A case of multiple personality / by Albert Wilson.

Reprinted from the Proceedings of THE SOCIETY FOR PSYCHICAL RESEARCH.

A CASE OF MULTIPLE PERSONALITY.

BY ALBERT WILSON, M.D

The Society for Psychical Research.

OFFICERS AND COUNCIL FOR 1904.

PRESIDENT.

PROFESSOR W. F. BARRETT, F.R.S.

VICE-PRESIDENTS.

THE RT. HON. A. J. BALFOUR, M.P., F.R.S.
SIR WILLIAM CROOKES, F.R.S.
PROFESSOR J. H. HYSLOP, Ph.D.
PROFESSOR W. JAMES, Harvard, U.S.A.
PROFESSOR S. P. LANGLEY, Smithsonian Institution, Washington, U.S.A.
SIR OLIVER LODGE, D.Sc., LL.D., F.R.S.
LORD RAYLEIGH, F.R.S.
THE RT. REV. THE BISHOP OF RIPON

COUNCIL.

W. W. BAGGALLY.
THE RT. HON. G. W. BALFOUR, M.P.
ERNEST N. BENNETT.
J. MILNE BRAMWELL, M.B.
MONTAGUE CRACKANTHORPE, K.C.
THE EARL OF CRAWFORD AND BALCARRES, K.T., F.R.S.
HON. EVERARD FEILDING.
F. N. HALES.
RICHARD HODGSON, LL.D.
SIR LAWRENCE J. JONES, Bart.
SIR OLIVER LODGE, F.R.S.
W. M'DOUGALL, M.Sc., M.B.
J. G. PIDDINGTON.
ST. GEORGE LANE FOX PITT.
FRANK PODMORE.
LORD RAYLEIGH, F.R.S.
F. C. S. SCHILLER.
SYDNEY C. SCOTT.
A. F. SHAND.
MRS. HENRY SIDGWICK, Litt.D.
H. ARTHUR SMITH.
SIR A. K. STEPHENSON, K.C.B., K.C.
LIEUT.-COL. G. L. LE M. TAYLOR.
PROFESSOR J. J. THOMSON, F.R.S.
CHARLES LLOYD TUCKEY, M.D.
MRS. A. W. VERRALL.

FORMER PRESIDENTS.

PROFESSOR HENRY SIDGWICK,	1882–1884.
PROFESSOR BALFOUR STEWART, F.R.S.,	1885–1887.
PROFESSOR HENRY SIDGWICK,	1888–1892.
THE RIGHT HON. A. J. BALFOUR M.P., F.R.S.,	1893.
PROFESSOR WILLIAM JAMES, Harvard, U.S.A.,	1894–1895.
SIR WILLIAM CROOKES, F.R.S.,	1896–1899.
FREDERIC W. H. MYERS,	1900.
SIR OLIVER LODGE, F.R.S.,	1901–1903.

NOTICE.

ANY well-attested information, bearing on the various subjects which are being investigated by the Society, will be gratefully received, whether from Members, or persons intending to join the Society, or from others. Communications to be addressed to the Secretary, Society for Psychical Research, 20 Hanover Square, London, W., or in America, to the Secretary, Dr. R. Hodgson, 5 Boylston Place, Boston, Mass.

It is hoped that Members and Associates in different parts of the country, who are willing to take an active part in the Society's researches, will put themselves in communication with the Honorary Secretary, The Hon. Everard Feilding, 5 John Street, Mayfair, London, W.

The Rooms of the Society, at 20 Hanover Square, London, W., are open every week-day from 11 a.m. to 5 p.m.

Reprinted from the Proceedings of THE SOCIETY FOR PSYCHICAL RESEARCH.

A CASE OF MULTIPLE PERSONALITY.

BY ALBERT WILSON, M.D.

A CASE OF MULTIPLE PERSONALITY.

By Albert Wilson, M.D.

TABLE OF CONTENTS.

Introduction.

Before giving an account of this remarkable and almost unique case of Multiple Personality, I propose to call attention to a few details of the mechanism of the Nervous System, some understanding of which is essential for a clear grasp of the main object which I have in view.

My object is to demonstrate that the mind or personality which we call the "Ego," the grand sum total of our character and individuality, is capable of disintegration into minor personalities, good and bad, dependent on the condition of the body that sustains them.

It follows, therefore, that temporary or permanent brain conditions may have an important bearing on the great question of individual responsibility.

We have within us three Nervous Systems. The lowest is the Sympathetic system. It consists of two chains of ganglia inside the body, in front of the spine: also three principal ganglion masses, one for the heart, another for the digestive organs, and a third lower down. The sympathetic nervous system controls all our inner organs, but it specially governs the circulation of the blood, down to the smallest blood-vessel, and so controls the supply of nutriment to each organ. It resembles the Commissariat Department of an Army.

The second nervous system consists of the spinal nerves, which are concerned with the movements of the body and limbs. This represents the Combatant Force of the Army. The sensory nerves are like Scouts, while the motor nerves and muscles represent the Fighting Battalions.

The third nervous system is the Brain, which reaches its highest development in man, after rising in gradations from the fish and amphibian types through the reptiles and birds up to the mammals. It is the Cerebrum, or upper brain, that we may take to represent the Intelligence Department, with the General and his Staff, in a large Army Corps. Just as these higher Officers depend for their existence on the Commissariat, so the Brain depends for its healthy action on the Sympathetic nervous system. It is this system in disorder which I describe here.

So closely are these Nervous systems interwoven that each depends on the other, and any disunion or want of harmony between them upsets the whole organism.

The surface of the Brain has been mapped out by Ferrier and others into areas for the various functions of sight, touch, taste, smell, hearing, and motion. This outer surface, called the Cortex, for the depth of about an eighth to a quarter of an inch is of a grey colour, and contains the nerve cells which form the organic basis of Mind. Under the microscope there are seen five distinct layers of nerve cells in the cortex both of man and of other mammals. These develop gradually from within outwards, from which one would infer that the inner or deeper layers are related to the voluntary protective instincts of the lower animal life. Such is actually the case, and it has been shown by Dr. G. A. Watson that in lower animals, such as the rabbit and hedgehog, the more superficial

layers are much less developed proportionately than the deeper ones. Dr. Watson also showed that in the lower animals the superficial layer (which from the peculiar shape of the cells in it is called the Pyramidal layer) becomes thicker as the animal rises in intelligence; and in man, where intellect prevails over instinct, the Pyramidal layer is highly developed, and considerably thicker than in any of the lower animals. The extensive researches of Dr. J. S. Bolton have further shown that in man the thickness or depth of this pyramidal layer bears a distinct relationship to intelligence. He found that in idiots, who from birth never enjoyed reason, this layer was relatively very shallow; while in the demented there is a decay or dissolution of the pyramidal layer.

Now, healthy brain action, or Mentation, can only occur if the brain receives a proper supply of blood, both in quantity and quality. The quantity is, as I have said, regulated by the Sympathetic nerves. But the quality may be bad, as in poisoning by gout, alcohol, morphia, impure air, or mal-nutrition.

Those whose functions are judicial ought fully to estimate these statements as facts, not theories. The brain, if poisoned by excessive alcoholism, is damaged, and such damage prevents the proper functioning of the individual's original Ego, and leads to the formation of a new personality, associated with damaged structure and of lower type, more nearly approaching the brute creation. Our daily observations are thus scientifically explained.

