my opinion we are not justified in regarding any two, or it is likely to cause pain. It is recommended
advanced cases did it maintain a daily variation culin reactions. As the course of treatment pro-
irregular usually steadied down; only in the very remainder of the day after injection. General
reactions as evidenced by the temperature chart exceeded, the temperature where previously high and
is 0'25 c.c. (= miv.) ; this was increased gradually to a maximum of 1 c.c. (= mxxi). In no case has
more times a week. For an adult the initial dose is impracticable, and in most cases they are given
with out-patients of the hospital class this is
right angles to it. Injection must be made slowly
the needle plunged swiftly through the skin at
in the same plane as the body. The site for injec-
with the preparation.
makes good progress as I desired. Secondly, taking
a batch of new patients, I placed the odd numbers
upon pneumosan, and I think the results will be of
interest to practitioners who are as yet unfamiliar
with the preparation.
Before tabulating my results I will describe the
method of administration. The injection is given
intramuscularly in the deltoid, using each arm alternately and avoiding as far as possible the
exact site of the previous one. The patient's hand is placed upon his hip, the arm being held relaxed in
the same plane as the body. The site for injection is swabbed with spirit solution (1:1000) and
merely informs us that our
mosan Treatment, and into which Stage (Turban) they had Advanced.

<table>
<thead>
<tr>
<th></th>
<th>First stage.</th>
<th>Second stage.</th>
<th>Third stage.</th>
<th>Very advanced.</th>
<th>Total.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deteriorated under treatment</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>No appreciable change</td>
<td>5</td>
<td>2</td>
<td>5</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>Improved</td>
<td>10</td>
<td>10</td>
<td>8</td>
<td>8</td>
<td>33</td>
</tr>
<tr>
<td>Much Improved</td>
<td>13</td>
<td>8</td>
<td>9</td>
<td>5</td>
<td>35</td>
</tr>
<tr>
<td>Disease arrested</td>
<td>7</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>36</td>
<td>23</td>
<td>25</td>
<td>19</td>
<td>105</td>
</tr>
</tbody>
</table>

I have lent towards severity in estimating the
changes occurring after the use of pneumosan. It
must be borne in mind that many of the cases were
given pneumosan for the very reasons that they
were not progressing favourably under other forms of treatment. Great difficulty was met with in sub-
dividing patients in to improved groups. I consider
that I am unable to give a precise definition of all
the points which influenced me when subdividing
this group, but, broadly speaking, those classed as
"improved" are so chiefly with reference to their
symptoms, while the "much improved" are so
with reference to their physical signs as well as
to their symptoms. As this paper approaches
the subject solely from its clinical side I consider
this rather loose subdivision of the improved cases
to be helpful.
It is a striking coincidence that in all patients
who are gaining the upper hand in their struggle
with the tubercle bacillus symptoms improve before
physical signs, and that it is not uncommon to find
a patient who, anatomically speaking, is in an
advanced stage of tuberculosis is yet symptomati-
cally well for all ordinary purposes. Such patients
may well be termed "carriers." On the other hand,
patients in an earlier stage with no, or but slight,
physical signs are not infrequently suffering from
pronounced toxemia. These facts should make us
extremely cautious in speaking of a cure or even an
arrest of the disease. Unfortunately, we have as yet
reaction whereby we are enabled to test whether the
disease is entirely overcome or is remaining
latent. Besredka's serum diagnosis may prove to be such, but requires further
confirmation. The tuberculin reaction is an anaphy-
lactic phenomenon, and merely informs us that our
reduce the patient's temperature and fit him for
subsequent tuberculin treatment, but as I noticed
that coincident with the defervescence there was a
marked improvement in the general condition of
most patients, I decided to withhold tuberculin and watch the effect of the continued adminis-
tration of pneumosan upon the physical signs. The
first sign of general improvement was, as
rule, diminution of cough; this was followed by
increase of weight, appetite, and energy, resulting in
an all-round feeling of renewed well-being. Many
patients whose physical signs have altered but
little (this refers especially to the advanced) never-
theless demonstrate in varying degrees these
improvements in their general health. I spoke of
having used pneumosan in 121 cases, but only 103
are tabulated; the reason for this discrepancy of
18 is that 7 patients after beginning treatment
desired to discontinue their attendances at the
dispensary, while the last 11 have not as yet been
under treatment for a sufficient time to warrant their inclusion in the table.

