1863

William A. Headley

Headley
Polypareia
"Vides novum exemplum humana salutis."
"ubi insons - blandus - in fidem honestas -
"sola Copia abundans - in te atque aeternas
"impatientia - fam duos - fam miraculis,
"fam insanabilemus morbos - molenque
"rardem usum - prodeam.

Borehaux.

"To be, or not to be - that has been treated
as one of the grand questions of human life
- and the problem has been variously
solved. The Egyptians gloried in the per-
fection of their "air enquefanci" - the
Romans vanished from their cities all
who were guilty of the crime of copuleness.
- But whatever may have been the dictates
of taste or fashion - certain it is that the
all of fattening has been cultivated, in-
directly at least, in every country -
every age - at least if their high ap-
preciation of the value of good feeding
and earnest devotion to the cause of gourmanderie - is any criterion to judge by. Comer "rejoiced in a banquet as in a battle" - I never forgets to provide good fare for the successful followers of 'thundering joy'. - Plato is an earnest upholder of the dainty real cause - and Horace records his esteem of gastronomic luxury in many a polished ode. - To come nearer to our own country - "caeser of carmine rumen" was one of the loveliest things that Caesar wrote home about our tallarious ancestors - And to come nearer to our own time - Dr. Johnson pronounced dinner to be the great event of the day. May we read its Consequences by the experience of Dr. Brunnschke, who, when he was inconveniently crowded in the thoroughfares of the metropolis, could not help remarking that it was not so much owing to the number congregated as to the obesity of the separate individuals." - And Statisticians tell us that for every fat foreigner - we can
produce a hundred corpulent Englishmen, but obesity is not to be looked upon merely as the accidental result of habit or good-living. The art of fattening has absolutely been cultivated for its own account. The Egyptians systematically fattened their slaves by causing them to sit in a bath of chicken-broth, the etiquette being, while sitting in the bath to eat a whole chicken, one of those from which the bath was made. His head of dunceian misery being fattened for marriage, cooped up in a small chamber and fed upon a fattening seed called 'mush,' the Gondor, or dwarf, was in his habits of choosing the fattest man amongst them for their King— and for no other reason than because he was the fattest. The candidates for royal honours knew that it was his corpulence that constituted his claim; I went to the scale with as little ado as a Newmarket Jockey, we prefer an hereditary monopoly—but nothing almost appears—
occasionally to take a hint from the Greeks, with regard to our enigmatic authorities.

In short, copulence has ever been a great fact— all history and tradition tend with examples of it— from the era of the Egyptian flesh pots to the days of aldermanic dinners. And it's properly just sometimes im-

questionable. Who can imagine an en-

dialed alderman? Who can differ from

Caesar in his dislike for

"That spare cafards"

who will say that Falstaff, unless he had been fat, could ever have been half the merry rogue he was?— Nay, we admire it sometimes. Nor do we limit our admiration to his embazon

point of the Medicean Venus— but can see nothing objectionable in the comfortable proportions of the "British nation."— Fat

fair— and pretty."— But there are tinctures,

when the comedy art oversteps its limits—

when the "insouciant blandus" - "penguin

humor", accumulates into a nuisance and a disease— we were not all born to be
Tall staffs, nor to aspire to the legal honours of the Gordians. Talham ruined
the reputation of many an honest man.
Later, the authentic instance of that poor
player whose port condition enabled
him to play the part of the apothecary
in 'Romeo + Juliet' so successfully, that at
least he found himself not only just of
the plebeians of a crowded house, but a
salary worthy of Dundreary. But with
better pay came better diet + copulence
after that, which of course mitigated him
for both part + salary. And so he
starved again — till the misfortune
worked its own cure, and he could
once more present himself to a delighted
audience. Or look at this Preston. Now
— how man — over the pride of the hunting-field
"Th' old man that used firsst to hold the bell"
finds himself fat — sixteen stone and
'where' now. Only the officers of infantry
realist full of valour & military en-
thusiasm becomes fat & unable to ac-
company his corps — or the cavalry-officer.
whose ponderous proportions are too much for his strongest troop horse; he is obliged to leave his regiment and his mews.

As to civilians, Christopher North tells us of the plight of the body, "choked and ob

stenubled" by their lord's accoutrements when he asked us to behold "his gentleman converted into a head of

burden and compelled to be the Porter of his own offal pieces."

"Like a fat Alderman, on a Lord-Mayors' day,

that straddling stools

after his guts

for fear they should break loose, get before him."

In going further into the history of capacitance we might apply to "apparacles" for a descrip

tion of the people that inhabited the banks of the river Thames, "whose bodies were so con

spicuous that the joints of their limbs were not visible"—or point to Sancho the fat

King of Leon—or Saint Le Gras King of France—or to a certain Bishop of Menzies—or

a Saxon duke did bow to fat

that much as history relate;

eat pots & lastynulks to divers

His postique parts without his feeling.
But the annals of our own Country furnish us with a very sufficient list of Names, which this preservative has made History. Listen to the History of Daniel Lambert. Wines of Polybarcanus were 75 haed grea thite sufficent to "Mr. Lambert of Christ's, he shed fifty-two stone, eleven pounds (Hibs. to the stone)." Bought of Malden, "an last, he shed was forty-two stones - ten stone less than Lambert." But his biographer philosophically remarks that "it is supposed his weight was much increased before his death." - Jack Powell. The pitcher of Exe, can scarcely he supposed to have yeast much lighter when we know that "his body was five yards in circumference - his limbs in proportion - he had sixteen men to carry him to his grave." - Again: "March 1467 - died at her mother's house all Night of a suffocation of Jazz. Mrs. W. - n." Such instances we might multiply by scores. It applies the pathological mind to think that they exist for the most part as para graphs in the pages of
Curiosity. Curiosity. Collected by a real gar-
Curiosity to qualify a love of the mar-
vellous, or place in all outwitting anthers
with certain infinitesimal fancies and
or the little healthman of Glaynor sunshine,
but looked at with another object
in view - they indicate a dead state of
helpless affliction - They reveal a terrible
pathological condition. They tell us a tale
of physical incapablities - of functional
abnormalities - perhaps organic disease
- of impeded lungs that cannot play for
want of space - of enervated hearts
fully and irregulazly beating - Cloged by
masses of surrounding fat - of intellects
clouded - of diseased minds - and the part
die - mind -. Isolated, detached through the ponderous heap of flesh
The cause of so grave a condition
is worth investigation - and the
Cure of Corpulence has received no little
attention at the hands of medicine.

