Typhus Fever in Whitehaven, with
Recollections of a personal attack in 1890

Whitehaven is an old seaport town on the
Cumberland coast with a population of 10,000.
The town occupies the outlet of a watershed,
and there are many small courts branching
off from the streets, inhabited by fishermen,
dock labourers, and loaferos, who gain a
precarious livelihood. Fever has been
almost endemic in the town during the
present century, with epidemics at intervals;
one especially severe outbreak occurring at
the time of the Irish famine, when many
poor Irish were shipped over to this port
and brought typhus along with them. I am
told by old medical men of great numbers of
typhus patients lying on the piers, previous to
their removal to the fever hospital.

Waterworks were established in 1850, the water
being brought from Ennerdale Lake and an
excellent system of sewerage followed soon
afterwards; the sewage matter being conveyed to
the sea remote from the town. From a report
by the town surveyor in 1875, I find the
number of houses situated in the courts or
alleys to be 1,036, with 4,125 occupants, and an
average open space for each house of only 159 ft. This condition of things is practically the same now.
From the books of the West Cumberland Infirmary to which the fever patients were formerly removed, I have myself made an analysis of an outbreak of typhus which began in 1847 and continued for four years, in order that I may compare it with an epidemic in 1890 when The Notification of Infectious Diseases Act came into operation in the town, and to a report by Dr. Donaldson, a former house surgeon. These are: Sep 23 p 340. 1847, I am indebted for an analysis of the cases occurring in 1847 and up to Sep 1848.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Cases</th>
<th>Males</th>
<th>Females</th>
<th>Total Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>1847</td>
<td>157</td>
<td>56</td>
<td>11</td>
<td>17</td>
</tr>
<tr>
<td>1846</td>
<td>131</td>
<td>51</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>1845</td>
<td>34</td>
<td>13</td>
<td>21</td>
<td>6</td>
</tr>
<tr>
<td>1844</td>
<td>36</td>
<td>20</td>
<td>16</td>
<td>11</td>
</tr>
<tr>
<td>1843</td>
<td>14</td>
<td>6</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>1842</td>
<td>8</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>1841</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
</tr>
</tbody>
</table>

To the town officials I am indebted for the sex, age, and result of the 38 notified cases in 1890, so that in the calculations I have made for the year 1890, I am able to exclude all doubtful or unnotified cases.
Taking the total number of cases for the four years 1877-80, we find 92 cases in all, comprising 48 males, 49 females, and 24 deaths of which 19 occurred in males. After the age of 30 during the same years 20 men were attacked, whereas in 1890 there were only 7 above that age.

In the years 1877-80 I find that no woman died between the ages of 20-40 although 14 were attacked, and in the year 1890 out of 4 women between 20-30 one died, whilst there was no death among eleven women attacked between 30-40.

In 1890 the death rate 17.4 is almost identical with that of 1877-1876, and an increase is to be seen in the female death rate, and a decided decrease in the male, as compared with the four years.

In 1890 we find that 6 out of 36 females died, whereas only 5 out of 49 died in 1877-80.

Among the males in 1890, 6 out of 27 who were attacked died, as compared with 19 out of 43 in 1877-80. In considering the death rate of the males between 20-40 as compared with the
females, I found that in 1877 80 out of 16 men I died; whereas no woman died out of 14 who were attacked.

The following table shows the ages, sex, and deaths of those attacked in 1890.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Under 10</th>
<th>10-20</th>
<th>20-30</th>
<th>30-40</th>
<th>40-50</th>
<th>50-60</th>
<th>60-70</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Died</td>
<td>27</td>
<td>17</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>17</td>
</tr>
</tbody>
</table>

It thus appears that eleven children under 10 enjoyed the same immunity from death as eleven women between 40 and 50.

In the years 1877-80 no death occurred in any child under 10.

In 1884, 43 cases of fever occurred in the town, and the patients were treated in a new hospital outside the town, as since the year 1881 no fever cases have been received into the West Cumberland Inf. From the temperature charts I have had the opportunity of seeing this was evidently an epidemic of typhus.