The Brain is nourished by the Blood, and receives its supply chiefly from the carotid arteries in front, but also from the vertebral arteries behind. These large arteries divide and subdivide into smaller branches and twigs (as an oak tree divides into branches and twigs), penetrating into the brain. The finest arteries or capillaries in the brain will only allow the blood corpuscles to pass along in single file, since they are only about $\frac{1}{3000}$ of an inch in diameter; but doubtless there is a still finer circulation which our microscopes have not yet been able to reveal.

Bearing in mind this simile of the branches and twigs of a tree, one can easily imagine how paralysis or loss of function of any particular brain area may occur if the branch or artery

supplying that area is blocked from any cause. Thus we find in disease that a clot may shut off the area of speech, or the area of movement of a leg or arm, or both. These are instances of permanent destruction or paralysis.

The Sympathetic nerves are vaso-motor, and have the power of either contracting or dilating the arteries. Thus in blushing, the capillaries dilate. We may also notice in some nervous people peculiar flushes or blotches come and go, usually about the neck or face. Dilatation of the arteries of the brain produces headache and throbbing; or if it occurs in the psychic area, delirium or mania. A very common, I might say popular, disease is sick headache or megrim. Here the carotid or other large arteries are in a state of spasm or contraction, partly shutting off the blood supply to the brain, perhaps for hours. The face then becomes cold and pale, and temporary blindness and nausea also occur.

In other disturbances of the sympathetic nerves we have "dead fingers," chilblains, and frost bites from arterial spasm. There is a disease, called after Reynaud, in which by the contraction of the arteries the fingers become blue or purple, and if it continues, gangrene may result from arrest of the circulation.

If then we can trace the effects of the vaso-motor action of the Sympathetic nervous system in coarse structures like the skin,—when it occurs in a delicate organ like the brain, and in its most highly developed and sensitive part, we must expect a great variety of mental symptoms.

History of the Case.

The patient, Mary Barnes, who is the subject of this paper, was, when I first saw her, aged 12½ years, having been born in October, 1882. She always appeared healthy in mind and body, and was a well-developed child. Her mother is a remarkably healthy woman: her father also is healthy and well built: the other three children are in every way fine specimens.

In April, 1895, she caught a chill and developed influenza,

and was in bed for ten days. She then went out, for the first time after her illness, on Easter Monday; but the weather was cold and a relapse ensued, and she had to return to her bed the next day. On the Saturday she complained of extreme headache, which, though at first relieved by pressure, became worse, until she screamed with the pain, and as the symptoms were aggravated by light and sound, she had to be kept in a dark room. She became very weak, was feverish, and had "tache cérébrale." In the second week there was less pain, and the attacks became intermittent, and "shaking fits," not rigors, occurred. During the second week she grew so weak that she had to be fed with a spoon, and often was unable to swallow. For two days she was supposed to be dying; and once she was thought to be dead, and a woman was sent for to lay her out. This death-like collapse, which occurred again on two more occasions, would seem to have been a phase of one of the abnormal personalities.

In the light of subsequent events, and knowing what we do of similar cases of trance, we may suppose that she really was near to dying.

In the third week the pain ceased, but she was still sensitive to light, and therefore kept in the dark. In addition, she appeared to be blind, and at times was able to recognise her parents only by their voices, or by touch, feeling their faces or even their ears.

(i) During this third week delirium developed, lasting about a fortnight. As explained below, I call this condition B1. The chief characteristic was intense fear of every one, including her parents; she called people "snakes," and said she felt them biting her. Her facial expression was terrible. In her ravings she knew no one, and often hid her face in the pillow when any one approached. It was not an imaginative delirium of the delusional type, nor were there hallucinations (erroneous mental impressions without external cause), but illusions (misinterpretation of external objects). Thus, if she saw a fold in the sheet, or touched a hand, she at once screamed out "snakes," and tried to get away from it. She showed extraordinary strength in these attacks, which was in curious contrast to her dying condition of a few days previous. She also developed jerking or choreic movements

of the legs and arms, and at times general rigidity with opisthotonos,[1] accompanied by lividity, and even coma. She might have ten to twenty attacks a day. The marvel was how her strength lasted out. This mania, we afterwards discovered, was characteristic of the abnormal personality, B1.

(ii) In the fifth week all these symptoms subsided, but her manner changed into that which I afterwards called B2. Her intelligence was good and all headache had disappeared, so that she was thought to be recovering. She was still in bed, as she could not stand, but otherwise had full use and control of her muscles. She now, however, took to nicknaming all her friends.

She called her father—Tom.
her mother—Mary Ann.
her sister F.—The gigger (supposed to be giggler).
the nurse—Susan Jane.
her sister A.—Sally.
her brother F.—George.
Dr. H.—The Jim.
Dr. T.—The Sam.

This curious stage was led up to in the first instance by the following incident:—One day whilst reading, or playing with dolls, she began shaking, then, pushing everything away from her so as to clear a space, said, "It is coming," and after turning a somersault on the bed, sat up and called out "Hullo!" while those around her noticed an altered facial expression. She would address her family and others by the above nicknames, and talked in a babyish manner, clipping her words. She also had a childish, simple, almost silly manner, giggling when spoken to.

It was quite apparent that this babyish mood marked the emergence of a new personality, for her memory of past events was completely obliterated, nor did she know the names of ordinary objects. The "fit" passed off in about half an hour. Her expression would alter, and she frowned and seemed very angry. There would also be sighing and difficult respiration for about a minute, when suddenly she would look

[1] Opisthotonos occurs in lockjaw and some convulsive seizures. The muscular rigidity is so great that the patient rests on the heels and the back of the head, the body being arched.

up with her own natural facial expression and go on as if nothing had happened. These fits recurred several times a day with increasing frequency, and lasted from ten minutes to an hour. There were no premonitory symptoms beyond those described. As days and weeks wore on, the normal state was of shorter duration; and indeed so prolonged was the abnormal, that I visited her almost daily for ten weeks before I saw her in her normal condition.

For the sake of simplicity I will here give further particulars of this abnormal phase. The patient became childish, clipped her words, and had no knowledge of ordinary names, nor of her ordinary surroundings. Thus she did not know the meaning of the word "legs," and if you explained, she would say, "Legs, what legs? What dat mean? Dese sings? Dese long sings?" and so on. When I said, "I want you to walk," she replied, "Walk? What dat, what walk mean?" I said, "Get on your feet," pointing to them. "Get on them things? Those feet? What feet? Walk, mean get on those things? Can't do it!" So I lifted her on to her feet, but she could not stand. Her feet gave way, turning outwards. But some things she appeared to know; thus, she would call a drawing slate "a jawing skate," and yet if I touched her nose and asked what it was called, she either might not know or would call it her ear. But if I said it was the nose, she would argue before she understood. Similarly she called her mouth her nose, and her chin her mouth, and her ears were her eyes. This habit of misnaming things disappeared in a month or two; probably she heard the right names from those about her, for in this abnormal condition she would be quite lively and bright, though restless. She would turn over books, looking for N's and O's. P she called H, and E, B. She also reversed colours, seeing the complementary colour. Black she called white, green red, and *vice versa*. She wrote her words backwards, beginning at the tail of each word, and writing it from right to left, but to the right of the word preceding it, so that she had to calculate what space would be wanted for each word, which she did with very fair correctness, as may be seen from the specimen reproduced (Plate I.). This writing was done with ease and ordinary rapidity, and the total effect of it does not differ from ordinary writing.