What then do we know of its nature
and production - what of the causes which
pre-dispose to and excite it - what of
means towards its cure or alleviation.

Without being sanative enough to expect a specific in the "Millie's pudding," may we not look for a less heroic remedy than Bucov's "a gills of brandy a tasin a day for a month" - or a more feasible one than the trek from Athens to Megara and back - that Herodotus had to prescribe for his polybarous patients?

"The Miller of Bellemere so reduced his food that latterly his diet consisted only of a pudding made of sea-urchin - a gentleman who was fond of food - long and more enterprising than convenient, having heard of the salutary effects of Mr. Wood's pudding - ordered his cook to prepare the Miller's pudding, which he eat with great regularity - every day after his usual dinner." - Dr. Hadd

Athens to Megara - a distance of 20 miles.
In tending the affection "Polyaraxia" he cannot confine the term upon their choice. There is nothing in the derivation (πολύς, παράσιλ) to separate his condition from any fleshly excess. Thought with equal justice, the appeal to the enlarged liver or the hypertrophied muscle of the blacksmith's arm. Only we take the term as we receive it from hope and content ourselves with knowing that it is the scientific synonym of obesity or corpulence. As such it conveys a definite enough idea of a certain condition to our minds—but a condition by no means easy to define. Its describers can scarcely persuade themselves to call it a disease. Meas Asche "L'obésité n'est pas une maladie, mais elle n'est pas l'état normal—elle n'est pas la santé et c'est un état intermédiaire entre celle-ci et celle-là—une predisposition au système cellulaire ce qui la plethore et au système sanguin et l'espèce alors nerveux au système nerveux."—A pleasing
description — but would probably be more accurate as a definition if it at
once called the condition a morbid one, t
stopping short of the analogies. That a
certain amount of fat is normal, is no
reason why in excess it should not be
regarded as disease. Where the boundary
of health is raised, disease begins
at a point difficult enough to determine.
We avoid the difficulty by regarding
Polyparia simply as an excessive depth
of fat — not partaking of the nature of
tumour, in normal situations.
At the same time carefully separating
this fatty deposit from those fatty
degenerations, e.g. of the heart or liver,
which often accompany it. The two states
are by no means essentially connected
— either may exist without the other;
the one is normal until it exceeds
the other materially from the very beginning.
To say that Polyparia is Emaciation
and then dwell upon its diagnosis may
seem unnecessary and appeal an
uncalled for completeness even in an orthodox thesis. Is it possible to ima-
gine that any one can fail to recog-
nize it by the nearest glance at the ex-
ternal aspect of the body? In the back that it acquired, the loss of harmony in all its parts - the especially exaggeration of the abdomen, breast, neck, the indented appearance of the limbs, the muscular energies elop'd - the apoplectic countenance, the red clay of the blood changed into 'purple' - and the respirat
ion that resembled the 'puffing of unserviceable bellows' - and the skin - its whiteness, its polish, - its 'evidence'. But that we are not always to look for such appearances as these a reference to the experience of a trade may possibly prove to us. Let him tell us how the "internal aches can acquire an enormous increase without manifesting itself by great external corpulency". It is in the form of a communication from the London "society of Physicians"
a hundred years ago. "He was a merchant of this plate aged 52. Tall of a strong frame that inclined with a capacious breast & prominent belly of a pallid tallow-coloured complexion gay & active, until these 7 or 8 years past caught Cold at the beginning of June 1762."

The report then goes on & states "how he had a Cough & expectorated what was bloody for which he had taken 3 let blood each time about 10 oz. - but the Cough grew worse. In Sept. Dr. Wade saw him & thus reports "No appearance of wasting eyes sunk lips pale..." the physician observed when he turned or changed his position - he had ordered the most beautiful & penetrating of the medicinal plants... but it disagreed with him & he dropped it - and this is what he wrote of himself on the 30th Sept. "Upon the least motion I remain entirely helpless because here begins the difficulty of explaining the matter properly."

I must give it a name right or wrong..."
and therefore will call it a flame rises as from out of my stomach, settles my breast instantly, I do entirely that I pant for want of breath, it felt hot more or less according to the excess of my motion—my head is attacked not only with giddiness but a burning in my temples and back where it caused a noise—tingling that makes me almost crazy...turning in bed made me pant for two or three minutes at least.

I was much puzzled by these singular and anomalous symptoms asks himself—

"is it a disorder of the breast only—and if it be in the organs of inspiration,
if it be a ronida or an hydroptic cause?" The case of the marquis de St. Auban presents itself to him. His after two and a half months' confinement died from a pyriform motion or mass of fat in the head. At last, after case.

Referece to the works of Boedecar and Monori he comes to the conclusion that the diagnosis points in the direction..."
of aneurism. The patient died May 17, 1863.

And this is the report of the autopsy:

'The adipose membrane on the head & neck was considerably thick upon

facing the sternum the two laminae of

the mediastinum was filled with a

prodigious quantity of fat - the heart

was dried in fat - the abdomen

presented an amazing collection of a

fatty substance not only in the peritoneum

but in the mesentery & mesocolon.