On Sept 8, 1890 I was called to see two female children aged 15 and 11, in a court named Robinsons Fold. The elder had been ill four days and the younger two days,
and both had commenced by shivering and vomiting, from the mother's account. The Temp. of the elder I found was 102.6, pulse 128, Resp. 42. Temp. of younger 103.4, pulse 130, Resp. 30. I was struck with the great prostration in both cases, and the sickening odour that emanated from the elder girl's body while I auscultated her lungs. This elder child had a short painful cough, no blood in sputum, and I found slight dulness at both bases, with increase of vocal resonance, and crepitant rales. The smell had almost made me vomit, and I thought of typhus. On examining the abdomen, I found a faint maculated eruption which in this case I can best compare in colour to the pigmented spots seen sometimes on a pregnant woman's forehead. I diagnosed typhus, and reported both cases, these being the two first cases reported. I shall name the elder of these girls B.

On Sep 13, I was called to a girl whom I shall name C aged 17, in a different part of the town, in a filthy court named Cooke's Court. Four persons inhabited a small room, and I found the girl lying across the floor with her head touching the wall.
Opposite the fire-place, while her feet extended into the grate, I diagnosed typhus. Under this room was a cellar filled with refuse, and stagnant water lay in pools on the floor. On inquiry at this first visit, I found that a girl of 16 whom I shall name A had been attacked with illness three weeks before, in this same room. She had been delirious it appeared, and had been carried in a cab while still prostrate by a charitable lady who wished to rescue her from this brothel to another court named Bacon's Court where as it afterwards transpired a woman was at this very time lying ill of what proved to be typhus. A left Bacon's Court also and went to live in another named Spittals Court, and within a week, disease which proved to be typhus broke out in this Court also in the house in which she resided.

From the history I received on this occasion Sept 13, when visiting C, I came to the conclusion that the illness of the girl A, which commenced 3 weeks before must have been typhus which unfortunately had not been recognised. Then I say that the girls A, B, and C were companions, that C lived in the same room with A during
The latter's illness, and that the first case I saw and reported 13 had visited it during the latter's illness, I can come to no other conclusion than that it was a typhus case; for I have also shown that her movements were followed by typhus in both the houses in Bacon's Court and Siptells Court, which she in turn inhabited, after her removal from Cook's Court.

Now on the 9th Sept there had died, I learnt in this Cook's Court, next door to C after a week's illness, a man named Blake. He had not been notified as typhus. The sister who nursed him moved on his death to a court named Brassi Court a quarter of a mile away, and was called to her on Sep 20, and joined her suffering from typhus. Several people who attended the "wake" held over the man Blake were afterwards attacked with typhus. This man had returned six weeks before his illness began from Newcastle, and it was afterwards commonly believed in the Town and is still, especially by the Trustee Board—the governing body of the Town—the wish being probably father to the thought—that he had imported typhus from Newcastle. But the girl A who lived next door had been ill more than a week before this man's illness began, and an incubation stage of six weeks must be open to very great doubt. In Cook's Court we had overcrowding, filth, and poverty, sufficient to account for the
outbreak. I was interested in observing that in 1877-80 not one case came from Cork's Court; and many courts affected severely in those years enjoyed immunity in 1890.

On account of the defective hospital accommodation in Sept and the consequent retention of many patients in their own homes for several days after notification, while a building was in course of preparation for their reception, the disease spread rapidly.

I myself in my out door practice attended 16 cases before my own attack, previous to their removal to Hospital, so that my observations must chiefly relate to the initial week of the fever.

The rigor, headache, suffusion of eyes, general pains, and especially the sudden rise of temp. resembled strongly the initial symptoms of influenza of which I had then had experience in the epidemic of the early months of 1872, when I had 60 cases under my own care. The prostration, and in 5 of my cases the cough which was present from bronchitis, still further increased the resemblance. Murchison in his Treatise on Contagious Fevers (Ed of 1872) p. 493, draws attention to the possibility of confounding lymphoid with influenza, but makes no reference to its similarity to lypheus. In the case of a lypheus and influenza epidemic occurring at the same time, the sudden onset and prostration in both cases would render the task of diagnosis I think
Still more difficult.