She also wrote figures backwards. She could not at first write to dictation nor originate a word, behaving as if the word-centre in the brain were switched off from the writing-centre. She could only copy,—the writing-centre communicating with the word-visual-centre.

But as weeks rolled on and as her education improved, she acquired the power of writing from her own ideas or to dictation. This may suggest that in the abnormal state her store-house of word-memories was not empty, but that she lacked the power of association of names with objects. At the same time as this new personality appeared, that is in the fifth week of her illness, catalepsy occurred. The cataleptic fits came on no matter whether she was in the normal or abnormal mental condition.

As the abnormal personality B2 was a psychic condition, while the catalepsy was a condition of the muscles, the two conditions are clearly not to be regarded as identical. Any excitement, such as a knock at the door, or even the noise of my carriage entering the street, would provoke a cataleptic attack. The feet and legs first became rigid, usually extended, seldom flexed. Or it might be first one leg and then an arm. The rigidity usually travelled to all the muscles of the body, except the face and neck. Sometimes she would be fixed up like a ball, so that she could be lifted all of a piece by one limb. Or an arm might become fixed in the attitude of feeding when such an act was in process. I have seen both arms and hands fixed, holding the cup and spoon, which could not be released. She called the attacks "brackets," and they were evidently painful and frightened her, and during them she dreaded being touched. In five to ten minutes the muscles relaxed spontaneously, and then she was much exhausted. These cataleptic fits were very constant for about six weeks to two months, and then became less frequent, so that weeks might pass without an attack. Finally after two years they disappeared.

It was not until July 20th, 1895, that I saw her in the normal condition. Her father had brought her to my house in a bath chair, as she could not stand. She seemed completely lost, and understood nothing. These vacant periods were very common, and may have been either phases in the

conditions just described, or forerunners of another abnormal sub-stage, in which she was quite an idiot. I now incline to the latter view.

During her visit to my house she suddenly returned to the normal. Her appearance then was that of a modest, pleasant-faced girl. She said "Good morning, sir," and talked quietly and rationally for about five minutes. She told me she knew nothing of the attacks or of what she said or saw in them. She said she had only seen me once before (this was one day when she was passing from the normal to the abnormal as I entered her bed-room), though she knew from the others that I went to see her. Then just as suddenly her expression and manner changed. She looked angry and frowned, pouting and wearing a much annoyed expression. After that her features relaxed; she smiled and again assumed the vacant childish look, and began talking baby talk. She said Mary Barnes (giving her proper name) had gone, and she hated Mary Barnes, because people liked Mary Barnes better than herself. While normal she had risen from her seat and stood in an ordinary way; but as soon as the new personality came on she lost the support of her ankles, and her father had to prevent her falling to the ground.

Let me now review the first three months of her illness. I propose to call her normal state (Mary Barnes) A. The abnormal condition I call B. But there were ten abnormal states, more or less different from one another. These I will call B1, B2, to B10.

The illness began with influenza, essentially an acute nerve disease: it passed on to meningitis. The highest brain cells we may assume were damaged, perhaps from the toxin, perhaps in their nutrition, or from both causes. My first impulse was to call it a case of Hystero-epilepsy, which loose term covers a great variety of conditions, but affords no explanation of any of them.

A medical *confrère* suggested that she had at some time been hypnotised, but this was not the case, and, as I shall show later, attempts to hypnotise her entirely failed. Yet her condition resembled that of somnambulism or hypnosis; for her normal state A knows nothing of the abnormal B, while the abnormal B has a faint glimmer of the existence of A and of what she

does. I observed later that though at first no abnormal stage knew anything of any other abnormal stage, yet after a time, probably through hearing conversations, one sub-stage would learn a little of another sub-stage (see, *e.g.* in Appendix I., p. 392, a letter written by B9 on November 22nd, 1896, referring to an incident that had happened to B2).

Yet, in spite of the failure of the attempts to hypnotise her, her father could often by suggestion bring her from the abnormal to the normal. By caressing her and addressing her by name in a coaxing manner, he would bring her to her normal self, though she always relapsed quickly, perhaps in ten minutes or perhaps in three minutes. As months rolled on, it became more difficult and finally impossible to effect these brief recoveries.

B1 was a condition of acute mania, accompanied by intense fear, amounting to terror, with illusions of snakes, psychical blindness, and great thirst and craving for oranges and lemonade. These symptoms enabled us to diagnose it, not as ordinary mania, but, from its sudden recurrence and disappearance, as a distinct phase of alternating personality.[1]

B2 was a stage in which she became a simple child, requiring education in every-day details, and also reversing ideas or conditions, as in writing, perceiving colours, etc. When addressed by her proper name, she said it was not her name, nor could we find a name to please her; she said she had no name—she was "a thing." So we called her in this stage "a thing," or "good thing," and she always responded to it.[2]

[1] In acute mania there is overactivity of the pyramidal layer, with congestion of the capillaries.

[2] In this condition spasm of the anterior cerebral artery would deprive the prefrontal area of nourishment; also the motor area of the foot, which was always paralysed. The prefrontal, as the highest psychic and association area, might thus misinterpret all external impressions. Some might explain it as a derangement of the mind, reversing objects and misapplying names. The memory of words and names existed, but, if I may so put it, the labels had got mixed. Perhaps the inaction of the prefrontal area would account for all the phenomena. Another explanation might be that the more recently educated pyramidal cells were shut off by deprivation of blood supply and the deeper layers which had been educated up to the age of four or five left intact, for she now resembled a young child in every way.

(iii) On July 24th, 1895, she passed out of B2 into a *third* abnormal stage B3, which her parents named "Old Nick," because she was very passionate and bit her clothes. After the anger passed off she was very sorry and would say it is "a naughty man," and that he only comes for a minute and would not bite "them things," touching her face and hands. B3 differed from "a thing" or B2 in being more educated, for "Nick" could read and write and had better physical health than the other personalities. B3 was a frequent visitor, staying for several weeks at a time, and I will later give a more complete account of her doings in this stage.

(iv.) In the B4 substage, which occurred first in August, 1895, she was a deaf mute. During the attacks she took no notice of loud noises close to her ear: and communicated by talking on her fingers, which method she understood slightly in the normal state. This B4 state came on after a prolonged catalepsy, but passed off quite suddenly, changing to B2. But in September she was again deaf and dumb for a fortnight.[1] She changed back from B4 to B2, "a thing."

One Sunday in October, 1895, when she was rolling on the floor as B2, crying with toothache, I resolved to extract the tooth under chloroform. The late Dr. Althaus had come out to see her. After I had extracted the molar, she was pleased to be relieved of the pain. Her father now brought her round to the normal A. She was greatly surprised at the blood and gap in her jaw and asked how it was, as she never as Mary Barnes had felt any toothache and knew nothing of the chloroform or extraction.

So A was unconscious of B's physical suffering.

(v) The B5 substage appeared only on one occasion, November 26th, 1895, and lasted until December 20th. In this condition she had attacks of paralysis in the legs, became deaf and dumb for about an hour at a time, and lost all memory of events which had occurred more than three days before. She said she had "only been here three days" and was "only three days old." As I had not seen her for three days, she consequently did not know me. She also reversed things. She called the flame of the fire or gas black, black white, and a fat pug thin. She

[1] The spasm of branches of the middle cerebral artery would shut off the blood supply to the centres of speech and hearing.

spelt backwards but wrote forwards. Otherwise she understood everything in the house and gave no trouble. She complained of pain in the left temple, which suggests spasm of the middle cerebral artery.

