Agoraphobia

and

some allied conditions.

April 1903. A. Lewis Husband.
AGORAPHOBIA

AND

SOME ALLIED CONDITIONS.

Some years ago, my attention was called to some peculiar symptoms shown by a lady with whom I was intimately acquainted. At that time I could find no detailed description of the condition in any of the ordinary textbooks of Medicine.

I have since then, had ample opportunity of studying the condition, and in general practice have met with over forty similar cases in seven years; and many others which simulated the conditions, but which on careful investigation must be excluded, as they occurred in patients of hysterical and neurotic tendencies, who were ready to own to almost any symptom, if in questioning, the slightest lead was given them; and great care was necessary in differentiating genuine cases, especially in examining patients who were suffering from any condition of so-called functional nervous disease.
Since looking up the literature on the subject, I find a brief description under the title Agoraphobia, in the 1894 Edition of Quain's Dictionary of Medicine p. 26 Vol. 1 by Fred. J. Roberts as follows:—

"Agoraphobia: Fr: La peur des espaces. By these names a peculiar nervous complaint has been recognized, characterized by a feeling of alarm and terror associated with a group of nervous symptoms, which some individuals experience when they are in a certain space. The condition may be developed rapidly or gradually, and the chief phenomena observed are as follows: A sudden sensation is experienced, as if the heart were being grasped, while this organ palpitates violently. The face becomes flushed, the legs feel weak, tremble, and seem as if they would give way under the body. There may be sensations of itching, coldness, or numbness, or profuse sweating may occur. There is no true vertigo: the special senses are unaffected, and consciousness is not at all impaired. A curious impression is sometimes experienced as if space were elongating..."
itself out indefinitely. Persons who are thus affected are quite sensible of the foolishness of their fear, but cannot be reasoned out of it. During the attacks they feel a strong inclination to cry out, but hesitate to do so. They think that their dread is known to others, and many of them endeavour to conceal their feelings, lest they should be considered insane. The circumstances under which the symptoms just described may be experienced are various. They may be felt for instance in the street, especially if the shops are shut, in public buildings such as churches, concert rooms or theatres, in omnibuses, cars or other conveyances, on a bridge or on looking at an extended façade, or a flying perspective. Most persons who suffer thus in the street feel better when with someone or when near some object such as a carriage, or even when carrying an umbrella or a stick. Occasionally however, they shun other people especially acquaintances.

But little is known as to the nature and origin of Agoraphobia. The complaint
is not regarded as idiopathic, but as sequential to some other condition. It occurs in males and females, and the individuals affected may be strong and in good bodily health, while they are often intelligent and well educated. A history of hereditary nervous disorder can be traced in some cases, indicated by the occurrence of insanity or epilepsy in members of the family, and the patients themselves may present indications of a nervous temperament. Their emotions are often easily excited, and they may be subject to nervous symptoms, such as headache, a feeling of heat in the top of the head, sparks before the eyes, occasional faintness or motor disorders.

In 1893 Granger Stewart in his Lectures on Nervous Diseases, speaks of various similar forms as Clifford's disease, Agoraphobia, and Claustrophobia, and ascribes these conditions to some error in equilibrium.

Roberts in his work on Medicine Ed. 1888 p. 875 states: "The condition named Agoraphobia may be regarded as a form
of Hypochondriasis in which the patient dreads being out in the streets alone, and cannot go into the midst of any public gathering."

Neither Ziemssen, Welch, Pagge, Brizlow, Cowen, Handfield Jones, Pepper,Trumpnell, Older, or other authors, so far as I have been able to ascertain, have fully described these Conditions, although many have written very copiously on Neuroasthenia, Hysteria, and Hypochondriasis; Conditions which to those afflicted with them are sources of great distress and suffering. Some of the later writers have briefly mentioned Agoraphobia, a similar but opposite condition called Claustrophobia. Evidently Roberts in his remarks includes both under one head.

In the recent Edition of Allbutt's System of Medicine, I find Agoraphobia and Acrophobia very briefly referred to in connection with Neuroasthenia by and Psychological Ideas by Rixen Russell - Vol. VII, p. 886.

"Both Agoraphobia & Acrophobia are common forms of imperative ideas. The former condition makes it almost impossible for
The affected person to venture across any large open space, owing to the fear that something untoward will befall him; in the latter state the subject finds it difficult to resist a strong impulse to throw himself from any height, in spite of his being fully aware of the unreasonableness of this impulse. Neither giddiness nor suicidal intent plays any part in such cases." Further, he states "As was said when Convulsive tic was under consideration no hard and fast line separates the mental state characterized by fixed ideas from that of true insanity, so that at any time the border may be crossed, and what was formerly recognized by the patient as absurd, now becomes a delusion in which he firmly believes."

With all due deference to the distinguished authority, I shall later endeavour to show that this view of the condition named is in some respects wrong, that an organic cause is responsible for the condition of Agoraphobia, while Acrophobia has nothing whatever to do with any approach to Insanity.
Much nearer the truth is also the statement in Vol. VII p 141 sqq. when writing on Neurasthenia.

