food &c,
and these ideas are supported by Hellebard's
researches.
Good, McQuillot &c.
researches in Hincmar, and who says that
infever and berleuizium are but varieties of the
same disorder, and that the principal cause
of both is an error lice or arrangement of
the functions of the absorbent sytem; and
he is supported by many in thinking, that
delicate, ill fed, and neglected children in
certain villages became affected by the Disease
and the course of a year or two after they are
taken from the breast.

Some again have

lived to have a predisposition to it in
families of the scrofulous diathesis; and
Robertson has held, that it is only seen
in such as in England; and Mr. Hall and
say the circumstances which give rise to
scrofula would under the existing causes of
sore give rise to it.

That all of these causes have been
induced by the writers who mention them,
and that they are causes of scrofulose,
we can have little doubt, but that there
is any one particular cause to the exclusion
of the rest is, I think, a mistake: because
sore or leprosy is found in one locality
here.
where it is endemic, and not in another, does not entirely negative the statement, that theieee may be the cause of the Pneumatic
scale, or because it is been frequently con
nected with some affinities functional, damage,
does not prevent it occurring as a consequence of some imperfect performance
of the functions of the absorbent system.
And the immortality of cases from a Disease
though exposed to the same exciting Cause,
and the liability of others to it, are facts
which have been universally observed in
all ages, and with respect to all Diseases,
even including those which exhibit the
most contagious properties.

It will be noticed that most of
the Causes are of a debilitating kind,
either by the introduction of substances into
the body, which will have a deleterious
effect on the system, by impoverishing or
destroying the life giving fluids, or by
the actual drainage of that fluid from
the body, or by the want of supply of the
requisites for the formation of blood, or the
matter being supplied, by influences which
prevent
prevent the due assimilation and purification of the blood, so that the system is unable to maintain its usual normal standards. It may be observed that all these causes point to one common necessity of their action, or to the more immediate cause of the Bronchocele, an improvement of the blood. The sex of the affected also favour this view, liable as they are to many more of the causes adduced peculiar to the Female, or as Lebanci says 'by a severe necessity attached to the role which native augurs to her, woman is subjected to many accidents and incumbrances; her life is nearly always a series of alternations of health and suffering, and too often the suffering preponderates.' It is to meet such emergencies that we have such a normally enlarged Thyroid in the Female, over that pre-eminently by the Male. That this improvement of the Blood is the cause of the Bronchocele is most likely, from finding that Anoxie is produced under the same influences, long continued.
continued. Hemorrhages, exhausting discharges, starvation, chronic diseases, certain poisons, etc.

fective assimilation of the air and oxygen, that it is so universally present with meningitis, &c. Mr. McRae says that he has seen "no instance in which some anemia was not developed in every patient, given by the history, or mitigation on removal by the proper treatment" (it being remembered that the eye may not detect anemia, and yet "the murmur at the base of the heart, the tinnitus in the unanesthetized ears, and the want of pulse of the unfilled arteries" heard by auscultation all testifying to its presence), and that all the symptoms are capable of mitigation, by means which improve the quality of the blood.

That there is an oligemia present is also spoken to by many of the symptoms seen in the patients, and of these we will take a passing sketch. Mr. McRae speaks of the pulse being small and jerky, ranging from 130 to 135, of incoordinate action of the heart, labored respiration, vertigo, headache, pain in the large...
large, arteries, bellows murmur in the Aortic orifice re, and in another case of the Continuous rushing sounds in the veins of the neck, and hypochondral swelling, and the whiff of the carotids. The harmie hear: their spoken of in the above is always of a soft nature, it never later the place of the first breath at the base of the heart, as the organic systolic murmur will do, and the whiff in the large arterial trunks is of an intermittent character, being heard with each pulsation, while the Venous bruit or our Continuous "hissing" sounds. The causes of these sounds are yet doubtful; they have been ascribed to "unusual vibration among the particles of blood, either by mechanical obstacles in its passage, or (whether directly or indirectly), by a change in its constituent elements, and quite independent of such obstacles." For their production in anything like perfection, Dr. Hamilton Begbie thinks that there are two circumstances necessary, firstly a marked excess of Water over its Corpuscular Elements.
of the blood, and secondly a considerably
swelled action of the heart," and says "Then
these conditions have co-existed, I have never
failed to identify the Cardiac and Vascular
Auricular Murmurs. Have we such a fault
in any other normal or pathological condition,
or can we produce such? at the
pregnant uterus we have the placental
bruit. No doubt arising from the sudden mixture
of the blood from narrow vessels to the comparatively
large spaces of the placental cells, also
we find it a diagnostic in acute Thromosis.
the blood vessels to which have also been
gently enlarged, or we may produce it
by pressing the stethoscope on the jugular
Vein and so partially obstructing the
passage of the blood. May it not there-foe in this case arise from the same
causes, from the small amount of blood
entering the large vessels, which are capable
of, and generally hold a much larger
amount of blood normally?-