In 4 out of my 16 cases diarrhoea was a prominent initial symptom, and I found congestion of eyes in all, and photophobia was present to a variable extent in all the cases I saw in the early days. In 5 cases I observed bronchitis, with cough. In 4 cases I observed enlargement and redness of the tonsils and faucets, with accumulation of viscid mucus, and great difficulty of expectoration; the patient clearing the mouth with the finger in two cases in a most distressing manner.

The mulberry rash appeared in all the cases I saw. In eleven cases it appeared on the 3rd or 4th day from the first visit, but in four cases the rash was present when I first saw the patient, and I was unable to satisfy myself as to the exact duration of the illness from the account of the relatives, who were very prone to lie, as they dreaded removal to twin hospital. I delayed calling in aid until late in the disease. In 4 cases I observed petechiae in abundance at the end of the first week, and 2 of these died. Delirium occurred in all my cases, and in two cases it was active and violent, and one of these who had to my own knowledge mitral regurgitation of old standing, died. In two suits I observed systolic mitral bruits.
and in all those was faintness of first sound on the advent of delirium, but in none of my cases was the first sound absent, while under my observation. In 2 patients aged 85 and 70 there was a foreboding of death, and on my recovery I heard that both had died.

A symptom to which I am disposed to attach considerable importance is the tenderness of scalp to percussion that accompanied the initial headache and continued until the disappearance of the latter, except in one case, when the hyperaesthesia persisted until the 10th day, even during constant delirium. In 10 of my cases this hyperaesthesia was a prominent symptom. In my first 2 cases I did not observe it; in four others the headache had disappeared when I first saw the patient and there was delirium at that time. In no case did I observe hyperaesthesia of the rest of the cutaneous surface to compare with that of the scalp. Murchison p 179 mentions hyperaesthesia as occurring late in the disease, and in one of my own cases I have alluded to its persistence until the 10th day, during delirium. I can find no special reference to hyperaesthesia
of scalp as an early feature of the disease. In my 10 cases the patient winced, and complained at once. We were unable to obtain a trained nurse for one of my medical friends whom I attended, so I cut his hair myself on the 3rd day, and merely holding the head steady with the fingers caused him the most exquisite pain. In the case of a girl of 16, whom I saw on the 2nd day of her illness, this feature was wanting, although she had headache and a temp of 102°F. A typhus patient had been removed from the same room the day before. I waited for definite symptoms before notifying, and 2 days later she went out of her own accord. On my recovery I heard that this girl had been attacked with true typhus a fortnight later. This was perhaps a case of typhisation à petites doses, alluded to in Sisson's Chin. Med., Vol. 2, p. 463. New York Soc. and true typhus supervened. I have seen numerous cases of influenza in the two epidemics since 1870, and although I have perused all my cases, I have failed to find this tenderness of scalp observed in typhus during the early days. I have
also had influenza myself twice, and although
the headache was intense, there was no hyperaesthesia
such as I experienced in typhus.
I have only had the opportunity of testing this
sign in 7 cases of typhoid fever since 1890,
but in 11 cases I have failed to observe it.
Two cases of children I saw in this town in 1892-
15 months after the last case reported as
typhus—exhibited this hyperaesthesia of
scalp. In both cases there was prostration,
and I could get no satisfactory account
of the duration of the illness. From the
above symptom of hyperaesthesis occurring
in both cases I suspected typhus and
next day the elder developed a mulberry
 rash. Both were removed to fever
hospital, and two other members of the
same family have since been stricken
with typhus, along with the nurse
in attendance on them. Should this
symptom prove common in future cases,
it might prove to be of importance
in differential diagnosis; and for
this reason I have devoted some
space to my own experience of its
value.
As a contribution to the mental phenomena occurring in the delirium of typhus, I have thought my own case worth recording. On Oct. 2nd, having been for the last three weeks in frequent attendance on typhus patients, I felt inclined to shiver, and found myself asking patients the same questions twice over. I went to bed at 12 p.m., and slept until 6 a.m. Then I received an urgent call to another typhus case. I felt some headache and unable to walk as quietly as usual. On my return I went to bed again, and slept until 5, when on being awakened and still feeling headache and shivering, I took my temp for the first and last time myself, and found it 100 ½. I then sent for my medical attendant, and stayed in bed. I made my mind up to pay no attention to my temp or pulse myself, and to ask few questions; and I afterwards heard on recovery that I had kept my word. The shivering ceased about midday and the frontal headache increased in severity, and the scalp became sensitive to pressure. I had a restless night, and photophobia began to trouble me. I remember that I