Now here is an affection producing the

most grave & distressing symptoms

during life & finally the undoubted

cause of death yet its nature never

suspected by physician or patient

such is Polytharpid sometimes - causing
death yet some hesitate to call it
disease - only revealed by post-mortem
examination yet generally supposed
that it cannot exist undetected.

To illustrate these two points I have

quoted the Case at otherwise un-

pardonable length.
Before proceeding to a consideration of the fatty deposit — when excessive & constituting disease — the highest possible glance at the deposit as it normally exists may not be out of place.

From the fact of its being generally deposited in connection with areolar tissue it was long supposed to be similar in structure & function — but now known to be totally distinct and independent.

Thus in the Canals of bone there is fat but no areolar tissue — and the latter the fund e.g. in the subcutaneous aponeurosis in the eyelids and under mucous membranes, without ever being accompanied by fat — with regard to its minute structure — without insisting on a distinction, between adipose tissue & fat, it is sufficient to know that it consists of fat-containing vessels from 200 to 300 of an inch in diameter. And when these vessels exist in mass every one is familiar with the polyhedral form which compression causes them
to assume the fatty mass when looked at with the naked eye is seen to be subdivided into lobules or packets to facilitate motion between its parts, and permit the distribution of blood vessels. Chemically its solid principle is stearine and oleine its fluid thus differing from other fats which mostly contain margarine in addition. Its ultimate analysis gives carbon, hydrogen, and oxygen in these proportions: C. 79 - H. 9.5 - O. 9.5.

In proportion to the entire body its weight is about as one to twenty and for the most part is to be found in the following situations. Underneath the skin— which subcutaneous layer has been dignified with the name Panneerus adiposis— surrounding vessels and nerves, and in the spaces—between muscles— in the folds of synovial membrane— in the palms of the hands— soles of the feet— in the folds of serous membranes as in the mesentery—omentum—around viscera, especially the kidney.
feels up irregularities, and found an admirable reflecting material. He might of course hold the chyle and fluid to the liver—and we mention the canceps of bones—the thymus, liver and heart. The enumeration will be sufficiently complete.

In point of situation the deposit is much modified by age and other regularities—why, for example, it should live to lie over the abdomen and between the layers of the peritoneum—especially as the cutaneous tissue over the buttocks of fat women age which lie involved deep among the many mysterious fats deposit. Its uses are scarcely less numerous than its advantages. Its subcutaneous distribution by equally distending the skin gives smoothness and beauty—and that contour which characterizes the female form at puberty— as Dr. Cypriot has it: "unde forma vinda, levis, amabilis adeo, ut apta premi." It supports mechanically—it lends
shock - it proceeds from the fact that it supplies heat. It also supplies a combustible material - but keeps up the temperature of the body like an inner garment. It affords a receptacle where unrequired hydrocarbons which would otherwise be excreted and lost can be stored up for future use — a store which in the higher animal supports life for months by supplying respiratory food and preventing the waste of most important tissue.

Our knowledge of the physiology of fatty deposits is comparatively obscure - but even in its imperfect form contrasts strongly enough with many crude speculations and quaint theories of a past age. The celebrated Fourcroy described fat as an oily matter formed at the extremity of the arteres - an idea which was combated in all seriousness not very many years ago. None had a theory that it was formed in the large intestines chiefly by the instrumentalities of the bile and until recently great controversy
raged as to whether it was merely an
exudation from the arteries or the secretion
of peculiar glands -- which last idea
had Eunice for its champion.

The physiology of normal fat is difficult
even where we feel that it is slowly,
slowly when we come to deal with the
etiology of Polyarthritis. In looking about
for causes it is not a little puzzling to
find that this morbid condition de-
velops itself in every variety of temper-
ament -- in every diversity of locality
and climate and under the most opposite
hygienic conditions. No diet preserves
immunity -- no country appears to be exempt.

Its victim may be the "poor-fed Frenchman";
the "Sauvage-German" or "Thief-Twit; meal-
deasing dealt". It may be the adept in
conquemondere or the ascetic who almost
conceives that it is a duty to eat -- it gran-
the (the immoderate beer-drinker or the
most practical nephalist -- the nobleman,
best eater or the most refined vegetarian
-- not more the French palais reel
every body is heard about who daily con-
sumed 16 lbs of solids in the shape of
beef -- Cat's ladder & Candles, washed down
with five bottles of rum, was "extremely
lean" -- yet the man whose appetite, even
under the stimulus of delicacies, is only
equal to the faintest effort may be the
victim of Polyaricea — the best Indian
was not the sugar示范区, sometimes
causes too fast for work on a diet of
nothing but Lake Sugar Cane, and again
hands down to us the examples of obesity
by the superintendents of the vineyards
whose food for a couple of months was
nothing but the grapes and the fig.

In our attempts to explain a condition
which exists under such a diversity of cir-
stances we are almost driven to
take refuge in long loose generalization
nor should we be the first to attribute
it vaguely to the lymphatic temperament
or a "special predilection which
are true enough so far as they go,
but we must try to go a little further.
As predisposing causes however they must not be overlooked. Polyphagia is one of those diseases in which hereditary tendency is often strikingly manifest. In tracing the history of certain families we cannot but be struck with this - how, though perhaps lying under very different conditions to their forefathers, successive generations appear to inherit a tendency to obesity. It may be noticeable in every individual member of a family, regardless of age or sex, but more generally limited to certain members of it - thus its children may be remarkable for leanmess & obesity only, develops itself with advancing years - or the converse may be the rule - or as to sex extreme importance may be noticed in its females, while leanmess is the lot of its males - or its females may be thin & spare, only the males that are predestined to obesity - much stress is popularly laid upon certain physiological peculiarities
as indicative of future obesity — but it would not be difficult to show how many a child without the "thin face — round eye and obtuse or small nose" has grown into a corpulent man.