From the position of the heart
to the heart itself, pulsation is often visible,
especially when one side is chiefly affected.
caused by the rapidly healing Cancer lying beneath, and it may simulate an American on that effect.

Gooplande in speaking of the symptoms which may be present says, "then the tumour is very large or hard, or where it has increased suddenly, it not unfreqently occasions most urgent symptoms by its pressure on the Throat, Oesophagus, or Jugular Veins? It is free from pain usually, unless when pressing upon some nerve."

Latham says we find with a host of other symptoms the surface pale and cold, palpitation and Dypnea, Appetite pervers, digestion imperfect, nutrition insufficient, secretion scanty and unhealthy, pain everywhere, a shattered nervous system, and infatuated brain, all pointing to one common source, an impoverished state of the blood"—and this latter closely with the description of the goitrous peasants of the Himalayas as described by McFadden, of the Alps as pictured by Willis.

But of all the symptoms which are seen,
seen occasionally with it, that which has engaged the greatest attention lately and indeed the connection or association with which has only been recently pointed out is the exophthalmie, or Bulbillata, of which so much has been said and written within the last few years, and its association with which has received several distinct names as Graves' Disease or Baudouin's Disease. Lawrence and others indeed deny this connection, but there is on the whole an acknowledged relation, but the cause of the protrusion has offered a fertile ground for controversy. One thing we may premise, that there is generally no pain, and that the vision has been little affected, though this is sometimes seen, as in one case which I saw in the South of Scotland, where the protrusion became excessive, so much so as to make the eyeballs hang in a very uneasily condition out of the orbits over the palpebral protruberance, the vision became completely lost, and for some time before the patient's death, which was caused
by another Disease, she was wholly blind. — Thephthalmic Condition has been thus described by Dr. Negri in one of his cases, "The eyes were prominent and staring, giving a wild and startled St. In the Countenance, the Albuginea binually visible, and darker than natural, from a highly developed Vascularity. There was a painful sense of distension of the eyeballs, but no diminution of vision. These conditions were aggravated when the face was flushed, or the heart more violently actted. An enlargement of the Thyroid was manifested simultaneously with these symptoms, but in the majority of the recorded cases it preceded the enlargement of the eyeballs, yet was concomitant to the palpitation."

The cause of the protrusion has been alleged or supposed to arise from many circumstances, mechanical or nervous. Some have supposed that it was effusive in the vitreous humour. One prevalent opinion maintained by the German Physiologists and by others in this Country is, that it..."
Barlow,  

Waltos

Withden Holmes

Billingham Mackenzie

Fletcher

Paper read to the Medical Chirurgical Society of Edinburgh July 7th 1863.
it is caused by a want of tone in the ocular muscles. Congestion in the posterior part of the eye, increase of the cellular tisue, or of the fat in the cellular tissue behind the eye, enlargement of the eyeball, for to, congestion of one or several of the different venous plexuses so abundant in or around the eye, as of the deep retinal veins, or of the choroid; Drosy of the globe; Pressure of the blood vessels on the nerves of the muscles of the eye; Varicoeyty of the ophthalmic veins, or simple hyperemia have been alleged to be all causes of the protrusion. Professor Syrface, in speaking of the causes of the exophthalmos says: "In cases of death from strangulation the eyes are seen staring and prominent, under a powerful emotion of fear or horror, and were where severe bodily pain is felt the eye "stares." Then there are cerebral mental states involving the emotions and the intellect, in which the same appearance is so common, that the repetition of the emotion in cases of exophthalmos is described by several.
several writers as being wild and maniacal. As to all these various instances it is a fair presumption that in each the same mechanism of the eyeball is influenced through the nervous system, and in a pair of the same paper in reasoning on the causes of sympathetic ophthalmia, from these data he says 'we might conclude, that when it occurs in strangulation it is probably due to mechanical injury to the cervical sympathetic by the tightened cord or other violent means used; in the emotional form the condition is probably alike that when the sympathetic is galvanised, the face being pale and the eye staring; in certain violent cerebral conditions such as mania with spilgery and general paralysis, the brain is probably in the first instance paralysed of the sympathetic, and subsequently of the fifth and seventh, and finally, that in the class of cases under consideration, when the sympathetic ophthalmia is symmetrical it is spacial, the cervical and upper dorsal region being the seat, together with
with the corresponding cervical and dorsal divisions of the sympathetic, but when
symmetrical, it is due to disease of
the trigeminal ganglion, and branches of
the fifth pair."