saw three striks on the bedclothes, which kept continually changing their position; I felt rather annoyed at this and asked to have them removed. On being assured there were no striks there, I came to the conclusion that I was wandering, and they troubled me no more. This night my temp. for 12 hours I am indebted to my medical attendant Mr. Anson, was 103.4. Next morning I felt very hot, and photophobia was so acute that I insisted on light being almost entirely excluded from the room. There was also hypeaesthesia of hearing, and the noises of the sheet were so painful, that I ordered cotton wool to be placed in my ears, and experienced great relief therefrom. In Anelsius's book p. 293 I find that Sir D. Corrigan suggested this many years ago, but I had not read Anelsius's book at this time. My temp. on this morning 7 o'clock was 103°. Headache throughout this day continued to be most acute, and of a retching character, and scalp was extremely tender; photophobia was so intense that I asked for bandage for my eyes. On white bandage being brought it gave me relief, so I asked for something
black, and a piece of black silk relieved the photograph greatly. The night nurse at the hospital here was now nursing one, and I feared she might contract the disease. On a male fever nurse being brought, his face seemed to me to resemble that of a monkey—but I did not tell him so. I sang the bell violently. When he left the room, and on my old nurse coming in, I insisted on my medical attendant being sent for. He soon came with the intention of reasoning with me, and I said: "You must send that man away, I am doing very well now, but if he remains everything will go wrong." Mr. Anson assured me that he would not allow him to stay, and I felt indescribable relief, and thanked him. All this day, I drank milk, and took a fancy for lime juice which I asked for and drank with avidity. This night of the 5th my temp was 104.8, and I remember nothing about this night, and now lost my knowledge of the days of the week, but remember that next morning the 6th Oct. when my temp was 104. I asked my attendants to telegraph to the head nurse of Dr. Miller's Ward, Edin.
Roy. Inf. where I had been Resident Surgeon in 1846 for a nurse who had had typhus, and I insisted on the latter proviso. I remember hearing soon after that neither Mr. Miller, nor the head nurse, could find a suitable nurse. Next appears a nurse from Liverpool, and then I hear she has taken fright and departed, and I express my justification to hear it. I learned afterwards that I got out of bed three times during the night this lady nursed me, and rushed out of the room, trying to get downstairs. I next remember having some brandy which I vomited, and I then refused to take any alcohol of any kind. I may remark that I am not a total abstainer, as I usually drink a glass of beer to dinner. Whenever brandy, champagne, or wine was offered me I spat it out on tasting it, and asked for milk alone, or Civic juice. I remember having some beef tea, and some chicken broth, and I vomited both. There was great relief when the bowels acted, and great distress
on micturition except in sitting posture. I remember taking the medicine as it was offered me and observing the taste of quinine. I now asked that a hat which was placed on a high cupboard should be taken away as it worried me; and the nurse removed it. I now imagined that a ravine led up to the right side of my bed, and a man in a slouched hat (that I had seen was a tall one) came stealthily up the slen, and entered my room, on his way to my box in which I really had some money. When he got to the middle of the room he turned round and said: I was sitting up in bed as I imagined, with a five chambered revolver in my hand, which I had taken from under my pillow on seeing him come up the slen. I immediately fired one chamber at the heart—arming under the 5th rib inside the nipple line—one through the forehead, one through the throat, the next through the sternum, and I finished up with one into the abdomen. He now staggered and dropped, and some shadowy attenuants carried him out at the door on the left. I now reloaded my revolver on
seeing another individual-in a similar lat-come quietly up the same. He and I went through precisely the same performances as in the last case, and four more men were, in succession, treated in a similar manner. Every one of them came quietly in, looked around, received the 7 chambers, in the same parts of the body and in the same order, and were in turn carried out by the shadowy attendants. I felt satisfied now, and had no feeling of remorse whatever. I was tried for these murders, and acquitted on the ground of justifiable homicide.