That mind and temperament are important predisposing agents we cannot for a moment doubt. Goethe speaks of the nervous temperament as incompatible with corpulence. Here we have the active anxious mind — look to insanity for illustration; take the man whose mind gives way under anxiety or overwork. Then no longer kept in check, no longer paralysed of the wear and tear of the active, hasty mind, not infrequently exhibits an irrepressible tendency to corpulence. A certain lethargy of mind no doubt must inevitably be one of its results — but is not infrequently pre-existing and its cause. In that the man of indolent mind, content with gait and steady good temper is just the man to prove fat — take your typical
example of probity. He's not the man to distiguish himself about eclipses. To make himself miserable about matters to his country's flag or discuss a question in politics as though his life depended on it—what does he care about Italy for the Italians, or Garibaldi's leg, or the Greek succession, or the fortunes of the Confederacy—But he can laugh at a joke and tell you something you don't know about the mysteries of a mutton chop. Shakespeare gives us a hint on this point. And indeed there are worse authorities on such a subject—why did Caesar object to "That Sphere Copernicus"—let me have men about me that are far "He thinks too much—such men are dangerous."

Until not very long ago, an investiigation into its exciting causes amounted to little more than a mere enumeration of the circumstances under which it occurred. Now howlier much of the obscurity...
That disproved its origin has yielded before patient physiological experiment and the revelations of organic chemistry. Their part and to us that its proximate causes are to be looked for under such heads as these. 1. Food 2. The Changes that food undergoes as modified in the pathological state of the body which it is destined to nourish 3. The Hygienic Conditions under which the organism lives to take up first the question of diet. In arranging all food under John proposed to the all animals, the saccharine, the aleinous, and the aqueous or plant lives as a classification which for our present purpose is all that I need desire.

The saccharine group is derived principally from the vegetable kingdom and includes sugar - by spinning gum and the different forms of the amylaceous principle - which are all characterized chemically by being composed of carbon - limited to hydrogen and oxygen. The amount of carbon...
The Veda sinews comprises the various Jkti
foes - composed chemically of oleic
acid and water and thus in ultimate
composition resembling the saccharine -
but the proportion of Carbon increased -
varying from 60 to 80 ½.

The aqueous especially in relation to
our present subject is by no means an
unimportant player - water Constituting
as it does 4/5 of the weight of the body
must enter largely into the composition
of food - "probably plays an important
part in the transformations that take
place in the system & contributed mater-
ially to the union with the organism."
The de-aerated, an extensive pulp Com-
presses + saline - celamine - albumen - Caseine
& lastly vegetable gluten - all of which
are known for a common or first from
the animal kingdom - excepting the last
which exists chiefly in the seeds of the
Cerealia - Paul whatever their origin, or
however different in some of their prop-
erities - they resemble each other and differ from other aliments in possessing an additional element - azote - this enables us further to divide solid food into two great classes - the azotised and the non-azotised. A due consideration of these principles constitutes the normal diet. But how does each class separately affect the morbid condition we are considering - what relative share have they in its production? It is only by an investigation of this kind that we can hope to frame a dietary for its cure or treat the disease on physiological principles. As to amount - of course of that which is generally meant by the comprehensive term "excess at table" - a good digestion it is almost acknowledged though by no means invariable; result - an inquiry, is rather a question of quality - what excess is more than prudent than another - of the idea of dyspepsia infallible it is most necessary to say that of course all ready found fair taken in the food.
tends directly to increase the deposit of fat in the body — its effects as we shall hereafter see only modified by the capabilities for assimilation and the amount of exercise taken. As to the saccharine experience proves that the food which has the most decided influence on the formation of fat is that which is digested in starch. In part, & other substances of a similar constitution having proved this plainly enough in his experiments of fattening hogs upon maize. It was objected by Dumas that the maize already contained the fat — and so it does, but in exceedingly small quantity. He has since entirely withdrawn his objection. England too speaks strongly to the point in the use that it makes of such substances as peas — beans and potatoes for fattening purposes — in fact in our domestic animals we can increase the amount of fat at pleasure but only by the use of non-azotised food — "a pig
when fed with highly nitrogenized food becomes full of flesh — when fed with potatoes (starchy) it acquires little flesh but a thick layer of fat."

The great fat factories therefore are to be found in the saccharine plants — the ones that is the great enginery of the polyporic and man. — Man need the fat in the dark as to the crops — chemistry endeavors to explain the fact to his entire satisfaction. — Thus the ultimate analysis of fat and of one of the saccharine elements gives them a relative composition of this kind:

<table>
<thead>
<tr>
<th>Carboxylic</th>
<th>Fat</th>
<th>Etheric</th>
<th>Saponifiable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon</td>
<td>44.91</td>
<td>78.9</td>
<td>44.91</td>
</tr>
<tr>
<td>Diamine</td>
<td>6.11</td>
<td>11.0</td>
<td>6.11</td>
</tr>
</tbody>
</table>

and relatively:

44.91 : 6.11 : 78.9 : 11.0

Thus it follows that starch by the mere separation of part of its sugar may pass into fat — this is undesirable enough. But whatever the theory "this at least is undeniable" says living "that the herds should be consumed by the cow. Contain"
no butter - in the fodder of oxen no hay - but exists & no hops - land can be found in the potato. refrain to divine."