PNEUMOSAN IN THE TREATMENT OF
PULMONARY TUBERCULOSIS.
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Early last year I had amongst the patients under
my care a considerable number who were suffering
from pulmonary tuberculosis in an acute stage. They were cases eminently unsuitable for the exhibi-
tion of tuberculin, so I determined cautiously to try
pneumosan. The results proved so satisfactory with this group of patients that I extended the
investigation in the following ways. First, I trans-
ferred from tuberculin to pneumosan all those
patients who under tuberculin were not making
such good progress as I desired. Secondly, taking
a batch of new patients, I placed the odd numbers
upon pneumosan, the even upon tuberculin; unless
I considered that tuberculin might in any case
prove harmful. In this way I have had during
12 months 121 patients under treatment with pneumosan and I think the results will be of
interest to practitioners who are as yet unfamiliar
with the preparation.

Before tabulating my results I will describe the
method of administration. The injection is given
intramuscularly in the deltoid, using each arm alternately and avoiding as far as possible the
exact site of the previous one. The patient's hand is placed upon his hip, the arm being held relaxed in
the same plane as the body. The site for injection
was swapped with spirit solution (1:1000) and
the lactic phenomenon, and merely informs us that our

mosan Treatment, and into which Stage (Turban) they had Advanced.
The Great Problems.


F. Schlegel was the first to observe that every man is born either a Platonist or an Aristotelian; and it is unquestionably true that a broad dichotomy exists in men’s outlook on philosophic problems. The method of one is that of mysticism, the other that of science. The work of one looms vaguely through a cloud of emotion and hidden longings or passions; that of the other presents sharp and decisive outlines, and exhibits without softening or disguise the naked crudity of facts. Doubtless each point of view is rooted deep in the inherited constitution of the mind of man, and the weapons to which the first is accustomed are ill-fitted to combat the tenets of the second.

The philosophy of Bernardino Varisco represents the extreme mystical position, in sharp contrast to the philosophy of science. It is likely, therefore, that many men of science will see in it, as in all such systems, nothing but the ill-digested mystifications of a philosophic vocabulary. Yet it is not possible in the case of syphilis. When we have a means of arriving at the diagnosis sufficiently early my experience leads me to hope that in a few months the balance of the table will be greatly altered by the passing over of many from the ‘much improved’ group, and that the so-called ‘disease arrested’ cases show the highest proportion of good results. This is only to be expected under any beneficial form of treatment, but I should like to take this opportunity to point out that what we are in the habit of calling the first stage (using Turban’s anatomical classification) is in reality a stage of well-advanced disease. Strictly speaking, the first stage is the stage of deposition of the bacillus in the tissues; between this and the second stage a considerable interval elapses, during which the tuberculin reaction manifests itself. It is the appearance of this reaction which heralds the second stage proper. During all this time the bacilli have been multiplying in the tissues and have been surrounded by barriers of connective tissue creating what Ehrlich terms a “dead corner,” which makes it increasingly difficult for our remedies to affect them either directly or indirectly. Yet it is not until all this has happened that we begin to talk of a first stage.

What really is most needed in the treatment of tuberculosis is early diagnosis, such as is now possible in the case of syphilis. When we have a means of arriving at the diagnosis sufficiently early my experience leads me to hope that in a majority of cases a course of treatment with pneumosan will prove entirely efficacious. I have found it a most useful drug in the so-called first and second stages of the disease, and I know of no better palliative in advanced cases. I do not regard its action as specific, but rather as tonic and alterative. In a large number of cases its use is followed by a defervescence of temperature and an improvement of the patient’s general condition, resulting in arrest of the disease. On these grounds I consider that it merits a more extended trial, particularly as its use appears to be free from danger even in acute and advanced cases.

In the course of my remarks I may appear to have disparaged tuberculin as a therapeutic agent; before concluding, then, let me make it clear that I am a believer in the value of tuberculin under proper conditions.