The pathological appearances do not favour
these many theories, and we are reduced to
two, that of Professor Laycock, and that of
Haller:—that the poisoning may be occasioned
by lesions of, and that the eyeballs are
under the influence of, that part of the
spinal cord known as the oculo-spinal,
and which comprehends more especially the
two last cervical and two first dorsal
nerves, i.e., I think, now clearly proved, and
that it may result from lesion of the
function of the sympathetic in connection
with this part of the spinal cord,
no one will deny, but that it is over-
shadowed by other means in some instances.
I, think, pretty clear from several obser-
vations made in connexion with this as
well as other cases. — For instance, Fisher
says, "It may be reduced by pressure applied
to the Carotids, while in fatal cases, the
hips are observed to move within the orbit after death, and we know it may be produced by pressure on the jugular and so preventing the return of blood from the head, when there would be no such lesion of the sympathetic as Dr. Sayeck has to necessary for the protrusion. In a case recorded by Dr. M. we find the following on examination I found that there was a thick neck and a small bronchocèle, of which the right half was larger than the left. The fossa was now limited to the left eye, the patient being unable to raise the lid, and there was increased heat on the left side of the head. After treatment with extract of chamomile, hux verm, and sulphate of iron in small doses, the oedema and other symptoms disappeared, and the enlargement of the thyroid was now restricted to the right lobe. In this case had not the reduction of the thyroid any thing to do with the removal of the oedema? That the thyroid may help when enlarged upon the internal jugular vein.
V Few is of the greatest probability, if we keep in remembrance its relation to that vein, and that it does so we know. Sir Henry Marshall records a case in which one lobe of the Thyroid lay over the Carotid, and received a pulsation from it, and on post-mortem examination it was found that the internal jugular vein of the right side was found to be "one and a half inches wide when empty," evidently speaking to the amount of pressure it had been subjected to. And again, we find in death from suffocation in a drunken fit, when no cord or other means of pressure are present, by which the sympathetic could be hurt, that the face is flushed and livid, the veins of the head and neck swollen, the eyeballs starting from their sockets, and the swollen tongue protruding from between the teeth, all certainly pointing to a hyperemic condition of the internal parts of the head. And again, we find that hemorrhages of the brain occur infinitely more often on the left side than the right.
and we would suspect that the left eye or left lobe of the thyroid would be correspondingly the most frequently affected, while in reality observers have given us the opposite statement, and Albert Pickworth and Greenlaw, who are the only observers of this point that I have met with, all concur in saying that the right lobe of the thyroid is more often enlarged than the left, and Dr. Pach says of 9 cases of Proptosis, 5 were unilateral, the right being the one affected.

May we include of the orbit of the sheep, especially for the first time described by Mr. Turner, and which evidently seems to be for the purpose of protrusion, if present in the orbit of man, not have something to do with this much disputed Proptosis?

Does the sequence of the appearance of the three great symptomatic not favour any of these views? If any, it leans towards the support of the Thyroidal Enlargement being the cause of the Proliferations, and all agree that the palpitation
Palpitation nearly always precedes the other symptoms, then the gland enlarges and afterwards the eyes become prominent.