It is clearly the non-voluntary food that produces fat - but the external conditions under which the body lives must modify the result. This leads us to another part of the subject - chemistry again comes to our aid. It tells us that the hydrocarbons being destined for the support of respiration and the supply of animal heat (by combination with oxygen) and the formation of CO₂ & H₂O must first of all serve this purpose - and it is only the surplus that can be stored away as fat - then the more active the exercise - the more active the respiratory function - the more rapid the consumption of oxygen - the more rapid the combustion of carbon at the left likely the formation of fat. In fact the whole mystery of fat - formation to make Lucullus words again "to be found in the disproportion between the quantity of carbon in the food & that of oxygen"
absorbed by the skin and lungs." Here we have the explanation of many familiar facts. "The hare both free and actual motion never accumulated a particle of fat though living on the same food that fattens the sheep because enough oxygen is absorbed to consume the carbon of the gum. In an animal and all similar constituents of their food." There is no surplus to make fat. The fattening or not only has an abundant supply of food but it is confined to the stall and motion denied it; respiration (i.e., the supply of oxygen) is reduced to a minimum. In death a deficient supply of oxygen is equivalent to an increased supply of carbohydrates food. Here we have the explanation of that experience has taught the farmer. When he fattens his cattle and in the same fact we have the rationale of habits influence in the production of Polyyxarca. Readily inactivity and slothful habits must almost inevitably induce it.
Temperature, as well as habit, modifies the influence of food—cold involves a greater necessity for heat—producing food. Hence it is natural to suppose that the colder the climate (other things being equal) the less will be the tendency to gain fat.

The Equatorial doubtless is not fat—built with them it is a physiological diurnal condition for their savage state; it is non-conducting power of heat—retaining properties, like the inner garment it protects them from the effects of the external cold.

With regard to the somewhat Julius fowl influence of locality independent of climate it is said that the inhabitants of low swampy situations are more frequently the subjects of obesity than those living on the mountainous regions. Rather than in the moisture of the atmosphere, the explanation is probably to be found in the influence of habits or in the physical environment that encourages more briskly and the mountain—-and the corpulent.
Holander is perhaps less the offspring of a humid atmosphere than the victim of his prodigality and beer. — Richald states that during an intense fog the swallows have been known suddenly to become so fat that they were unable to fly. From the sportman’s point of view, this is splendid.

It is only right to say that doubts have been thrown by certain recent writers upon the propriety of this distinction of heat-producing elements. We cannot absolutely maintain that the sun and its rays which disappear in the human body are destroyed by combustion, but though without absolute proof, the inference is to say the least, an extremely rational one — and until they supply us with a better theory, we may be excused for accepting this.

In considering food we did not take up the question of alcoholic drinks. What effect have they upon the economy, and above all, do they form fat? Alcohol of course cannot form lipids, nor
contribute to its renovation—during clamped it among the elements of respirations—

Consider that it is burned in the lungs and converted into CO₂ + H₂O—for which it merely required oxy gen.

Alcohol C₂H₅O₂  Carbons ac. C₂O₅
Oxy gen O₂  Water H₂O₂

It would thus appear to serve a most useful purpose in evolving calories and supporting the heat of the body. And through its carbon + hydrogen do not exist in the ratio to form fat. It may do so indirectly by preventing the waste for heat-producing purposes of other hydrocarbons. Among the recent experiments however it is probable that these views may have to be abandoned. The experimenters think themselves justified in concluding that alcohol is neither transformed into destitute in the living body—that the whole of what is ingested is excreted unchanged—so that it has no claim to be regarded as a producer
Dr. Perini refers to Hogarth's picture of "Beer-ale" and "Gun-lane." It illustrates the popular notion that probably the lower classes are represented as plump and in good condition - the inhabitants of the dome are equally miserable and emaciated. But the explanation does not lie in the alcohol - by evaporation we obtain from beer an extract which consists of starch - sugar - dextrose - laetic acid - salts - the extractive and aromatic parts of the hop - gluten and fatty matter - and it is upon some of these elements in the principles we have already noticed that its nutritive and fattening qualities probably depend - the aqueous portion is on the other hand probably to play a part of some importance.

So much then for the purpose of the deposit as dependent on food and the external agencies that are brought to bear upon it - we approach a much more obscure but equally important problem in the consideration of the manner that food is
deal with as modified by the condition of the economy itself. A thorough mastery of this subject would of course suppose an lengthy investigation into all the phenomena of digestion, elimination and excretion. This is not the place for such an inquiry. Neither is our knowledge of these processes sufficiently accurate to warrant us in pursuing the investigation for such a purpose. But it is impossible to doubt that the production of fat is often dependent on hidden causes which are only to be looked for in a condition more or less pathological of the economy itself. We know that the different elements of the food are acted upon in different parts of the alimentary canal by the agency of different fluids. Thus, following the course of the food down and up, the saliva besides its physical function of moistening the food and facilitating its mastication, has the property of converting starch into sugar. The pancreatic secretion has the same
power, and the same change is effected
by the glands of Lieberkuhn + Brunner ---
and much more rapidly and certainly ---
in fact, this daceharme transformation
principally takes place in the small
intestines. Now this is a transformation
that must take place before the starchy
elements can fulfill their purpose in the
economy - what that purpose is, we have
already tried to discover - and it is thus
not difficult to conceive, how it may be
interacted with according as the salivary
pancreatic or intestinal secretions are at
fault - either in point of diminution or
defects --- again - it is the especial
function of the pancreatic secretion, to
reduce fatty matter to a state of com-
plete emulsion - still its digestion can
scarcely be said to be complete -- for
though in this emulsified state fat is
doubtless capable of being absorbed - the
most recent observation in physiology
goes to show that another agent comes
to play to facilitate its absorption ---
If capillary tubes be moistened with tamnicholato or glycholcholato of soda, fat is much more readily absorbed in them than is the case with its solution upon the ileal surface. Thus, fat matter may be dependent in a large extent for its absorption upon the biliary secretion. Experiment demonstrates this. By drawing off bile from an animal, he causes a loss of weight. A dog with the bile thus catheterized through rose with abundance of solid food emaciated from the first. And at the end of a month, he was only half of its former weight—when animals whose bile was thus interfered with were fed on fat alone only about 10 per cent has been used up. And the same experiments showed that an animal under these conditions regurgitating 500 grammes of animal food which had been required four or half that quantity, had the bile been allowed to pass normally into the economy. Simply of course because under these conditions the fats were
undesired and useless. Further - in
resection of the head of the head of the
pancreas, nothing is so common as the
absence of fat in stool - the same
results from catheterising the bile in the
experiments we have just been considering.
and the facts are thus explained, clearly
because such conditions of the economy
preclude their being made use of - in
the one case because access to them of
the pancreatic secretion is prevented
for their multiplication - in the other
because the bile is absent - to facilitate
the absorption of the emulsified fats.
We might also direct upon the liver as a
glycogenic and fat-forming agent.
Such a hasty glance in reminding us of
the agencies that are at work upon food
in its passage into the blood serves to
find the probable results of these change-
ments - for example we have seen how
emaciation may result from the absence
of bile - may kept a somewhat similar
state of things keep to explain why it is
that certain persons may eat any quantity of food without growing fat—and may it not be possible to bring home to an opposite condition a share in the production of Polypiasia? At any rate we thus see what causes may be at work and how they may affect it—without flying for explanation to such vague principles as 'irregularity', 'disordered', or 'depraved appetites'. The day is probably distant enough when we shall be able to refer Polypiasia to the special derangements of special organs—still less probably to effect a cure out such a knowledge—but that we cannot with certainty point out the offending organ— is not a reason why we should allow it to pass unexamined.