On December 20th her condition changed very suddenly. Though just previously paralysed in the legs, she jumped up and ran upstairs to her bed. Here she commenced turning quickly round and round on her back and shoulders with her legs in the air. She also had a peculiar way of resting on her head and trying to walk up the wall. She executed all these movements on her bed, and so peculiar and rapid were they that they resembled an acrobatic performance. Then came the fear of snakes and thirst and we recognised the substage B1. This was its first appearance since the meningitis in May, 1895. This B1 substage of mania lasted three weeks, till January 13th, 1896. There was an exact repetition of the May symptoms, and she remembered exactly all the events of May when she had the fever and influenza, while she knew nothing of subsequent events. She also complained of headache, and asked for the cold water coil which she had had then. In her extreme thirst she would eat any number of oranges in a ravenous fashion, one after the other, though at no other period has she cared to eat oranges. She also asked for the nurse who attended her in her first illness and whom she had not seen since. After about a fortnight these symptoms passed off and she was able to go out in a bath chair, but her mind was still a blank as far as the events of the past seven months were concerned.

One curious phenomenon occurred on the evening of January 12th, 1896. Her memory went back to April, 1895, to the early stage of the influenza, when she had pains in her head, but not the severe symptoms. She said she was Mary Barnes—for in mid-April the dual personality had not been recognised. It was an exact repetition of the symptoms, for when she was ill in April she did not show the normal intelligence of Mary Barnes. At 3 A.M. on the following morning she became normal for about an hour, all symptoms of influenza disappearing, and again between 8 and 9 A.M., after which she changed to B2, and, except for a few normal intervals, remained so for three weeks until February

7th, 1896. On January 28th, 1896, she wrote as B2 a letter to her father (see Appendix I., p. 387). The letter was childish and the words were spelt phonetically. It is however written forwards, for as the result of education B2 now wrote forwards usually. On January 22nd, 1896, she was shown to the Clinical Society and seen by Drs. Jones, Savill, Mickle, Bramwell, Althaus, Lloyd Tuckey, and Mr. Barrett. She was then B2, but her father twice brought her to the normal. Great efforts were made to hypnotise her, even with the help of chloroform, but all efforts failed and she became much exhausted, sighing deeply and flushing, as in hysteria. On March 6th, 1896, she had an attack of mania—substage B1. It came on very suddenly, when she was in the B2 condition. About 8 P.M. she had said to her father that she felt very ill and wanted to go upstairs, and although she then occupied the front bedroom, she ran into the back room which she had occupied in May, 1895, when she had the first attack of delirium.

I saw the whole attack. She was jumping on her hands and knees on the bed, calling out "snakes," "nakes," and was greatly terrified. The pupils were widely dilated, the face flushed, the pulse very rapid and feeble, together with breathlessness and constantly great exhaustion. She would bury her head in the pillow as if to avoid the snakes; or at other times, kneel and say her prayers. If we touched her, she called us "great big nakes." I tried to fix her gaze, but it frightened her and she put her hand over my eyes saying, "take them away." She devoured oranges like an animal, biting off the peel and throwing it away. The fruit she swallowed greedily in lumps, calling out "more, more." Suddenly the excitement ceased and she sat on the bed, placed on the pillow in front of her a small box, and on the box a book and an orange. She imagined herself a fisherwoman, for she called out "Fish! fish! fish! Shrimps ½d. each," and putting the pillow with its load on her head, called out "Who'll buy my fish?" Then she threw down "the fish" and tried to walk up the wall, resting first on her back, then on her shoulders and finally on her head.

I tried to rouse her by making as much noise as I could close to her head with a large key and a tin tray. It frightened her and she grabbed the key and threw it away. Next I shouted to her to wake up: she said she was awake, but took

very little notice of anything going on about her. Another sudden change and she looked round the room with an air of curiosity and said "This is not my room," and as she could not walk, crawled on her hands and knees into the front bedroom and climbed on to the bed. As soon as she got on the bed in the front room she changed to the B2 of June, 1895. She lost the wild maniacal look for the simple childish face. She saw me looking round the door and said "Hullo, there is the new gentleman," which was my appellation in June, 1895, nine months earlier. She said she had seen me that morning for the first time. She, however, had not seen me that morning, and was probably referring to some remote memory of one of my visits in June, 1895, for she said I then had on a black waistcoat with green spots. In reality that June I had on a white waistcoat with red spots, the complementary colours of what she imagined. She was very amiable and asked for a pencil and paper and began writing backwards, as in June, 1895. She called her mouth, eyes, and her nose, eyes. She said she had no mouth. Though very much exhausted during the B1 state of mania, she seemed quite fresh after she changed to the B2 personality. The next morning she knew nothing of the mania and continued in the B2 stage. On April 4th she had a violent epileptic convulsion, which was followed by one or two slighter fits at long intervals.

(vi) On May 6th the *sixth personality* appeared. We called her "pretty dear" or "good creature" in this stage, as she was a very sweet amiable child, though very ignorant. She had to be taught to spell, read and write. She denied ever having seen me before. She was rather like B2 ("a thing"), but more tractable. B2 sometimes showed a mischievous disposition, *e.g.*, breaking window panes or putting mustard in her younger sister's eye. B6 on the contrary is very kind. Another point of distinction was shown later on in that B6 learned a little French from her father, while neither B2 nor A could learn French.

B6 was rather an important personality, for now the normal A became a very rare visitor, putting in an appearance perhaps only once a week, while B6 became more permanent, until finally after two years it remained constant and all other personalities disappeared. Usually B6 has no motor paralysis,

and is domesticated and helps her mother. B6 is rather a subdivided personality, for as "good creature" she can walk, but as "pretty dear" she cannot. "Pretty dear" occasionally loses the use of her hands.

(vii) In another six days, on May 12th, the *7th personality* appeared. She called herself "Adjuice Uneza." She only came once and lasted ten days to a fortnight, meanwhile alternating with B2 and gradually fading. The special features of B7 were that she had a clear memory of small events of her early childhood, while all memory of and since her illness was obliterated. Thus she spoke of going on a tram to the London Hospital to see her father, a thing which she really had done in April, 1885, when two and a half years old, and remembered her mother being ill with diphtheria when she was under two. She also remembered the first part of the influenza and also a visit to L———, but nothing of the relapse or meningitis which followed in April and May, 1895. B7 could not stand or walk.[1]

On May 31st her father brought her to my house as B2: an hour later B7 appeared suddenly and was unable to walk. Her father brought her back to my house in a bath chair, and on her second visit she had no memory of having been in my house an hour before. When B7 appeared her mind was quite a blank as to recent events. Thus she did not remember me for some time.

(viii) On June 20th another severe fit of convulsions occurred, in which she never bit her tongue, though violent during them and much dazed on recovery. The following morning, June 21st, she woke up greatly confused and knew no one. She said she was only born last night and so how could she know anything? However, she knew her father as "Tom," and her mother as "Mary Ann." She was very like B5 (which appeared on November 26th, 1895), but could not be the same, as there was an entire absence of associated memories. This state lasted for about three days and never appeared again. It may have

[1] We know that in some cases of senile decay the memory of early childhood stands out clearly. Does not the substage B7 somewhat correspond to this? I would suggest that from arterial spasm the more superficial cortical layers are weakened or paralysed, while the deeper layers with earlier memories are stimulated.

been no more than a post-epileptic confusion or it may have been another personality, B8.