It has been contended that the whole of the symptoms are of a nervous origin, something influencing the cardiac nerves, which again act on the thyroid body, and then on the eyes, whilst others amongst the principal of whom are Dr. Neglie and Latham hold that the essence of the disease is an impoverishment of the blood, which acting by the rapidity of the circulation on the cardiac nerves, acts on the heart and vessels to this action. Those who maintain the nervous origin of the disease, say that the fact of the great majority of those affected being females speaks to this view, though I think this as fully supports, if not more so, the nervous origin of the malady, if we remember the much greater liability of the females to the causes which gave rise to the affection, and the close relation and sympathy through the spinal cord, between the brain and the thyroid. Does it...
Hernsipical Journal for 1863.
its frequent concomitance with Hypertrophy of the spleen, and as Leucocythaemia. Can this not favour the opinion that it is a Blood disorder? and I think the actually Leuco-

"cythaemia. Condition" of the blood of the patient where it is prejudiced, goes also far to prove this. "Dr. Holland in recording a case says, the "spleen was normal in size, colour, and consistence. The blood taken from the left ventricle exhibited a free demonstration of that state to which Professor Virchow gives the name of Lymphemic, and D. Burnett that of Leucocythaemia, the colourless corpuscles being about seven or eight times more numerous than they appear ordinarily in healthy blood, and that an opportunity of having the observation confirmed by my friend Dr. Robert MacDowell of Dublin, who was at that time in Vienna." In another case where the same author says, in which the Thyroid was enlarged four or five times its normal size, while the spleen was in every respect normal, he says that "blood taken from the pul-

monary artery contained so great an excess of
Medical Journeys Report for 1864.
then colourless corpuscles, that they filled the greater portion of the field." Dr. Heale confirms the above observations of Dr. Holland, and on examining the blood in seven cases of females with goitre he says "those only who have had the opportunity of examining the blood microscopically in cases of Erythema depending on Splenic Disease, will see the close analogy of the blood in that disease with the case above noticed, although the pale corpuscles are not so plentiful in the latter as we often find them in the former affection." These observations I can myself confirm, as I have found the same condition in all cases of goitre which I have examined at the Schools of Scotland, in some of the villages of which it is endemic. Dr. Heale observes further on "in all the above cases, the number of the pale corpuscles was decidedly increased, in some greatly so, and in most, the size of the pale bodies was also materially increased." I there any link between the increase in size of the corpuscles, and that seen in the
fetal capillaries? In the fetus all the blood-glands are in their greatest activity, and attain their greatest proportionate bulk. In pregnancy also, not only does the thyroid gland frequently enlarge, as has been before noticed, but the observations of some would lead us to believe, that there is also an increase in the size of the spleen, and in one patient of Professor Simpson's, there was an enlargement of the spleen at early pregnancy, and this to such a great extent in some cases, that it has ruptured in the efforts of Parturition. Vichow also asserts that there is always a leucocytic condition present in pregnancy.

It has been held that there is a relation between Goitre and several other diseases, more especially to Syncytia and as mentioned formerly they have been ascribed to the same cause, and it was thought that the presence of Goitre in a locality negatives the evidence of Bronchitis, and that are having died disappeared in districts where formerly it was
was prevalent, Bronchocele has taken its place and become endemic. But it would seem that wherever goitre is prevalent there also are seen many debilitating diseases, for example, Webster in his Tables of Disease, which occurred at the two different stations of Petropaur and Schooghat (which were two of the places he cites as examples of the Disease, in consequence of the action of Manganese Lime Stone). It is seen that at Petropaur, where goitre occurred in an extensive degree and there alone, that other Diseases as Dysentery, Diarrhoea, Fever and other insubstantial maladies occurred more extensively — nearly double the amount that they did at Schooghat, and that while four deaths occurred at the former, none occurred at the latter station. And we find that leucinimia, insuring, Pock, Goitre, stunted growth, and deaf and dumb states are all often associated together.

The bladders of the persons affected point to an insubable Condition of the System. Manson, Proctor &c. thinks that it is seen
Army Medical Sanitary Report for 1860.
in those only where there is a want of toxicity. Robinson thinks that in this country it is only seen in leprous families, and in this neighbourhood conceals in relation to India, and says "in those little communities or hamlets where leprosy prevails to a certain extent, the people are characterized by a want of enterprise and bodily vigour, as compared with their immediate neighbours who are exempt from the disease." In one of the Army Reports it is said at Kisaneer, Haute Alps, at an elevation of 4,255 feet above the sea level, in a garrison of 934 men, 33 were attacked by it. The Report says the men who came from maritime places, and who were placed at Kisaneer under quite unusual conditions suffered most. If we look to the Disease in the lower animals, we find it also associated with them with circumstances which deprive the systems of its due proper healthy tone. For example, in India, and also in the lands bounding the Sudanese, where it is seen in dogs and other animals, those affected are...
"puppies of a month old bred from English dogs", and it is well known as a fact of universal observation, that the removals of any of our English dogs from their own temperate climate to any of the tropical countries, entirely swimwater them, so that the bulldog or greyhound, which in their own climate are models of fierceness and fleetness, become dill, lazy, and spiritless, under the influence of an Indian Sun.