What we have said of the etiology of Polypiasia obviates the necessity for alluding under a special head to its Pathology. Before however proceeding to a consideration of remedial means there are two matters of which it may not be out of place briefly to allude—Fatty tumors & Fatty stools.
with regard to the former the only connection that they have with our subject is that they have no connection with it whatever—sometimes however they may exist on the skin in such numbers and of such a shape as to produce a kind of morbid obesity—Dr Benjamin J. Brodie in his celebrated lecture on fatty tumours mentions instances in which they have been extremely numerous—and I believe it is Dr. Chambers who alluded to the case of a female who was covered with a hundred such tumours yet died of emaciation—it is perhaps this class of cases that gives rise to the editors of some accounts of instances of obesity that used to be marvellously cured at the hands of professional emaciators—who attained their object by surgical operation—cutting down upon the troublesome tumours & removing it—-we are told of a Parisian surgeon named Rothmeur—who in 1718 delivered a noted patronage of an insomnian punisher—and there's a story of a
certain Pasha who was always accou-
dained by a travelling surgeon to believe
him of his fat in this way whenever
it became troublesome.
In fatty stools we have already alluded
and seen how one quart of them yet to be
found in disease of the head of the
pancreas, and another in the fact of
the being denied access to the intestinal
canal. It is probable also that they
may have their origin in the liver from
the quantity of fat that has sometimes
been found in the hepatic ducts, and
the extreme improbability of its having
been precipitated from the intestines. Lastly,
the rapid absorption of pre-existing
fat is unquestionably a cause of the
of course evacuation as rapidly and
certainly follows this being so it is
evident that in the art should he ever
attain it which would enable us in-
ingsensibly to produce fatty stools— we
should also have the certain and
d satisfactory cure of constipation.
Chambers in a pamphlet published some years ago draws attention to the fact that confidence sometimes comes in with pregnancy and notably increased with the rise of the world of its temporary burden. There is another and a more common class of cases in which it does not make itself manifest until after confinement — in fact, for a confinement to date from a confinement, yes by no means rare. It is a petulant fact that whenever the ovaries are dormant there is a great tendency to form fat. The tendency to become fat after the cessation of the calumens has passed into a proverb, and it is during the period of lactation and pregnancy that the ovaries are taking their rest. It is astonishing, & Chambers goes on to remark that such a tendency should manifest itself under circumstances in which there is such a drain upon the vital energies of the mother for the nourishment of another being — but that when we
remember that during pregnancy one is supplied in abundant measure - that in fact in the drain - blood it flows separately - forming a milky appearance and further

consider the experiments of Mudder on the effects of the union of oil and albumen - the matter is not so difficult to explain.

There is a popular notion that fat people are generally impolitic - this is likely enough - when we consider the fatty changes that under these circumstances are likely to take place in the Placenta.

We have already noticed shortly, some of the unhappy consequences of Corpulence - indeed a further glance be a further stimulus to our search for Remedies - for alas the misfortunes already alluded to are by no means slight and few among the many ill that - fat flesh is heir to - there is the certainty of a short life and the probability of a sudden death - who ever heard of a stout man living long lived? - his years rarely number over fifty - as to sudden death - we know how the fat, deficient
may so clog the brain as suddenly to dis-  

pend its functions. - And then there's apo-

plexy. There's no more powerful precluding  

cause to it than obliterating and simply fluid -

the fatty accumulations press upon the  

large blood vessels interfere with venous  
goaing and cause congestion. - And further  

for the consolation of that people we may  

read that in them the first attack of  
apoplexy is pretty sure to prove fatal -  

whilst other people have a tolerably fair  
chance of recovery. For similar reasons  
epilepsy is by no means uncommon among  
them. Then there are the fatty degenerations  
of muscles and glands which almost  
irreversibly accompany the advanced states  
their voluntary muscles become soft and  
flabby and their liver is like the liver of a  
blandish goose - as to the heart - the  
fatty elements go up as the place of its  
proper space that there comes to be only  
the thinnest possible lamina of distended  
matter between blood and pericardium -  

yet the entirety of this pale pallor
is a question of life and death. In that there can be the question that the majority of competent people succumb finally to organic affections. Right if you then lived in no danger from these there's your away of minor affections storing them by the face sufficient to make it terrible. It is the part of headache, giddiness, and dimness of light. I. induced lenticular to a plentiful source of ulcer — by ditching the skin it becomes a source of perpetmal irritation, and tends powerfully to the development of cutaneous disease.