"I cannot omit two curious conditions characteristic of Neurasthenia, phenomena which indeed pertain rather to it than to insanity; viz.: Agoraphobia and Claustrophobia. I am not concerned to define these names as names; they are accepted, and that which they signify is familiar enough to those who see much of Neurasthenia.

Claustrophobia is more of an obsession of Agoraphobia, the patient is agitation is usually free until the dread falls upon him, as a wide space opens before his eyes; of Claustrophobia he is always more or less conscious, perhaps its condition are more continually about him. The dread of being shut up in a church, in a theatre, in any closed apartment even in a friend's drawing room, especially if crowded with people may be intolerable. Some of these obsessions, as I have said, are associated with visceral sensations of a more or less oppressive kind, thus
Claustrophobia is apt to formulate itself as an oppression at the chest, a panting, or a heart constraint or a disposition to diarrhoea. Still it is essentially independent of visceral sensation; it is a sort of panic, an impulse to a flight which might be impeded. Agoraphobia on the contrary is an impulse to declension, a fear of empty space as such. The "giddiness" which possesses some big strong men in high places or on ladders or the like, is peculiar and not to be confounded with vertigo or with ordinary "funk". It is incomprehensible even to a timid climber who is free from it.

Now agoraphobia, like claustrophobia is common in neurasthenia, and I repeat, a mark of this malady rather than of insanity. A young athletic schoolmaster suffering from Cerebral Neurasthenia and sleeplessness after influenza was bewildered and ashamed to discover that he dare not with whatever decompensation cross the market-place of his little town. But as I have said Agoraphobia is not only a matter of market-places, but also of any unhelpful space, of a space that
in which there are no easy steps for the eye.

A neurasthenic lady to whom I had recommended the bicycle, came to me almost with tears in her eyes, for she had quickly and gladly taken to the exercise, and found great benefit in it, saying that when she turned into a spacious and unoccupied road, she was seized with panic; in narrow or winding lanes or in broad thoroughfares full of traffic she was quite happy. A kindly Yorkshire clothier—one of our railway cars—was amazed to find that after this accident, and while suffering from inertia and other consequences, he could not face the broad road from his house to his office, unless indeed when blocked with traffic. He would turn into a cottage, complain of fatigue and send for a cat; and for a time he was constrained to go about his work in a carriage. I suppose he got over the difficulty; for my part I lost sight of him. In consultation with skilful oculists, I have often tried to find an explanation of this dread in some disorder of adaptation of theocular muscles.
But without success. The defect seems to lie in some lack of mental grasp of space relations."

Further, in the same article on p. 153 Clifford Allbut says: "Errors of retraction are apt to bring about strange consequences."

These extracts seem to show up fairly well what is at present known of the conditions, but no definite theory of the cause has yet advanced, although Allbut was very near it in the previous underlined paragraph, it is remarkable that he did not suspect what I believe to be the true determining factor. Especially noticing his remark about errors of retraction.

There is no doubt that in cases of acrophobia and its allies, are sources of great discomfort to those affected, and therefore worthy of further study, and if possible relief. In many cases, the idea that they are making themselves ridiculous, and are apparently unable to do something which should be so easy, a condition which seems so foolish but which they cannot understand—causes great mental suffering; as several of
my Cases have stated, they feel they could cry with shame, and the miserable feeling of inability to perform apparently easy actions.

A point of extreme importance in most of my Cases is, that the Acrophobic troubles are not experienced in the dark. Many Claustrophobics do the same quick definitely, and it is a well-known fact or stand that Acrophobics can walk on eminences in the dark, which they could not attempt to do when seeing where they were going.

This fact certainly points to the cause of the condition being associated with vision in some way or other, and so I shall show later, this, taken in conjunction with other observations, led me to ascribe the cause to the refractive condition of the eye.

I now give in detail some of the principal Cases I have met with during over seven years observation. I would draw special attention to Nos. 1, 2, 5, 9, and 11. The brief cases detailed form about one fourth of the total found during that period.
Cases.

Mrs J. H., 28 years when attention was first called to symptoms. Married. A lady of strong and healthy family, no neurotic history or nervous heredity. Well educated, sensible and strong-willed, no hysterical tendency. Rheumatic diathesis, otherwise perfectly healthy in every system. Had two healthy children. Three sisters and six brothers, four of whom are myopic; she herself suffers from myopic astigmatism.

She describes her symptoms thus—

In attempting to cross any wide empty space a peculiar dizziness comes over her, especially if she suddenly emerges from a narrow pass. She falls as if she were reeling and about to fall, and is dazed and thinks people are looking at her. Always most if there is no one with or near her, it tends to hurry across the space and tracks better if done so, but will not attempt it until someone or something as a cart or cab is near, and then tries to hurry across in company.
She has similar sensations if attempting newly to cross a wide street as for instance George St, Edinr. She feels better if anyone be near whom she can keep looking at or in contact with, or if she has anything in her hand to grasp and look at— as an umbrella.