It is well ascertained that those who drink hard waters are liable to the Specie Diathesis. So much seen amongst theGotrons who drink water from Carbonaceous earth and which has been proved beyond doubt, to be the most probable cause of Morbidities.

That there is a relation between Gout and Goutinism is almost admitted by every one, but what that relation is has not yet been clearly determined. The Goutin is generally Gotrous, but the Gotrous are by no means always Goutin. The appearances of the Gotrous as we found them and a former page, have a
Johnson's change of air

Maton, Blackie,
striking similarity to that of the Celtic as we find it described by those who have visited and observed them in their native Valleys. The symptoms of a deteriorated blood are at once plainly visible, "the skin is of an unearthly colour, flesh soft and flabby, eyes red, prominent, watery," and another visitor to the Valley of the Rhone in Lower Valais finds "sluggishness, weakness, dullness, and various diseases to be the characteristics of the people." The villages are "full of dirt and uncleanness, the houses closely packed together, the people poor, and but ill supplied with the very necessaries of life, and all the appearances which at once disclose a chronic debilitated state of the system, as Rachitis, flaccid growth, sterility are found in abundance." The Causes of the two affection seem also allied, so much so, that some have even held them to be the same, and it has been remarked that "when both parents are goutous for two generations in line, conception, the offspring of the third genera, line is a Celtic," and Copland says that
that the same causes which occasion
Grits, when present in a more intense
degree, will also produce Cretinism, - or as
McGillan points it, they are varieties of the
same disorder, and arise from the same
causes, an error loci or devaignment of the
function of the absorbent system. Some
have held, that the excessive amount
of lime taken into the system by the
inhabitants of those Valleys where grists
is so prevalent, - for it is only in remote
Valleys and hamlets away from towns, or
well populated agricultural districts that
cretinism is seen to any amount, - induces
lime osification and thickening of the
base of the brain, thereby diminishing
the size of the foramen for blood vessels,
and it is fair to connect the unusual
quantity of lime taken into the system,
with such premature and abnormal
osification. - There is one decided objection
in this theory, viz: that grits is endemic
in many parts of England, arising from
the same causes, seemingly the same cause,
and yet a Cretin there it truly a rare one.
Those who maintain the nervous origin of Sinus, also contend that Catarrh must claim the same parent, and hold that in the former, the Vaso motor system may alone be affected, and yet thus not affecting the intellectual faculties, while in the latter, the whole nervous system is affected, including the Vaso motor system, or the system regulating the Blood Circulation; while others say, that it is a predominant activity of the sympathetic, and an im: perfect development of the Central System.

By others, poverty, dirt, humid inhalations, inspire atmosphere, and bad foods, have been thought as important causes as any.

Dr. Guggenbichl, whose views from his extensive opportunities of observation, must be received with the greatest respect, has said, that Catarrh is a "Disease of the Central Nervous System," causing a want of development of the body and perceptive faculties, and considers, that if this Disease of the body be removed, the maladies of the mind will be more easily overcome, than in those cases of
which the body is in full vigour, and
the mind idiocy.

But might there be two maladies which
are so often coincident, both in the same
district and in the same persons, not
arise from different causes, but both of which
the sufferers from whom they are exposed?