Then next I remember to glamping up and down the Himalaya Mountains. The exercise was delightful, and I always met some of my old friends at the top.

Next a Frenchman and his wife appear on the scene. They have come to the town knowing that typhus is present. They have a new cure and would like to begin on me; accordingly they call on my medical attendant and explain it to him. First they feed the patient well with milk and massage him for three days. Then they elevate the patient to a
height of 100 feet by means of 4 poles and ropes, to which a hammock is suspended, the patient being bound hand and foot in the hammock to prevent him falling out, and fed at intervals by the Frenchman climbing up. My medical man is charmed with the idea, and on coming to tell me so I say “Well I am in your hands, you must just do what you like, but it will be very awkward for me if, when I am bound down in the hammock hand and foot at so great a height, I should want to wipe my nose.” He assents to this, laughing, but says it will be all right. So I resign myself to their hands with great misgivings. I have no recollection at all of the nile and massage treatment, but at the end of 3 days I am seen by a number of my medical friends, who are in a critical frame of mind, but express their satisfaction. I wield some heavy dumbbells with great ease to show the improvement already effected and am now ready for the ascent in the hammock. The two French people chose the end of the pier in this town, on which to
exact the post, because they say the air will be fresh there; and on my observing that if anything went wrong with the posts I might be precipitated into the sea. They tell me that there will be a boat waiting outside to pick me up if necessary. I have a feeling of unspoken apprehension after this, but I must be elevated, however, because the Frenchman and his wife quarrel, and he determines to shoot her as she paces by a curtain at the end of their tent. Shear his stoilory and inform his wife, and advise her to tell the police and then wait for events. I suggest that on the night of the attempted murder we will push a lay figure past the curtain in her place. We do so, and he shoots the lay figure which we allow to drop. He thinks he has killed his wife and chuckles, and now thinks he will kill me; but the police having heard the shot come in and apprehend him, he is tried for attempted murder. Being a
foreigner he is after a formal trial sent over to France and tried before a French tribunal; and I appear as a witness against him on both occasions. He receives 10 years penal servitude for his offence, and I return to England—but have no recollection of how I travelled; and find myself coming through the streets and my friends whom I meet, stand aside and ask me why I am outside when I have typhus; and then I wake up and know I am in my bedroom but feel somewhat confused for some time.

For the temperatures I am indebted to my medical attendant who also gave me the information which follows.

Oct. 4 M 100°8 E 103°4; Oct. 5 M 103° E 104°8
Oct. 6 M 104° E 104°; Oct. 7 M 103°4 E 104°4
Oct. 8 M 103° E 104°; Oct. 9 M 103°2 E 103°6
Oct. 10 M 103° E 103°6; Oct. 11 M 104° E 104°4
Oct. 12 M 103° E 103°8; Oct. 13 M 101°6 E 103°
Oct. 14 M 101°6 E 102°; Oct. 15 M 101°4 E 100°8
Oct. 16 M 98°2.

A faint mulberry rash appeared on the 14th day.
followed by petechiae which were numerous at the end of the first week. The delirium was acute, and I made frequent attempts to get out of bed.

On Oct. 11, I am informed by Mr. Sibson that in the evening the pulse was 130, respirations 50, though there were no signs of mischief at the base of either lung, and that I refused to protrude the tongue which was contracted and black. The extremities were at this time cold, and there had been almost total suppression of urine for 24 hours. There was never any albumen in the urine during the illness. Subcutitis was present during the 10th & 11th Oct.

In the article on Typhus in Jamieson's Diet. of Med. p. 189 it is stated that from the first there is a craving for drinks yet all are accepted alike, and the feeling of relief which they give is unconnected with their taste, which is not really perceived. In my own case however I was able to distinguish, though with my eyes bandaged so that I could not see them, beef tea, chicken broth, barley water, gin, champagne and brandy, which I spat out on tasting in each instance, as I was afterwards informed, whilst I
accepted milk, and lime juice.