A prolonged observation of the case has led me to feel sure that A or Mary Barnes, the normal child, knows nothing of what happens in any of the abnormal states. Whereas in some of the abnormal states, as in B2, there is a faint glimmer of knowledge of the normal A. This knowledge of the normal does not begin at once after the transition, but develops later. June, 1896, was a trying month, for she constantly shifted about from one personality to another, perhaps three or four times a day, once manifesting three personalities in five minutes. They also seemed modified at times. On July 8th, B3 or "Nick" returned quite suddenly; she could then as B3 walk or read or write. It was the first time she had been able to walk properly since May 31st. "Nick" was healthier than any other sub-stage. The normal A, Mary Barnes, only came momentarily to the surface; "Nick" stayed ten weeks and showed very interesting phases. As "Nick" she went in July, 1896, to the seaside and stayed there about five weeks, getting much stronger on her legs, though this temporary improvement was followed by motor paralysis for five or six weeks. "Nick" said that she had never seen the sea before this visit, although, as a child, Mary Barnes had stayed at the seaside.

On August 14th, when at the seaside, her mother was ill in bed. Her father cuddled her and called her by name, and thus brought her back to the normal state, when she expressed surprise at seeing her mother in bed, and exclaimed, "What! dear mother; not out of bed yet!" This is a striking fact, for in the abnormal B3 stage, as "Nick," she had been nursing her mother very attentively, and also had showed great distress at her mother's illness. The next day she returned home, being still "Nick" on the journey. When home her father brought her to the normal A: Mary Barnes was greatly surprised to find herself at home, having been unconscious of the journey. Also whilst normal she remembered the normal stage of the previous day and seeing her mother in bed. She returned to the seaside in a week, and it was noticed that the normal A, now so rare a visitor, began to come more frequently, and that when going down a particular road. So her parents

began to suggest to "Nick" that Mary Barnes should come as soon as they reached this road. This "Nick" resented, and looking cross would walk on so as not to hear; but in two or three minutes she would run back with her arms out to embrace her father, so pleased to be back again in the normal state, clothed and in her right mind. In August, 1896, she bathed in the sea. As a child she had done so before: but now as "Nick" she bathed for the first time.

Sub-stage B3 or "Nick" continued from July 8th to September 20th. On Sunday, September 20th, "Nick" left at 2 P.M. during her dinner. The new state was a *variation of B6* and was called "Tom's Darling," Tom being her father's nick-name in nearly all, if not all, abnormal stages: this being about the only common link, in fact, between the many sub-stages. In this new state as I saw her on the 21st, she had no name; everything was upside down, she could not read or write or walk. She was very ignorant of ordinary things and did not remember her visit to the seaside. It often happened when a new sub-stage appeared that the mind was an absolute blank at first. On the 23rd she called herself, in answer to questions, "Tom's Darling." On September 26th "Nick" returned for half an hour and got her mother's tea ready. A few days after, when "Tom's Darling," B6, she described to me the incident of September 20th; she said "in the middle of dinner on Sunday 'Old Nit' went away and 'Tom's Darling' came. 'Nick' was very kind and left me half the dinner." "Nick" ate a very good dinner until the change; but the new personality would not finish the dinner, being dazed and mentally blank with altered facial expression; she also lost the use of her feet, after having been able to walk for two months. "Tom's Darling" said the fire was in the bedroom before, so the Tom's darling personality evidently must have appeared at some previous time, and we believe she was a modification of B6, "Good thing" or "Good creature." It appeared that two or three sub-personalities sometimes merged into one, as in this instance.

(ix) On October 10th "Tom's Darling" gradually left and a new personality arrived, B9. The transition seemed to occupy the whole day and was not, as usual, accompanied by any sudden physical disturbance. She had, however, fits of temper, chasing her younger sister about, and trying to beat her with a stick.

She talked like a baby, could not walk properly and could only manœuvre about with a chair. She also tried to hit every one with a strap, watching her opportunity, and attempted to lock herself into the room. She spoke of things which had happened in her illness of April, 1895: so she must have been here before, and as her parents remember similar incidents lasting off and on for some days, it is clear that this was not the first development of B9. Her mind was a blank. She said she had no name and did not know me. She wrote and spelt backwards like B2. This state lasted in 1896 for about a week.

Knowing how they worried "Tom Dodd" (her father), she tried to give up her naughty ways. She could speak a little French, but did not know how she had learnt it. It so happens that only B6 and not even A, Mary Barnes, knew French. She talked of when she was here before, and said she was in bed and that "Jim," as she called a particular doctor, used to come and see her, thus recalling events which had happened in April, 1895. We evidently had not recognised this personality in the early mental tumult. Another doctor, whom she called "Sam," and whom she very much disliked, also came to her memory. She happened at this time to see him in the street and in temper shook her fist at him, which at once brought on an attack of catalepsy. She knew nothing of any events in her life previous to October 10th, 1896, except such as had happened in April, 1895, during her acute meningitis (?)

She at first would read backwards from right to left, making nonsense; but her father soon taught her to read in the proper way. Although she regained at times the power of walking, she might be temporarily attacked by paralysis, not only of the legs but of the arms.

A new feature occurred—a tendency to kleptomania, which she defended on the principles of common and modern socialism; "if people don't give you things, why, nick it; quite right too!" One day when in the village she took an apple at a shop door, but seeing a policeman she went back and replaced it. She was always threatening to steal, but after a time, on being told it was wrong, was sorry. During this substage B9, "Nick," or B3, appeared for a day in October 16th.

After "Nick" left, though confused, she seemed to know that she had been in a different condition. This might be aided by the free amount of talking around her. The same evening she walked up to my house as B3 or "Nick." She wished to show me a present, a toy wigwam, which had been given her an hour before. Suddenly B9, the retrograde state, arrived. Her face altered, and she would have fallen from the chair but for help, as she had lost the power in her legs. The toy fell from her hands, and when the first dazed condition had passed off, I picked it up and tried to interest her in it, but she did not care for it, and said she had never seen it before. When the former state B3 returned, she again was interested in the toy. The next day she was B9, and so remained for another fortnight. If asked her name she said she had no name. She was frightened by thunderstorms, and after one had an attack of catalepsy. Yet B3, "Nick," likes thunderstorms.

On October 31st she awoke in the B1 or maniacal state. She was dazed and knew no one. She had intense headache, beating her head and screaming with the pain. She jumped about the bed, and was violent, even breaking things. There was also catalepsy. In one severe attack the feet and legs were drawn up behind over the back, and the arms over the shoulders, so that she caught hold of her toes with her fingers. She screamed with the pain, but we could not loosen her. Strange to say she slept well. One peculiar feature was the approximation of B1 to B9. The numbering of the sub-stages is not correct according to their appearance in time. We had not recognised B9 till autumn, 1896; but it had in reality existed in April, 1895, just before B1 appeared in the same month. So the sequence was like the repetition of a cycle, yet not an orderly successive repetition. From B1 she changed to B2, and in the B2 state she had toothache, and for the second time I gave her chloroform and drew the offending molar. Previously as B2 she took chloroform well, but this time there was respiratory spasm and collapse, requiring artificial respiration. There was some discharge excited from the motor centres as evinced by muscular spasms and general rigidity and opisthotonos, the patient rising on her heels when we tried to hold her on the couch. The great effort produced collapse, when

she fell back livid and respiration ceased. She soon recovered with the help of artificial respiration and was quickly conscious.