She used always when out alone to walk near to other people, or close to the side of street and shops, it in crossing the Middle Meadow Walk Edinr. close to the railings. Always felt very foolish and ridiculous. Can sometimes overcome the feelings by a strong effort of will. She states that when the attack comes on she feels as if something were pulling her to one side, it is better if she walks towards the opposite side. The street noises seem loud, and things appear dull, blurred and misty. These sensations leave a sense of weakness, and sometimes she has felt as if the heart stopped beating for a moment. Her face would flush if she felt hot and uncomfortable, and agitated by the thought that people were noticing her, and
Thinking her intricated or involved. Sometimes the attack would come on all at once, and she feels as if she must fall unless she can get hold of something, but she has never fainted or fallen actually, or dropped anything she might be carrying, or become unconscious or really staggered—only felt as if she were doing so. The perspective before her seems to be receding and widening out, and the place becomes void. She then desires to close the eyes for a little while, then look at something near. She must keep looking straight at the ground in front, it does not notice anything passing. It is much worse if the street lamps are shut. "The unbearable". These symptoms are not felt in crossing fields—chiefly in places with prominent buildings about.

**Duration.** Their peculiar duration sometimes last only a few minutes if she can get back to more confined places, but sometimes will after lasting, continue during a whole walk. I have inquired whether the locality and
surroundings have any influence on this, and generally it seems to be so.

**Emotions** She is most miserable and feels as if she wants to cry particularly if sympathised with or even spoken to. Would rather walk a mile round rather than cross the marketplace of the town where she lived before going to Edinr: (Almost a square about of about 50 yards) and while in Edinr days she has suffered agonies in going through the Middle Meadow Walk.

There has never been any suicidal thought or desire. Sometimes so bad that she could burst out crying or call out in the street with the intense misery. If the thoughts and attention were occupied she would not have the sensations so bad, but they are then apt to come on suddenly especially if the hands were empty, for instance—If she had gone out without her umbrella she would all at once feel bad.

She is very emphatic that the sensations never assailed her in the dark.
The entire condition was worse at the Menstrual Period, or if from any Cause Fatigued or in a low state of Health. If the Health was very good the attacks were less severe, less frequent and more easily overcome.

I have given this case in detail as it fairly presents all the typical symptoms of Agoraphobia.

II. Mr. B.C. 29, Laurence, has shown nearly similar symptoms, but in addition some of the peculiar obsessions and imperative ideas spoken of by KienRussell. He is a fair example of Insanity of doubt or "Maladie du doute". During business, after placing documents in their correct places he feels not sure he has done so, and yet he says "know he has." He will return and look if they are safely stored. On going to bed he will fasten the doors of his house regularly, and yet on getting upstairs feels he must return to make sure,—after undressing has been again asnaile by the same doubt, it has returned a second
time to again make sure. He cannot convince himself that he has performed acts, that as a matter of fact he is constantly in the habit of doing without missing. On alighting from a tramcar or train he would feel he had left something behind him e.g. book - parcel - or umbrella, although aware there were no grounds for his misgiving; yet the idea would torment him and I have seen him in this condition with knitted brow and face quite strained. He feared insanity. On treating him with rest from business and grave assurance there was no fear of insanity, good feeding and nervous tonics he would lose most of his symptoms except the Agoraphobia, on correcting this Myopia he got quite well it is now working quite happily.

III No 7. E. 32. Commercial Traveller

great smoker, father - highly nervous - himself somewhat intemperate. Was myopic and had partial amblyopia. Showed agoraphobic symptoms especially
The self-conscious condition, thinking that people were constantly studying him when in conversation. This man unfortunately left town before I could get him successfully treated and I lost trace of him altogether.

IV. No. H. 51. Married woman. Extremely nervous, shy of phlegmatic temperament. Marked obsessions, agoraphobic symptoms. Was presbyopic and had a marked strabismus of left eye. Became so bad that would at one time hardly go out of doors. In this case the obsessions and dread of being alone were the most noteworthy points. Correct glasses made much improvement, but as she was constantly worried by a selfish and unkind husband she never got into a really good state of health.

V. No. H. 52 Married. Three children. Very markedly neurotic. Had symptoms of the opposite condition - Claustrophobia. She could not bear to sit in Chapel or
any hall or building under a gallery, as feared it would close down or fall upon her. Felt great difficulty in descending stairs and had the impression that the slipper grew coming up to meet her feet, would stumble and has more than once fallen or slipped down the stairs. She could not sleep in a bed with curtains or canopy. Sometimes felt as if the ceiling and walls of the room were shutting in upon her especially if the room was full of company. On this account she would not visit, or go to parties because of the constant miserable feeling. She used to go out into the yard or garden when she felt very bad to escape as she said "the shut-in feeling." This lady suffered a great deal from ulcers and cystic trouble and was generally in bad health. Had migraine and was hypermetropic. In this case also correction of refraction made good improvement especially in the Claustrophobic Condition, but was far from well at the best of times.
VI Miss M. 39. Spinster in easy circumstances, but hardworking. No nervous history. Hypermetropic. Mother and sister also. Symptoms similar to case 5 with regard to Claustrophobia but in other respects quite opposite, being generally in good health and of a happy and sanguine temperament. This case is notable as she distinctly states that the Claustrophobia never troubles her in the dark. When attacked in the daytime used to feel faint & hot and had a peculiar "drawing" in the eyes.