The delirium and the order in which they occurred were firmly imprinted on my memory, and I wrote them down after my convalescence. The imagined power in my case of traversing great distances in the smallest possible time, resembles closely the condition of dreaming. The details of which condition, however, I rarely remember. There was no loss of perception of personal identity, and there seems to be a close resemblance of the delirium of leprous to acute mania in which it is well known the delusions are often imprinted on the memory. (Murchison, p. 204 of Treatise on Contagious Fevers, notes the occasional superintention of acute mania on leprous. In my own case I was for a week after the temperature came down to normal disposed to imagine that at least some part of the delusions had been real experiences; and I can easily misspelling a gradation into insanity from the occasional irrationality of the judgment to suppress these.
ideas. In some cases the absence of communication with others, and consequent mental isolation, may, I should think, have been sufficient to prevent recovery from the confused mental state which I experienced during early convalescence.

The delusions I shall partially explain as follows. The hat would be a prominent article of dress in the brigands from a hat through of a different shape having worried me by its presence shortly before; and the idea of robbery probably occurred from the presence during the first day of a box in the room containing money I had been about to bank, when taken ill. My prostration would account for the accuracy with which I aimed at vital parts in the imaginary use of the revolver, which is however an instrument I have never possessed. I have no explanation to offer for the delusion about the Himalaya mountains and tobogganing, as I was lying on a hard mattress, except that the up and down movement may have been suggested.
by my constant attempts to get out of bed and being replaced in the recumbent position. As regards the delusion in which Mr. Punchman and his wife took part, I was in a room at the top of the hospital, and this probably suggested elevation at a height. I was taken milk in preference to all other articles of diet; and as to massage, probably that would be suggested from my professional knowledge of its use in certain cases of emaciation, and I had been struck with the rapid emaciation of the dyspepsia patients I had been recently attending. The idea of being bound down in a hammock would be suggested no doubt by the fact that I was continually throwing the clothes off the bed, and having them placed over me again; which would occasion a sense of restraint. The idea of the medical men seeing me at the end of three days' treatment with milk & massage, would be suggested no doubt by the consultations which Mr. Cameron and his father held on the 10th and 11th Oct. I have been much struck with the
partial resemblance of the delusion in which there was an attempted murder and extradition followed, with one related by Dr. Gueneau de Mussy in Murchison's Treatise p. 163-164, in which extradition also took place after a murder. I myself had not read Murchison's book when my attack occurred, and I am disposed to ascribe it to some newspaper reading, since extradition is frequently alluded to in the daily papers, and the case of Dr. de Mussy is not mentioned in Trouseau, Bristowe, nor in Janis's Dictionary of Medicine which were the books I had then read on typhus. It is I think of interest to note that I had in delirium the power of initiating a diactogen by which the Frenchman shot a lay figure instead of his wife.

In convalescence I suffered for three weeks from diplopia due to external strabismus of the right eye, with slight ptosis of right eyelid. This passed off at the end of three weeks. In
Murchison p. 168. allusion is made to strabismus as occurring in rare cases, but I can find no reference to it as a sequela. In my case the right 3rd nerve must have been implicated in some way, from the presence of ptosis with strabismus.

At the end of seven weeks from the onset of the fever I resumed my duties.

Syphilis fever is a preventible disease, and I am of opinion that until the Local Government Board sends unbiased independent inspectors down to such places as this, with full powers to condemn if they think necessary, and order the demolition of these courts, some future epidemic will surely be recorded. An epidemic causes a scare at the time, one or two courts are condemned, disinfected, whitewashed, and repaired, and as soon as the fever has passed away they are again inhabited by the same class of poor ill-fed people. Had the Infections Diseases Notification Act not
seen in operation, allowing of prompt removal when once a temporary hospital was established: I see no reason why the epidemic should not have continued, as in former times for several years. As it was, the defective hospital accommodation during the first fortnight was accountable for the rapid spread of the disease; and when once a sufficiently large hospital was provided, the fever was soon stamped out, and the last case was reported in Christmas week 1690.

James Tyson Kitchin M.B. & C.M. Edin. (1887)
hereby certify that the foregoing Thesis on Typhus Fever in Whitehaven, with Recollections of a personal attack in 1690, was composed and written by myself.

James Tyson Kitchin.
M.B. & C.M. Edin.

Whitehaven and West Cumberland Dispensary.

Whitehaven.

April 25, 1892.