Might the Bronchocleal not arise from one or
more of many of the unalleged causes
which we have previously glanced at,
and the tertianum from any of those
causes, which we said in other Countries
to affect the Cerebral system to such an
extent, that those affected are said to be
of unsurpassd minds?—The mere fact of the
one being found apart from the other
would give countenance to such an
hypothesis, and if, on examining, we found
that those who were affected with both
tertianum and Gout, were exposed to those
circumstances, which if separated, would
give rise to either the one or the other,
while those affected with Bronchocleal
only, were exposed to its specific causes
alone, I think we might be justified
in concluding, that they arose from different and separate thought of con-
comitant causes. If we look at any of the Statistical Reports on Insanity, of this or any other country, we will find that the great and clearly determined cause of Insanity is Marriages of Consanguinity. So much so, in this the case, that Seuissel thought, that six-sevenths of all his patients had been afflicted by the heritage of insanity. Dr. Bruin in a paper in the Transactions of the American Medical Association, in speaking of the offspring of consanguineous Marriages, says: "Insanity results far less frequently than forms of imperfect development, such as give rise to idiocy, deaf-mutism, &c. and gives the following table of 6,321 Marriages of cousins, giving birth to 3,217 deaf and dumb, blind idiotic, and insane children. 1,116 were deaf and dumb; 6,48 were blind, 1,854 were idiotic, and 299 were insane." As these inhabitants of the Valleys of the Rhone, of the Pyrenees and of the Himalayas, subject to this disastrous intercourse, alike continue to
by the law of God, and the experience of man? We do not know of any statistics on this point, and therefore cannot point to such, but I submit from the circumstances in which they live, who are thus affected, a thinly peopled hilly country, containing distant and remote hamlets, far removed from the circumstances which would admit of a wide and free intercourse with the inhabitants of other countries, or towns, a few villages, that such is highly probable. We might also accept the proposition negatively, if we considered the absence of delirium in those parts of England where Gorée is prevalent, but where there is a thickly populated and wide spread agricultural community, and where all the means of intercourse are of the best, and most easily attainable, description. And that holds good even in the coincidence of the two affections in one country, for Brackley, in his Account of Infants, says he never saw delirium there, though he had abundant opportunities of observing Gorée, which Mr. Hill and Splan...
by saying, that Bramley did not journey into the interior of Inphants, to the hills, and thinly populated and seacoast haunts, of The Country, where lecanismus abounds. And we find in Britain, that the only parts where lecanismus is alleged to exist, are in those parts where handling is as yet, comparatively as its infancy, and where consanguineous marriages by far the most abound. I mean the Highlands & Western Islands of Scotland.

The treatment of lecanismus is to improve the general bodily health, and the magnificent hospital built on the Aberdeens by the philanthropic Dr. Eggenburgs. at a height of 4000 feet above the sea level, regulates the treatment of the deformed. Cattin on these principles. Dr. G. having found that Cattin was caused by "bad air, bad foods, unhealthy or vice," and having found the symptoms to be "atrophy and weakness of the muscles, complete loss of observation and mind, no memory, extraordinary appetite, coldness, laying, dirty skin, bad health, with convulsions and distortions of the frame," a general

...
Some regimens are carried out, the provisions are nourishing and abundant, and along with the dietetic, the medical treatment is attended to, for the development and formation of the system depends on healthy digestion, and the formation of good blood. And this is best assisted by the use of flow, in the form of the mucate, or of the lactate and carbonate. Hot air is also largely employed, as are also baths, friction, and exercise in the open air. In short, the treatment is just that which is employed in the best establishments for the insane in this Country, coupled with the necessary for a debilitated and unstable constitution.

Of the Diagnosis of Bronchocoele, we need say nothing, it is self-evident, and of the Prognosis we may dismiss as a word—treatment being submitted to, it is favourable.

Of the Treatment of Bronchocoele. Hence I submit that the Bronchocoele, has been too much considered as the disease, and hence all the artillery
of the healing art, medical and surgical, internal and external, has been devoted against the tumour—which occurring as it does on females has been looked upon as a blemish on the beauty of woman, though when only slightly enlarged. I agree with Dr. Neghle in thinking, it sometimes adds to the graceful roundness and contour of the neck. Section of the entire tumour, but which was in 1112 was performed by Albrecht in speaking of an ignorant operator who in attempting resection of a pneumocele, by iounding the arteries of the neck killed the patient on the spot). Partial section, ligature of the thyroid artery, pressure, leucor, moxas, dry rubbing, friction with different liniments, stimulant and astringent lotions, mercurial applications, plasters, blisters, leeches, electricity and galvanism—internally mercurial preparations, Digitate, Camphor, sulphur of Potash, Barley, Lime, Potash and Soda, Iron, Phosphoric Acid, Turkey Viscidulosis, Sodice simply or as Soda.
of Potashium, Hydrochlorate of Lime, and Belladonna have all been used against the Tumours, and all had their separate advocate. That one, and all of them have reduced the enlargement of the Thymoid in cases in which they have been applied, we can have no doubt, from the innumerable instances which have been quoted of the efficiency of them, but I submit, that here the treatment must be truly physiological, and that the endeavour must be to improve the tone and health of the system, by the means necessary for each particular case. A combination of salutaries and sedatives, with attention to the dietetic regimen of the patient, will generally be found the most efficient mode of truly and permanently.(for I find that the internal application and internal administration of Potashium, Mercury &c. in these cases, which have come under my notice, have only checked the growth of the Tumour, or at most reduced it for a time) - effecting a relief, not from the goitrous Tumour alone, but...
but also from all the annoying and disturbing symptoms, which are too too often to accompany it. By this striking at the strongholds of the Disease, in that, as it were, reduce the outworks as a matter of course, and by keeping up the proper standard of health, they perform their respective functions normally without relief or defect.