VII Rev. E. S. Minister. Highly nervous temperament. Agoraphobic and Acrophobic. On commencing sermon when in pulpit would have all the lights turned quite low as could not bear to look around the church or down at his congregation. Told me that he had suffered a marked diminution in performance his ministerial duties, he had to give up duty and go away for protracted rest and change. He had repetitive errors in his worst condition followed a continuous spell of very hard
Literary and ministerial work. He left Sheffield it is now I believe in London and quite recovered. I am unable to state what his particular ocular weakness was.

VIII Mr. B. N. Steel merchant. Had had influenza when travelling in Australia & on returning consulted me. Had had Cerebral Neuroasthenia. I entered very fully into his Case. He had very decided Agoraphobia & on examining eyes found Myopic astigmatism a condition he had not suspected before his illness at the had always had "weakish sight". This man had marked visceral sensitiveness, said that when the attack came on he felt a kind of twining in the stomach & had drawing of the eyes & had headaches. He very was very subject to influental attacks, & took that complaint whenever it was about. His general system was fairly; he was weakened by the repeated influental attacks. Correction of refractive Error and careful treatment of his Neuroasthenia made marked improvement, but on the least overstrain he became Neuroasthenic again. But not Agoraphobic.
Mrs W. 40. Highly neurotic and markedly hysterical and always suffering from something as she believes. Had double ovariotomy when 28 and had great trouble from an intemperate husband from whom she is now separated. Great trouble in diagnosing her real condition. So just the case that would have convinced to almost any symptom or suggestion, in which one might expect to find one of the phobias. Although she had all sorts of giddinesses and subjective symptoms, I could never get any voluntary statement which pointed to any of the others under consideration. I was at first suspicious there might be some organic nervous disease. She was extremely cunning & went without my knowledge to one of our consulting physicians, then returned and told me he had told her the same as I had. She keeps returning for treatment whenever she feels a little worse than usual. Careful examination of the eyes shows quite normal, in fact very good sight, a fact of great interest, the history and course of this
Fig. 1. to face p. 24.
Care might lead one to suspect otherwise. The fundus also is normal.

X Miss N. H. 23. Another markedly hysterical case very similar to last, but no agoraphobia, and sight again normal. She has recently married and is already much improved in general condition.

XL Mr. F. S. F. P. 43. Independent means of a fine golfer. This case of great interest as showing a good Example of the allied Condition of Acrophobia. This gentleman is quite unable to mount a ladder or stand at any height of looking downwards. He says he immediately feels giddiness of a dread of falling, a desire to throw himself down. In playing golf with him over the new course at Nottingham, I was greatly interested to find that he was quite unable to play his tee shots from the 9th to 17th hole, which stand at a height of 50 to 80 feet over the greens placed to, the holes being in section as shown in Figure 1. and in appearance something
like the old Rockies Je on the D accrued. He would not play from the front of the ice and was allowed to play from behind where he could not see the drop in the ground immediately in front of him. He has no visceral sensations although he feels of bad and giddy. Any similar condition gives him the same trouble on that account he always prefers flat courses. He has suffered from this Acrophobia from childhood and has always avoided any experience of heights. Sight quite normal.

XII Mr H. to Plumber, came complaining of great giddiness especially when working at a height — in fact always scared falling — of peculiar feelings about the head. No Agoraphobia or Claustrophobia, sight normal. Health otherwise good.

On examining Ears I found hard plugs of wax and Epithelium quite blocking the external meatus a pressing on drum. Removed the plugs of Polysperoid once or twice with the result of a perfect cure. This is a common condition it is mentioned because of hearing later on.
The foregoing cases are the most typical of many in which I have met with definite conditions of Agoraphobia, Acorphobia or Claustrophobia.

Acorphobics do not as a rule come for treatment of that primarily, unless in a very exaggerated condition of affecting their daily occupation.

Leaving aside various forms of Vertigo due to organic disease of the Semicircular Canals or Cerebellum, giddiness from Ear-plugging with pro cure on the Lymph or nure is very common. I might state that personally I am Acorphobic, but not in an exaggerated form, and I always experience a visceral sensation in the region of the solar plexus, when standing on any more than ordinary height and looking downward. In an ascent of the Eiffel Tower at Blackpool, at the supported and by the closed railings, the visceral feeling for looking downwards from the top was very like what is felt in ascending or descending a high lift, or better still the shaft of a coal mine.
It is noticeable that it is only when vision is directed downwards that the Aerophobic fear and sensations are experienced. Freedom is felt if one looks upward - hence the advice to a climber “look upward”.