By noticing its phenomena, we have seen that they by no means indicate clearly its pathological sources — its treatment therefore as well as its causes must be more or less a matter of circumstances and uncertainty. Causation seems imperfectly known. Treatment must be correspondingly obscure — not that it is difficult to frame a treatment. Theory it is plausibly enough to say — allow less to be taken into the system than what it slops out — let. Waste be
greater than supply—prescribe a healthy diet and call in to your aid the assistance of purgatives—aphrodisiacs, and diuretics—but all upon such a theory—results will not support it—experience cannot sanction it, but what has been done for its cure—is what principle—And with that results?

Calvis Aurelianus the most able writer on the subject in ancient times entirely discards the notion of a specific and considers the treatment a mere matter of hygiene—the observation of certain kinds of food and exercise—recommends that the patient be subjected to the following:

death—then to the sand-bath—then to the sprinkled bath, and rubbed with pulverized rye—to drink little—to give bread of all kinds and very little animal food—finally, he orders little sleep and condemns bleeding. —Borelli says, ‘chew tobacco’—Ulmeller recommends the ear of squills—and Caurin says that
"fennel-water to my knowledge hath been<br>efficacious"— Virge has ever enjoyed<br>a world-wide reputation and we feel it<br>perhaps being reduced by this emaciation<br>that their skins hung round them in folds.<br>It is scarcely necessary, however, to say that<br>owing to the quantity that requires to be<br>taken it inflicts an amount of injury on<br>the digestive apparatus that is by no<br>means compensated for by the cure of<br>the corpulence—indeed an agent is set at<br>work whose action it is often difficult to stop—witness the case of that architect<br>who took it for a twelvemonth, and not<br>only cured his corpulence but reduced<br>himself to a total magnum,—then<br>his Fleming—thought that cure was to<br>be looked for in dainties, and imagined<br>that he had found a specific in soap—<br>a remedy which had evidently not quite<br>gone out of fashion when he had made<br>this book on corpulence (1816) for he tells us<br>of "a near relation of mine who was<br>requested by a gentleman to purchase..."
him a quarter of a cwt of Castile Soap for the sole purpose of washing in a similar case. Now 3 or 4 of soap a day (for internal use) for a twelvemonth is anything but a pleasant prospect, and we don't know the competent person who would not decline...pathetic with a certain mixture of not wishing "to make a washing-tail of his Remedy" and convert his Castile soap into jigs." But besides being an extremely disgusting remedy, want of success has probably had something to do with its downfall.—At the same time I think I have heard of its use in "a strict vegetable diet."—Queen objects to vinegar and soap and relies on blitheness and exercise.—At Gregory I think advised iodine without dwelling on a long list of further suggestions in the shape of alkaline baths—milk-water—Carbonate of soda—and soda-water;—the next i.e., remedy of any importance that demands our attention is Liqueur Potalaze.—The means that Mr. Chambers places such infinite confidence in that it's...
is perfectly safe he thinks Cannot be doubted - provided the person can take exercise along with it - it unable to do. There seem to be some doubts - but still JJ Chambers believed in its safety. Now from the mass of evidence adduced in its favour there can be no doubt of it's efficacy sometimes - but though probably the most successful medicinal agent that we have yet considered, its results are by no means consistent - and its uncertainty of action does not warrant us in relying on it for a remedy. Theoretically it acts by converting the fat into a soap - so establishing a home-manufactory of real human food for the purpose of filling up the unpleasantness of taking it. I should think also that it is not improbable that by its stimulating the gastric secretion the injesta is better assimilated. Dr. Legge's preconisation has a fair chance when the fat reaches it in order to be emulsified - It is well known that acRalis exhibited for any
length of time tend to the rapid evoluction of fatty acid.

However from all this one thing at least is certain that much as treatment may vary in the matter of special remedies all experience agrees in admitting into it a "dietetic and prescribing element." "Keep the eyes open and the mouth shut" was Dr. Radcliffe's advice and all writers from Calico Indians downwards have agreed in recommending an abstemious diet. - But they are almost equally unanimous in saying that it must be of a vegetable kind! - Now if he put any faith in the explanations worked out by dieting it must be evident that nothing saved the moreE particular - for such food at unce is elements that must mentally be converted into fuel - a farmaceous leguminous liquified diet - is just the diet to grow fuel upon. For that is the food of these innocent fruits and sugars and starch containing compounds that fat people are told to derain ad libitum.
Carnivorous and Hydrogen - the very people to feed their grinding upon - and the animal food that they are told to avoid abound in azote an element wholly poisonous of fat formation. The man therefore as dispensed to learnest must eat principally animal food - sparingly of vegetable - and drink little - and that little as we have seen before not been.

The necessity for fresh air and exercise as a remedial and preventive measure has always been strongly insisted on. D'illy's theories again explain the why. Dr. Readus indeed hinted long ago, at some obscure connection between fat formation and deficiency of oxygen. While Dr. Readus disposed of the supposition by simply remarking that Dr. Readus was himself so fat, that a certain lady used to designate him "the walking feather bed" - he may reasonably suppose that D'illy's theories to some degree admit of being disposed of with such summary facetiousness.

Much sleep must on similar principles
be avoided - ameliorate activity of both mind and body - fat formation must be unchecked - the salernitan medical school might have been giving the English King a pretty fine start. Coriolis when they invite him.

"Supere post equas - fui somnum meridianum."
The process of training, gives us ample proof of what exercise will do to diminish buck
not only without damage but with actual improvement to the health - and a course of Newmarket would doubtless do much to cure or coriolis. - But it is to be feared that when they apply to the aid of medicine at least our polycoracids patients are far beyond the reach of the medicina gymnastica.
The Turkish bath has proved itself an important agent to the cure - containing as it does the hot air and stimulation of the skin which have been so generally recom

...and Cullen could have told us the same years ago.
Have we done nothing in its treatment since then, but perfect hygiene and lose all faith in drugs? The truth is, to the last class of remedies there has recently been made the most important addition—ourn cerebrocereus has lately been suggested and tried—and without falling into a specific, we may fairly say that in these cases it promises to attain a high therapeutic reputation.