As confirming the theory of the repetition of former cycles, she passed gradually from B1 to B2 during November 19th or 20th. She called herself "A thing," and had the same childish way as previously described, and also the same memories. For the space of about a fortnight she was very ill and unsettled, changing without apparent rhyme or reason from B1 to B2 or B9, occasionally becoming cataleptic and adopting all sorts of attitudes and manifesting cutaneous hyperæsthesia, the slightest tickling causing pain. The normal A appeared occasionally for about five minutes at a time, and then disappeared. When calm, the patient could now walk or sit for two or three hours at needlework, drawing, reading or writing. She talked baby talk like B2, and called herself "nothing" like B2. Then the destructive fits would come on (B9) and she called herself "the dreadful wicked creature." Apparently she regretted doing wrong, but could not help it, though she knew at the time the evil thereof. Are we not all built on the same lines? As "wicked creature," B9, she would hit any one near her, or push them aside if in her way. She was also destructive, especially putting articles like slippers in the fire. At a later period when in this condition she tried to put her little sister on the fire, and would have succeeded if her mother had not entered the room. Does not this show how mental lapses may remove consciousness of surroundings and responsibility? From November 1st to December 10th, 1896, she was generally B2, "good thing," or B9; from December 10th to 29th, she was B6.

(x) In the evening of December 29th, 1896, she gradually changed. She sat on the hearth-rug, was cross and stupid, and finally her mind became a blank. This condition, which I have called sub-stage B10, developed in the course of the next two or three days till she became a blind imbecile. There was now no excitement, only apathy. She sat quiet by the hour, absolutely blind, with a vacant, stupid expression. She understood nothing, and at times appeared to be deaf. Her speech was incoherent, and she

used very few words. She called out: "Mutter," "Tom" (her father), and also "Picters." There seemed to be paralysis of the ocular muscles, as the eyes protruded and stared, and the pupils were widely dilated. She was guided only by touch and sound. If I handed her a piece of paper the rustle guided her, and she grabbed at it. Sometimes she would sit for hours rolling beads on a tray.

On January 3rd, 1897, about 2 P.M., she was observed to be drawing with a pencil. As she was drawing correctly, it was thought that sight had returned. But it was not so.

It is remarkable that while Mary Barnes, the normal A, never could draw at all, this blind personality, B10, could draw perfectly. Was this a hereditary ancestral faculty suddenly called into exercise, or an unknown latent power? She used to draw the fashion plates or pictures which one sees in the illustrated papers. They were very well done, even to small details of laces and patterns, etc. At a later stage she began colour-drawing with crayons. She was absolutely blind, as was proved by placing books between her eyes and the paper, which made no difference either to the rapidity or accuracy of her performance. We also proved that she was guided by touch. If the drawing was pulled away, she would put out her left finger and ask for it to be placed on the part she had been drawing by calling out the name, say the veil or nose. Then if her finger was so placed, she would resume. Later she became so sensitive that she could herself detect by touch where the pencil marks were, and if the paper was shifted could begin again correctly.[1]

In fact, ten weeks after the blindness came on she was able to copy by touch. Her general intelligence was then improved, though the blindness continued. If one drew a pencil line

[1] Anatomically we must divide sight into two elements, sensory and psychic. In this stage, B10, the area of sensory vision was quite paralysed. Extreme action of the sympathetic would cause dilatation of the pupil, and if it also constricted the circulation in the area supplied by the posterior cerebral artery, it would shut off the corpora quadrigemina and the lower part of the occipital lobe and calcarine areas, which are connected with sensory vision. Whereas, since she could draw, she must have been guided in so doing by her psychic visual centre, which is situated in the occipital area, this being supplied by the middle cerebral artery. (See Plate IX.)

across her picture, she would detect it by touch and rub it out. It was very strange to see her feeling the copy with the left fingers and drawing with the right. She copied writing in the same way. She could feel the red ink lines ruled on foolscap. Sometimes we thought she could see, for in drawing in colours she would hold the crayons so close to the eye that they would sometimes touch the cornea, which at this stage was completely insensitive.

She would also write verses and names from memory, as if the word memory centre was restored to her. Yet she had no memory of past events or of spelling. One day when she seemed brighter and I said to her write "L-A-D-Y, Lady," she wrote "Lady," and said, "It is not L-A-D-Y, it is Lady." She could write her name in a block, but mentally did not disconnect or isolate the letters. In other words, she could not spell. One day in January she completely and suddenly regained her sight for about two minutes. She called to her sister, "I can see you." Her sister said, "What am I doing?" she replied correctly, "You are combing your hair." Her intelligence with regard to her surroundings improved, but she was practically an idiot. If I called to her loudly "Wake up," she laughed vacantly and replied, "Is awake." If I said, "You are asleep," she replied with apparent indifference, "Not sleep." She, however, did not know what hands and feet were.

On January 16th, 1897, the normal A appeared three or four times for about two minutes at a time. She could see, but could not walk, though normal. Once she said she felt so well and comfortable. Is that not incomprehensible? Another time she told her mother she felt "sometimes to be dying and to go right away." This was said in an abnormal state, and appeared to refer to the changing period, either from normal to abnormal, or *vice versa*.

She has always called me "the voice" when in this "imbecile" state: perhaps because I shouted at her. She wrote me several letters signed "Tom's Lamb." On January 25th, when she was unable to stand, I commanded her very firmly and persistently to do so, and with success. After this the power gradually returned after an absence of three to four weeks.

Towards the end of January, 1897, after four weeks' blindness, she began to improve, not only in intelligence, but also in sight. She was very short-sighted, but could see colours and pictures at a distance of three inches. She could not see about a room, and had to feel where she was going. This we proved by several games at hide and seek, which did not please her when she was tricked. She was sufficiently blind to walk against the wall. Ophthalmoscopically the eye is and was normal. Mr. Tweedy kindly examined her eyes, and wrote the following report of them:

Feb. 8*th*, [1897].

I have examined Miss [Barnes's] eyes. The media are clear, the discs and fundus healthy; the refraction of the eyes is also practically normal, there being merely a slight degree of myopia in the left eye. The eye-lids were widely open and seemed spasmodically retracted, as in cases of ex-ophthalmic goitre. The child seemed unable to see anything at more than 2 feet away, but she could read words of the smallest print (No. 1 Jaeger) at about 3 inches from the eye. There is, however, nothing in the eye to explain the peculiar nature of her sight.

J. TWEEDY.

When using the ophthalmoscope, if the light appeared to focus on the yellow spot, the normal A, Mary Barnes, returned, but only momentarily. "A" still came occasionally, and saw and walked quite well. B10 was still very ignorant,—for instance, not knowing what a horse or dog was. Nor was she anxious to learn, usually answering "nothink" to any question. She knew the parts of her face, but not her legs or arms. She was, however, very amiable, and had a good memory for things happening daily. In February she was able to go about the house, though supervision was necessary. B10 differed from all other sub-stages, in that she did not know her way about the house. This is a special point which distinguishes B10 from the other personalities. She had to learn not only the position of the rooms, but also the position of the furniture. Before she learned this she was once stopped from walking down the cellar stairs, which she thought were on level ground.

Her method of counting was unique. Her numerals were limited to 1-2, 1-2, 1-2. She counted in pennies, which she called "brownies," up to a shilling, or a shilling and so many

"brownies." I asked her how much is twice six. She worked it out on paper thus:

1 . 2	1 . 2
1 . 2	1 . 2

and then said a shilling. If I asked her how much is twice eight, she would work out the answer as a shilling and four "brownies." It was a little complicated.