I have made it a rule in dealing with these cases always to examine the condition of the Eyes and Ears. In all cases of Neuroasthenia or Giddiness of any description, I have sought for Agoraphobic or Claustrophobic symptoms taking care not to be suggestive in my method of questioning.

Rivin Russell speaks (Societ) of Aero-
phobia as a Common Condition. In the Cases I have examined I have found about 80 per cent to be suggest subject to it in a greater or less degree, while a few seem to be entirely free. I know one gentleman who has walked around the top of a tall factory chimney, a thing which would be utterly impossible to me. It is interesting to note that his work was constantly in a room on the fourth story of a high building in the same factory.
Etiology.

Clifford Allbut states as before quoted that in cases of Agoraphobia he has had patients examined for "disorder of adaptation of ocular muscles". Has he also looked the refractive condition of the eyes? Apparently not, as he on p 153 before referred to he admits "Errors of refraction are apt to bring about strange consequences". But so far as I can ascertain he does not appear to have suspected the condition to be associated with refractive Errors. Probably thinking of the muscular sense and the measuring power of the eye movements, he may have been led to seek in them the Cause of Agoraphobia.

Leaving aside the usual and common symptoms of eye strain due to refractive Error e.g. frontal and scapelae headache etc, with which every physician is familiar, I wish to deal specially with the Agoraphobic and allied conditions of Amaurophobia & Agoraphobia.

The study of my original Case No 1 and the results of its treatment first led me nine years ago, while a final student in Edinburgh, to the theory that refractive Errors
might be the determining factor in the Agoraphobic condition if that this factor might have important reflex influences especially accentuated, if any low state of health supervened, such as Post-Influenzal weakness, Anaemia or Neuroasthenia.

Acting on this belief I have, since being in general practice, whenever meeting these Cases, had the Right most Carefully tested, and have, while practicing in Sheffield during the last seven years made a careful Study of Agoraphobia and the similar Conditions whenever met with.

Briefly of the most typical Cases I have detailed and the accompanying Table shows at a glance a Comparison of these Cases. In all, I have taken notes of over forty Cases, but on account of necessarily lengthening this thesis I have refrained from quoting more of them in detail.