For its introduction to this end we are indebted to accident and Mr. Lachmann Duparc. He may be pardoned for extracting a few particulars about it from his very interesting monograph.

It is a crypto-famine sea-weed—sometimes termed 'querent marina' and 'Keep ware.' Its introduction into medicine dates from a very remote period. It was in use among the Romans. Pliny who calls it 'querent marina,' says it was employed in faintness and not without advantage. Probably only thus used as an external application.
hear of it again until the 16th century. When its curative properties were again made use of by many physicians of eminence—Gauntlett, Basset, etc.—employed it with supposed advantage both externally and internally in syphilis, scrofula, and glandular enlargements. The discovery of iodine to which the properties of Franklin's were attributed caused it a long time to be forgotten till accident drew attention once more to its curative properties. And now through the exertions of M. Duparc it promises to regain much of its former celebrity. "Some years ago," he says, "Franklin's ointment was mentioned to me as a useful remedy for incontinent Pemiasis. I gave it a trial, which did not yield the promised result, but the failure was compensated by the discovery of other remarkable effects. In all the persons to whom the drug was exhibited a more or less considerable loss of flesh was observed. This phenomenon invariably occurred—occasionally in a short time but always without discomfort. 
on disturbance of the digestive functions - the only appreciable symptom being an increase of the urinary secretion."

Trends Vettivulosis is one of the numerous genera of the tribe Theicidae - a class to which as M. Dupartew reminds us - it philosophical economy - the arts and manufactures and medicine already owe so much - It abounds on the shores of the ocean and of the Mediterranean - is attended by a fan-shaped pedicle to the roots - arising to a height of twelve or fifteen inches - in a coriaceous dachtomand pond - supplied with air vessels and receptacles filled with mucus. Its substance is the same - flexible and tough - glossy - thin when fresh - dark brown when dry - it has a strong marine odor and a nauseous taste - Chemically it contains chloride of lodine - sulphate of soda - sulphate of lime - and the mucilaginous matter which unites the properties of peetine and lodine - When carbonized in a closed vessel it forms the substance which has been called - veget
able Ethiopia and which is known to give off a strong hepatic odour.

Keep in the when properly dried is easily powdered and distilled with water yields any oleaginous substance or a pungent odour which, when treated with ether gives a green oil that yet requires further investigation.

A decoction may be made with the dehydrated leaves (10-120 gr to the oz of water) which may be exhibited between a at meals but this preparation comparatively few can tolerate.

Mr. Duparc found that the powder but subsequent had a hydro-alcoholic extract prepared with which has had obtained more rapid and regular results. He prescribes it in 3-gram pills, fifteen or twenty of which should be taken during the course of the day. The best results are obtained by those who can use simultaneously both the decoction and the pills.

It is best taken in the morning fasting. The use of it does not necessitate any
change from the ordinary way of living. But of course during its use the rules of diet and exercise that we have already considered ought not to be forgotten.

As to its action on the economy after taking it for some time the person feels more lightweight more disposed the stomach performing its functions better and there is none of that sense of fullness and weight at the epigastrium that formerly occurred after eating.

It is not until after its use for three or four weeks that its special and characteristic phenomena begin to show themselves. The urine becomes more abundant and exhibits on its surface a milky pellicle. From this moment the absorbing properties of the tissues are manifest and the first signs of 'amelioration' appear. These effects every day become more apparent and although variable in degree never fail to appear.

In duration merely perhaps remains from any explanation of its action beyond
saying that it is a true stimulant: its
action especially upon the fat cells.

My address likewise cases a confirmation
of these results—which abundantly prove
the impotency and inefficacy of the remedy
and, however, take the evidence of a
medical man who tried it on his own per-
son. It is in the form of a letter ad-
dressed by Dr. Graffin to the “Revue de l'int-
apétitique médical-chirurgical”:

"I procured a supply of the Fucus from
Saint-Malo, where it grows in abundance,
and caused a hydro-alcoholic extract to
be prepared; this extract is very hypoglyce-
and for this reason a small number of pills
only should be compounded at a time—
which should be sprinkled over and preserved in
a large quantity of alcohol—powder.

I am 57 years of age 1 metre 44 e. (5 ft 9 in.)
In height. My bones are small and the
abdomen is in my case the principal seat
of obesity. On the 1st March, before attempt-
ing any treatment, I weighed 76½ kilopounds.
rather more than 12 stone). From the 6th March I took every day three pills each of which contained 5 grains of the extract - the first at six in the morning, the second at ten, and the third at five in the afternoon, at the beginning of every meal, without in any other respect changing my habits.

Under the influence of this remedy the urinary secretion became more abundant, more highly coloured and more aromatic than usual.

I again weighed myself on the 10th April after having taken ninety pills. I had lost one and a half stone in the course of the month.

From the 10th to the 20th of April I took only two pills a day, one at six in the morning and the other at five in the afternoon, then returned to three pills daily until May 10th, when having taken a second series of ninety pills I again weighed and found a further decrease of one and a half stone. From the 16th of March to 18th of May I therefor lost upwards of five pounds weight.
impart any change in my habits or diet or having experienced any inconvenience from the use of the remedy.

Such evidence is satisfactory enough. There is an absence of the marvellous and ugly that does not make it the less palatable. Though many such cases are already recorded, of course many further trials are needed to confirm the results—and future experience must decide its fate. But its present prospects at least seem to point to a successful future—and showed it fulfil the expectations that we are now justified in forming of it—then yield remiss and must once more take a high rank in Therapeutics.

W. J. Hedley.