Once when I asked her very quickly to count her fingers, she, automatically touching each finger, said 1, 2, 3, 4, 5; but quickly corrected herself and said, "No, that's wrong; 1, 2; 1, 2; 1, 2." Seeing that it did not fit, she began again, "1, 2," then a pause, repeating "3," adding, "three, what's that?" then she added "four," and, surprised at herself, said "five." Apparently the automatic sub-consciousness was aroused. But if one gave her four biscuits, she would count them "1, 2, 1, 2."

A curious link with her past memory occurred in the following incident: She was very constipated, and asked that "the voice" (that is, myself) would give her something, but *not salts.* As B10 she had no knowledge of salts, but she had had salts about a year earlier, I cannot say in what personality. I hoped to show her in this state to the Clinical Society, but she had altered to B6 or B2, it was not quite clear which. This was on February 26th, 1897. But in the middle of March she returned to the imbecile state B10, and was even worse than before; for she was paralysed, blind, deaf and dumb. She kept on muttering "do, do, do." The only way to feed her was to touch her with a tray; she would then feel for and pick up the food: sometimes she would feel for her mouth and guide it in. At other times she would miss her mouth and get the food over her shoulder, which made her very cross. We find the same feature in disseminated sclerosis, where there in an interrupted communication between the nerve roots in the bulb and the motor centres which ought to act in harmony. In such cases vision plays an important part. Here such aid was absent. The parents used to place her left hand to the mouth, and with the right she would feel the way along her fore arm. In three or four days she began

drawing again, her touch for guiding and copying being more acute than before (see Plates IV., V., and VI. for reproductions of drawings made during this period). On March 25th she left off drawing and took to sewing, working till she was exhausted. She then altered during the next days. For two days her jaws were tightly closed; then she became limp, and had no power in any part. In whatever pose any limb was placed, so it remained. Often she could not swallow, and sometimes she was comatose. This resembled her state during the second week of the influenza, when she was laid out as dead. When she was in one of these exhausted conditions on April 4th, the nurse was in the next room and heard her call out, "What am I in bed for?" Nurse ran to her, and the patient said again, "What am I in bed for? Don't you know I am Nick?"

Nick had left six and a half months before, on September 20th, 1896, at 2 P.M., in the middle of the family dinner downstairs. It was now about two in the afternoon, and also Sunday, and the family were at dinner downstairs. She smelt the dinner, and thought it was the same dinner she had left on September 20th. It was a curious coincidence that both days happened to be Sundays, and the hour the same. She wanted to go down to *finish* her dinner, and said to her parents, "You have been quick in getting my nightgown on. What am I in bed for? I am quite well." She had been so critically ill, half an hour before that, though she was very hungry, they only gave her very little food. In the afternoon she got up, dressed, and walked about, but was weak, not having been able to stand for three weeks (since March 14th).

Two or three features in this incident are very striking. Thus in one personality, B10, she is exhausted and collapsed, with no appetite, hardly able to swallow, and unable to stand. The instant that the new personality B3 is switched on, the exhaustion disappears: she is very hungry, and can walk. Again, whereas B10 could draw beautifully, B3 as "Nick" did not possess the art, and could only make ugly scrawls, and even these were rather forced from her (see Plate VII., Fig. 1).

We always found that the memory of one personality continued from the last appearance of that same personality. There was thus a continuity of the same personality; but

each one was ignorant of every other one. To test this, her father brought out the wigwam toy when she became "Nick." She at once recognised it. It will be remembered that she had it at my house on October 16th, 1896, and changed her personality while playing with it, at the same time throwing it down. She now said, "Oh yes, I remember now; I have been here once since I went to sleep on the Sunday, and I went to sleep again at Dr. Wilson's." The former date was Sunday, September 20th, and the return (at my house) was on October 16th, 1896.

On May 13th, 1897, she changed from "Nick" or B3, to B6 or "good creature." She remembered meeting me in the street on her way from church, and gave the details. It referred to my meeting her on December 27th, 1896, when she was B6. She said now, that to-day was Monday and that yesterday she went to church alone and met me as she came home. Evidently that was the last time she had been B6 or "good creature." I thought there was a mistake on her part, as Sunday was December 29th; but there was no mistake, and the incident as she described it was correct. We found that she remembered nothing after Sunday evening, December 29th, when she had been put to bed early, as she was poorly. A change in personality was developing. This personality could only draw imperfectly, and could not equal the performance of the blind stage (see Plate VII., Fig. 2). After she had drawn a picture we brought her to the normal A, when she expressed surprise, and said she never knew she could draw. "Nick" would not try to draw, except once or twice.

As B6, the "good creature," she went to the Jubilee Procession in June, 1897, and took an intelligent interest in it. One of my assistants, Dr. Taylor, of Perth, who knew her well during the first year, before B6 appeared, saw her there, but she never remembered having seen him before.

Though the date was June 27th, she maintained that it was only about a month since Christmas, the reason being that it was Christmas time when she was last in this B6 personality, and she had now been about five weeks in the same personality. This shows again how each sub-stage is continuous with the same and ignores the intervening events. She also said that she could not understand there being flowers

in January, so near Christmas, and why people would say it was June; that she had never seen the sea, but had heard about it, and would like to go there. She never had been B6 at the seaside. She deeply resented an effort made at this time to get her into a hospital for observation, and as a consequence became very ill and changed to a state of dementia. She declared she was quite well, and resented the idea of the hospital.

Four days later (on June 30th) she changed to "Nick" or B3, about tea time. She at once asked why the lamps were not lit, because when "Nick" left on May 13th it was 9.30 P.M., and the lamps were lit. She also said that her father called Mary Barnes, and so she went to sleep (on May 13th), and woke up to-day (June 30th). She seemed usually to have the idea, when one personality left, that she had gone to sleep: but when she went to sleep on May 13th it was 9.30 P.M., and her father was having his supper. She said when she woke up there was a different tea on the table, and Tom (her father) was gone.

She continued as B3 or "Nick" through August, and went to the same seaside resort as before. She was the same personality as when at the sea the year before, and now learned to swim.

On August 22nd she changed without any physical disturbance to the normal A, and then to "good creature," or B6. She then referred to having seen me with my assistant, Dr. Taylor, and spoke as if this had occurred the previous night, whereas in reality it was on June 25th, on which date B6 had been in evidence. But the memory of her visit to the seaside this month was entirely obliterated. She said that she had never bathed for fear of being drowned.

She argued that she was only two years old (about the length of time B6 had been present), and could not understand people saying she was 15. She only remembered two Christmas days.

In November she had another attack of mania (B1) which lasted a fortnight. Then she became "good creature" again, and remained so until March 24th, 1898, when she altered to the demented state B9. B9 lasted three or four weeks, when she again became B6 or "good creature." We could not now

TEL. 1345 HAMPSTEAD.

1, BELSIZE PARK,
N. W.

Sep 11 05

Dear Mr Tweedy

I don't think

I sent you this

Copy - But I believe

I sent you the one

out of Med psych

Journal - It is an

induce A to return. If her father tried she became unconscious and fell down: so we feel we have said good-bye to the normal "A" or Mary Barnes, and ever since she has been "good creature" or B6. She is intelligent, and has learned typewriting, and is making her own way.