The Case No.1. Mrs. H. my own wife, had suffered more or less since childhood and was always worse in any lower state of health or during menstruation. She had worn glasses since the age of 15.
myopia supplied by a "Chemist caustic" in Nottingham. These were renewed or altered whenever necessary at the same place. When 19 she consulted Bell Taylor of Nottingham as her sight was getting worse, I as I now suspect she was probably suffering from progressive myopia. He gave a bad prognosis of her sight, which fortunately has not up to now—about 18 years since—been borne out. When 27 she was in Edinburgh and being markedly affected with Agoraphobic symptoms I complaining much of eye-trouble I took her to Dr. E. Derry. He found that she had bad Myopic Astigmatism and must have been for years wearing lenses quite unsuitable. He very kindly prescribed a proper correction and almost immediately improvement set in. She is now periodically examined, any necessary slight alteration being made, and she has since 27 never been really troubled by her Agoraphobia. Of course in this case, I have had exceptional facilities for observation, and am well acquainted with the entire history having known the lady since she was about 16 years old.
<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Temperament</th>
<th>General Health</th>
<th>Facial History</th>
<th>Spinal Pain</th>
<th>Duration</th>
<th>Outcome</th>
<th>Remarks</th>
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</thead>
<tbody>
<tr>
<td>Mr S. H.</td>
<td>22</td>
<td>Sanguine</td>
<td>Very good.</td>
<td>Neurasthenia</td>
<td>L-1/22sp,</td>
<td>9 years</td>
<td>Curd</td>
<td>With history of</td>
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<tr>
<td>Mr S. G.</td>
<td>24</td>
<td>Neurotic</td>
<td>Good.</td>
<td>Myopia</td>
<td>R-22sp,</td>
<td>3 years</td>
<td>Curd</td>
<td>Very nervous.</td>
</tr>
<tr>
<td>Mr P. E.</td>
<td>32</td>
<td>Sanguine</td>
<td>Fair</td>
<td>Myopia (Asthenia)</td>
<td>L-1/22sp,</td>
<td>9 months</td>
<td>Improved</td>
<td>Poor memory &amp;</td>
</tr>
<tr>
<td>Mr P. N.</td>
<td>35</td>
<td>Sanguine</td>
<td>Fair</td>
<td>Myopia</td>
<td>R-12sp,</td>
<td>5 years</td>
<td>Improved</td>
<td>Continue.</td>
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<tr>
<td>R. E. S.</td>
<td>1</td>
<td>Neurotic</td>
<td>Good</td>
<td>Asthenia</td>
<td>L-1/22sp,</td>
<td>1 month</td>
<td>Curd</td>
<td>Well.</td>
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<td>Mr H.</td>
<td>51</td>
<td>Allogamatic</td>
<td>Good Asthenia</td>
<td>R-21sp</td>
<td>3 years</td>
<td>Improved</td>
<td>Allogamatic</td>
<td></td>
</tr>
<tr>
<td>Mr H. B.</td>
<td>32</td>
<td>Neurotic</td>
<td>Bad</td>
<td>Hypotonia</td>
<td>L-21sp</td>
<td>4 years</td>
<td>Improved</td>
<td>Continue fairly</td>
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<tr>
<td>Mr M.</td>
<td>39</td>
<td>Sanguine</td>
<td>Good</td>
<td>Hypotonia</td>
<td>R-22sp,</td>
<td>18 months</td>
<td>Curd</td>
<td>Would not control</td>
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<tr>
<td>M. B.</td>
<td>42</td>
<td>Allogamatic</td>
<td>Very good.</td>
<td>Normal.</td>
<td>-</td>
<td>7 years</td>
<td>No Brachial</td>
<td>Think he is better now than</td>
</tr>
<tr>
<td>M. W.</td>
<td>40</td>
<td>Allogamatic</td>
<td>Good</td>
<td>Normal.</td>
<td>-</td>
<td>1 month</td>
<td>Curd</td>
<td>Common hope.</td>
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<tr>
<td>Mr W.</td>
<td>40</td>
<td>Neurotic</td>
<td>Poor</td>
<td>Normal.</td>
<td>-</td>
<td>6 years</td>
<td>Occasional improvement</td>
<td>Almost hopeless case</td>
</tr>
<tr>
<td>Mr W.</td>
<td>43</td>
<td>Neurotic</td>
<td>Poor</td>
<td>Normal.</td>
<td>-</td>
<td>8 years</td>
<td>Curd</td>
<td>Left hand by influence of</td>
</tr>
<tr>
<td>Mr H.</td>
<td>56</td>
<td>Sanguine</td>
<td>Sore</td>
<td>Hypotonia</td>
<td>L-22sp,</td>
<td>4 years</td>
<td>Curd</td>
<td>Slightly better.</td>
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<tr>
<td>Mr W.</td>
<td>45</td>
<td>Sanguine</td>
<td>Good</td>
<td>Normal.</td>
<td>-</td>
<td>1 month</td>
<td>Curd</td>
<td>With history of</td>
</tr>
<tr>
<td>Mr H. D.</td>
<td>25</td>
<td>Morelino</td>
<td>Fair</td>
<td>Left myopia.</td>
<td>R-Plane</td>
<td>5 years</td>
<td>Improved</td>
<td>After surgery on</td>
</tr>
</tbody>
</table>

*Cases not detailed below.*
I now refer to the calculated cases—twelve as detailed before and three additional ones. By comparison of these I find
1. That in all the marked case of Agoraphobia & Claustrophobia there are Errors of refraction.
2. That the cases of Hysteria and Nervos-thema do not show these Conditions of refraction to be normal.
3. That all these Conditions—Agoraphobia, Claustrophobia, and Acrophobia are much exaggerated immediately any lower state of general Vitality is encountered such as Neuroasthenic and Anemic states.
4. That persons of neurotic temperament and tendencies seem most subject to Agoraphobia when refraction is abnormal.

With regard to the first generalisation this has been my Experience in all Cases. All have been tested by myself and many also by special Ophthalmic Surgeons viz:- Drs: Berry, Dr. Simon, Field, and Dr. Restley. Often the Error is only slight. Generally I have found Myopic Conditions associated with Agoraphobia,
and Hypermetropic with Claustrophobia.

With regard to the second generalisation, as I have only tabulated two cases of this kind, I have met with many other similar ones – Neuroasthenics (Hystericus with whom Emmetropic either naturally, or rendered so by the use of proper Corrections, in whom no symptoms of Agoraphobia or Claustrophobia were present.

In the third generalisation, I remark that it is of course quite possible that many cases of the condition may exist who never come up for treatment, so long as the general health is good and little trouble caused to the patient. But when these cases become Neuroasthenic as for instance after a serious illness – frequently influenzal – they come for consultation and the peculiar conditions are then ascertained. They bad cases will make their appearance for that alone, as in several of my cases, and it is then generally found they are in a neuroasthenic condition, though not always, but mostly
They come complaining of being "run down" and then occasionally on examination one of the Conditions may be detected. Now Hofophobics are not uninfrequently found out thus; amongst chimney sweeps, builders, telephonists and workers in similar occupations one gets a case like this:—W: 45 a big strong mason's labourer, very intelligent, complained that he could not do his work because he was afraid of falling when he was mounting his ladders or walking on the scaffolding. He had been at this kind of work all his life and had never had this difficulty before. He said that he had had a "Severe Cold" a week or two before and he thought this had caused this weakness. He had not been drinking. I diagnosed an attack of influenza with falling weakness, gave him two or three doses of this Club; with times, he gradually got all right.