We will, before finishing, take a hasty glance at the pathological appearances found in Prostrates, and briefly as to the Tumour itself. McClain, says in India the full size of one foot ten inches in circumference including the neck, and two feet from the lower angle of the jaw to the other. In the general enlargement of the gland, it is found that the nerves which supply the gland and go into its structure, are not wholly increased in size, the Kruellina alone being thickened, but not the Medulla, just as is found in the enlargement of the Uterus during pregnancy. Graves, in the cases which he records, says, that was...
Reggie, Marsh, Bellingham, 42
was not the slightest appearance of anything like inflammation in the gland, and afterwards says, it deserves more
the name of hypertrophy, and Hope, Hunter, 
he agree in thinking that there is not
an incised in the globular structure, but
merely an enlargement of the normal amount
with normal secretion, Hunter thinking
that the morbid anatomy all points to
an increased secretion; and this agree
with the observations made on febrilethemia
in relation to the spleen by Professor
Prumett, who says, "it was in these cases
demonstrated, that the cell and nuclear
elements, were increased, while the fibros
portion of the organ was apparently
normal." The post mortem appearances are
chiefly permanent dilatation of the Heart
Chambers with more or less of hypertrophy.
In Sir Henry Branch's case the gland
was found to be regularly lobulated,
and the lobes or cysts contained a consider
able quantity of clear fluid. - Dr. Beville
says the post mortem appearances consist
principally in the very fluid state of the
blood.
blood found in the heart and large vessels, in the dilatation of the cavities of the heart and various sinuses, in the enlargement of the liver, and in severe effusions into different cavities. Of the calcareous degeneration that is sometimes seen in the gland, we would but observe, that in all the cases I have seen or read of in which it has occurred, the persons were advanced in years, and had passed the normal period for menstruation, and that it agrees with all respects with the calcareous deposits found in other organs, that being seemingly nature's mode of acting, either with abnormal structures, as in the sacs of hydrated cysts, or those which she has no further need of.

The Comparative Morbid Anatomy of the Thyroid has not, as yet, as far as I can find, been well investigated, and the pressure of a fourth Winter Session would not have allowed of time to pursue it, even though I had been fortunate.
fortunate enough to have procured cases of it in the sheep of worm to whom I applied, but which I was not; but the enlargement of the Thymus in them is believed generally to be associated with disease of the lungs, and is ascribed by some to the eating of the Fungus Vulgaris, or Butterwort; but the most generally received opinion is, that it arises in those animals when fed on a wet marshy pasture, where the food is not of the most nourishing kind.

The thing may be noticed, viz.: That in them, it is exclusively as far as I can learn, confined to the ewes and never found in the Sheep; this arising I think, from the fact, that the Sheep is much better cared for, being provided from all the vegetables of the climate, and receiving its food at regular periods, and generally in abundance.
I submit then, that, from the causes, the symptoms and their sequence, the relations which it bears to other diseases, the anatomy of the organ in its normal or morbid conditions, or comparatively, it may be inferred, that the Hypothyrophy of the Thyroid Gland is a beneficial physiological action, arising from a general deteriorated state of the system, but more particularly with uterine functional derangement, its connection with which anatomically has not yet been discovered, and that the treatment ought not to be directed against this one particular organ, but ought to be of that kind which will strengthen, renovate, and increase the tone of the general system, and that by these means, the Bronchocele, which is merely a physiological consequence of this general impairment, will wholly disappear.

William L. Pribrzy