This man gave me some inte-
Eating information relative to men who worked regularly in high positions.
Fig. 2. See face p. 34.
He told me that it was common amongst his class to find men who worked at heights to be incapacitated for days after a fit of intemperance, and the gangers would put them to work on the ground till recovered. He says this is common in quarries, where sometimes manual plank bridges are made (see fig. 2) between one part and another of material hauled across in barrows. He knew men also who could not possibly do this kind of work, although many become quite expert at balancing and passing across quite narrow bridges.

Another case S. M. a sailor had an attack of Acute Rheumatism. He recovered, but was never afterwards able to continue at his trade—not on account of his heart, but because as he said—"his nerve was gone." He had in fact become very Acrophobic through former triviality. His sight was quite good, he never showed any symptoms of Either Agoraphobia or Claustrophobia. I am inclined to think that some degree of Acrophobia is present in
most people until they are rendered free from the trouble by practice and experience. We know well the difficulty with which a sailor boy first mounts the rigging. It would be interesting to have the early experience of mountain climbers.

There is now little doubt that the ability in the human race to stand and walk in the erect position to balance the body, is an acquired ability attained through many generations of ancestors, and further learnt and perfected in early childhood. I need not enter into the question from the evolutionary point of view. Most mammals are able to track at or very shortly after birth e.g. lambs, calves, foals, etc. In the human race this ability is only perfected after repeated efforts on the part of the child, as he gradually gains percept and experience of distance and direction, through the media of the muscular sense of the body generally, and the eye in particular. The latter is extremely important in the formation of percepts of direction. Notice how a young infant will make unwavering attempts to grasp objects really within reach until he
Learn to co-ordinate muscular movements with the experience gained through the eye. Now, during childhood, muscular perceptions of the Common Heights at which we live are being gradually and regularly learnt, by frequent repetition, as in habit formation, become a part of our permanent mental knowledge and power, and the eye muscles get accustomed to accommodating for the regularly recurring experiences. But place a young child on any altitude to which he is unaccustomed. Even the edge of a table or top of a wall, and immediately there is lack of power to equilibrate and adapt himself to the new conditions, unless assisted, he will fall.

Now this I believe accounts for Acrophobia. It is a question of degree with different persons, dependent on the amount and variety of experience they have had in practising equilibration at different altitudes. The same reasoning applies to the adult - extend the conditions - the result is the same. But when health is bad, the sense and power already acquired becomes to some extent weakened or lost and the person becomes pathologically Acrophobic.
In the upward direction we are constantly accustomed to infinite distances, and so no clear perceptions of distance in the vertical are or can be formed. Experience in that direction is not limited, as it is by the Earth whenever we look downwards.

In Agoraphobia similar conditions obtain but always in a more or less horizontal direction. The normal emmetropic eye has vision of unlimited extent - its distant point is infinity - it is always engaged in experiencing and unconsciously measuring or conveying to the perceptual centre perceptions of various distances, in regulating the motions and activities of the body by the experience so gained. There is the constant feeling of amount of muscular effort expended in forming the accommodations necessary for these various distances, and in the normal eye more effort is required for near than for distant objects. 

But if the eye be emmetropic these normal conditions do not obtain, the eye can only gain true perceptions according as it is able to see fairly clearly at certain distances only.
accustoms itself to estimations based on a more or less fixed distance. When great variations from this are experienced, a great strain is at once thrown on the accommodating apparatus, which results in Agoraphobic or Claustrophobic symptoms. Case No. 1. Mr. H. on trying to walk down a road without his glasses, goes as if were from one point to another fixing the eyes either on the ground in front, or on some object such as a lamp or tree at a little distance in front, reaches that and continues in the same way. If she then comes to a situation in which the guiding object suddenly disappears, she is at once nonplussed and liable to the Agoraphobic condition already described.

In the Claustrophobic cases the conditions are just opposite to this. Comfort is chiefly felt when the eye has a more or less unlimited range. Most of these cases have been Hypermetropic and accommodation becomes more strained as without assistance, only rays converging as they approach the eye will find a natural focus on the retina.
Normal Emmetropic Eye.

Fig. 1.

Myopic Eye.

Fig. 4.

Hypermetropic Eye.

Fig. 5.
In looking further at this from the optical point of view we find

1. The emmetropic eye has a range of distinct vision from about 5 inches up to infinity. At 5 ft all parallel rays being focused on the retina. Fig. 3. a

2. The myopic eye can only focus divergent rays upon the retina - the far point lies abnormally near & the range of accommodation is much diminished. Parallel rays are brought to a focus in front of the retina Fig. 4. a.

3. The hypermetropic eye can only focus convergent rays on the retina. The far point is negative & the near point abnormally distant - 8 ft & 10 ft. Range of accommodation infinitely great. Parallel rays are focused behind the retina Fig. 5. a.

In these differences lies I believe the determination of Agor or Claustrophobia. In Agoraphobia the patient says that objects do not appear to him to be "rubbing out" that is diverging - that is the subjective impression he receives. In myopia the eye by obtaining accommodation for objects within easy range, and obtains
a clear image on the retina, but suddenly losing the range and focus on approaching a near or distant space. The correct focus is thrown anterior to the retina at a Fig 4 and it receives only an extended and blurred image at the Fig 4 so that the appearance of the object suddenly widens out as the more so as the focus gets further forward. An analogous condition is seen in focusing with a photographic camera.

In hypermetropia the focus is suddenly thrown behind the retina at a Fig 5 the rays passing through in a gradually converging path, so that the impression of closing in or converging is conveyed to the brain.

This explains the suddenness of the attacks as described by the patient. While the patient has the attention divided the eye is unconsciously accommodating itself, or perhaps not accommodating at all, but all at once attention is drawn to himself if the attempt to concentrate falls on the distant (or near object in Claustrophobia) object in Agoraphobia with the result of a sudden blurring of the image, and
strain on the ciliary muscle & nerve, resulting in the subjective sensations already described.

Now the nerves that supply all the muscles of the eye are:

1. Motor oculi or 3rd Cranial
2. Testicularis, 4th "
3. Abducens, 6th "

Anatomically, the 3rd nerve springs from the oculo-motor nucleus which is situated along the floor of the Aqueduct of Sylvius, and is united with the nucleus of the 4th just posterior in the floor of the 3rd ventricle. Both these centres are united by the fibres of the Posterior Longitudinal Bundle, with the nucleus of the 6th nerve in the floor of the 4th ventricle. Thus the nerves of the ocular muscles are all correlated at their centres.

The 3rd nerve contains fibres for:

1. All the muscles of the eyeball except the External Rectus & Inferior Oblique
2. The Sphincter pupillae
3. The muscle of accommodation - the Ciliary Muscle.
and the three centres for these different fibres also lie directly in relation with each other.

Noting therefore the intimate connection thus shown, it is not unreasonable to suppose that in bad refraction where great strain is thrown on the Ciliary muscle and its nerve, cirulations may pass along this nerve from the muscle to the centre, or cell exhaustion may take place in the centre, setting up a reflex action along the fibres supplying the extraocular muscles of the eye, and thus accounting for the so-called "shivering and quivering" of the eye complained of in agoraphobia.

Further it is well established that forms of vertigo may be caused by paralysis, or loss of muscle balance in the eye, and there we get an explanation of the giddiness which sometimes attacks these people.

Then again these nuclei are connected with the cerebellum and doubtless with the higher centres of thought in the centrum, so there is no wonder that so peculiar nervous symptoms are met with,
due to irritations originally arising through lack of normal Conditions and power, in so important an organ as the Eye.

It will be noticed that I have said nothing of influences which may arise thro' the Optic Nerve itself, with its manifold Connections with various important parts of the brain. By Confused and indistinct impressions on the Retina, and by its connections with the nerves already mentioned thro' the various Centres, who can tell what false and contradictory impressions may be conveyed to the perceptive and Conceptive Centres. This may have an important bearing on some of the purely mental symptoms described, and when we further notice that it is chiefly in cases of Neurotic tendencies, there is little doubt that aside from the essential symptoms already considered;—Stark or optical illusions, giddiness, suddenness of attack to the minor symptoms are not to be wondered at.

Whether my Explanations be valid, and my reasoning sound or not, the important facts still remain to carry conviction to -my -mind at least.—
1. These cases of Agoraphobia and of Claustrophobia rapidly recover when fitted with proper Correcting Lenses.

2. Although in Neuroasthenic cases the General health may be much improved, the particular symptoms under consideration do not entirely disappear unless refraction be improved corrected.

Conclusions.

1. Agoraphobia, Claustrophobia and Acrophobia are more or less allied conditions attributable to similar causes.

2. Agoraphobia and Claustrophobia are directly determined by Errors in the Visual apparatus, chiefly refractive. The former is usually associated with Myopia & the latter with Hypermetropia.

3. Acrophobia is generally due to

   a. Lack of training & Experience in the Visual measurement of distance in a downward direction.

   b. To loss of acquired power Essential to some Condition of General Vitality such as Neuroasthenia.
1. Agoraphobia and Claustrophobia, but not Aerophobia are most common in persons of Neurotic temperament and tendencies.

5. All these conditions become much exaggerated under any Neurotic state of health.

6. Neurasthenia itself does not necessarily cause any of these conditions; nor are these conditions always characteristic of Neurasthenia; but Neurasthenia plus refractive error usually causes either Agoraphobia or Claustrophobia.

**Treatment**

The treatment of these conditions naturally resolves itself into:

1. Proper correction of any weakness in the visual apparatus.

2. The best possible treatment of any general weak condition found existing.

3. Assurance, especially if obsessions are present, that the Conditions are curable and have nothing to do with insanity.