Summing up the relationship of the different stages to one another, we may say that B2 represents a rough child, almost a waif, of 3 or 4 years old. B6 seems like the same child, more advanced in intelligence and refinement, though young for her age. B4 and B8 are like first cousins. B5 and B7 also seem closely related, but complementary to one another, as B7 remembers very remote incidents and B5 only very recent ones. B9 is, I think, an offshoot of B1. B3 and B10 stand by themselves.

About 1900 I met Mary Barnes with her father. Her manner was childish, like that of B6. When I asked her if her name was Mary Barnes, she said she supposed so, as her father said that was her name, and at the present time (February, 1904) she continues to say that she is Mary Barnes.

She is now to all appearances a healthy normal young woman. She is quite intelligent, and all her ideas are refined; but on examination one finds her memory is very bad, and though she remembers as far back as 1898, nearly all her previous life is a blank, including the years before her illness. I tested her memory as to various events which happened in the abnormal stages other than B6, and she had apparently no recollection of them; whereas events which happened in the B6 stage she now remembers. Thus she clearly remembers having seen Dr. Tuckey when she was B6: but she does not remember Dr. R. Jones, or Dr. Savill, Dr. Mickle, Dr. Bramwell, Mr. Barrett, Mr. Tweedy, Dr. (now Sir) T. Barlow, who saw her when she was B2, and B3, and B9. Also she knows a little French, which is as it should be, since B6 was the only personality besides B9 who knew any French. She does not remember the acute illness which started the alternations of personality; nor does she remember her childhood before then. Her father said in 1900 that she did not know her old schoolfellows, and her memory of school was a confused

blank. Of course, many impressions of her childhood have now been revived by intercourse and associations since she became B6; but this, after all, only serves to make her memory of the past even more confused.

Theory of Cerebral Changes connected with Changes of Personality.

Whilst many theories have been suggested to explain the psychical aspect of multiple personality, I am anxious to put forward some evidence of a pathological disturbance of the Sympathetic nervous system, which may throw some light on its physical aspect. To comprehend this subject we must consider some of the facts of brain evolution and development.

The most recent and reliable data we have are due to the researches of Dr. Bolton and Dr. G. A. Watson. Some of their work is at present unpublished, but I have permission to use their results for this paper.

I must first explain that a typical section through the cortex of the brain shows us five distinct layers of different kinds of cells, as indicated in Plate VIII. These layers are only from $\frac{1}{8}$ to $\frac{1}{4}$ of an inch thick. So they literally resemble the rind or bark of a tree, hence the term "cortex." Under the microscope one sees in them cells of varying shapes giving off fibres. At one time these cells used to be compared to electric batteries, where an impulse passes to a cell by a wire, and the cell discharges force through another wire. The simile remains sufficiently good for purposes of popular demonstration.

It has been shown that the general evolution of the cortex is from within outwards, the inner or deeper layers being the first to be developed, both in the vertebrates as a whole, and also in the individual. Dr. Watson, who has especially studied mammals in this respect, finds that in them the deepest, *i.e.*, the polymorph, layer is highly developed. The higher pyramidal layer (so called from the shape of its cells), which relates to intellect, is comparatively undeveloped; it contains few cells; they are irregularly distributed, and many

of them are of the embryonic type, suggesting possibilities not yet achieved. In the Rabbit, the layer is specially poor; in Carnivora, it is more highly evolved, and in monkeys still more so (see diagram of sections through the cortex of man and of the rabbit, Plate VIII.).

In Man the polymorph layer is much the same as in the lower animals, showing that we are no better equipped than they for a merely animal existence,—this layer being concerned with the instincts for self-preservation, and so on. In extreme dements, who had lost all their normal instincts, Dr. Bolton found that the polymorph layer was in process of decay.

On the other hand, in passing from the lower animals to man, Dr. Watson found a progressive evolution in the *pyramidal* layer, which is related to intellectual development. Dr. Bolton found this layer very thin and shallow in imbeciles and the first to decay in dements. It represents the higher intellectual control over the lower strata, which are devoted to the instincts and the senses. But in the human brain, on the more superficial or outer part of this layer, as if suggesting future evolution, there are many rudimentary or half-developed cells of what is called the embryonic type. Dr. Watson considers that this indicates that the human brain has not yet reached its highest development, and is capable of higher evolution, the longer the human race persists. To his opinion I would add the clause: provided our social and educational conditions are improved, especially by putting a check on the drinking habits so prevalent now in all classes, and so potent a cause of nerve degeneration. But whilst offering possibilities of higher education or development, these embryonic cells are likewise the first to decay, being more or less unstable.

Now if we suppose the same general principle of growth that governs the whole cortex to apply also to the pyramidal layer, it will contain, say, 10 strata of cells, of which Nos. 1, 2, and 3 (counting from within outwards or below upwards) are more ancestral or ancient than Nos. 8, 9, and 10, and therefore more stable. Against this, some will argue that at birth all strata are laid down simultaneously. But functionally 8, 9, and 10 are delayed, for they contain many of these embryonic cells, which are not apparent in Nos. 1, 2, and 3, and which in some people continue embryonic in type per-

manently. Also in incipient dementia and in an alcoholic case which I examined, where brain power was failing, it was the top layers, 10, 9, and 8, which were disappearing. In the alcoholic case, these external cells of the pyramidal layer had been destroyed. At the same time the patient had become depraved. Her higher mental ideation or true Ego had disappeared. She had stepped down from her original personality to a much lower grade.

This is an extreme case, but it suggests a physical explanation of mental deterioration and altered personality, with loss of responsibility.

Applying these facts to the case of the B6 personality, then, I would consider that the influenza toxin or the meningitis had damaged the extreme surface or top of the pyramidal layer, and so prevented the higher mental development which occurs between puberty and adolescence. The case now resembles one of neurasthenia. The patient complains of bodily weakness; she soon gets tired; there is loss of memory; brain fag; exhaustion after mental effort, and want of power of application; yet her intelligence and moral faculties are unimpaired. Does not this case throw some light on the condition of neurasthenia, for we know that the latter often occurs through derangement of internal organs which are controlled by the sympathetic nerves? Just as the finger tips in neurasthenic people are benumbed by arrested circulation, so the sympathetic disturbance in the brain circulation may arrest the functional activity of what we may provisionally term the "brain tips," or most distant and external parts of the brain.

The chief features of scientific interest in this case are:

(1) That the normal A was absolutely ignorant of the abnormal B, and, on the whole, *vice versa*, although the abnormal B sometimes showed a glimmer of knowledge of the normal A.

(2) Among the many abnormal sub-stages, each sub-stage was a separate personality, continuous with itself throughout its different appearances, and originally ignorant of every other sub-stage, though sometimes learning a little about the incidents of other stages, probably through hearing conversations.

(3) These personalities were switched on and off without any apparent rhyme or reason. During the process of change

there was generally some physical disturbance, such as shock, pallor or flushing, and alteration of facial expression.

Some would call this a case of somnambulism, and would maintain that the normal A is now merely asleep. This is not my view. I hold that each of the sub-stages is as much an individual or character as the normal A, each of them being merely a fraction of the complete personality or Ego. From this point of view, it seems to me that the case throws new light on the mechanism of the brain, and its relation to mind and personality.

It is generally known that the brain is mapped out into functional areas, viz., Sensory areas receiving impressions of smell, sight, taste, touch, and hearing; also Motor areas to direct the movement of different parts of the body.

There are besides three areas called association centres: the frontal, the temporal, and the parieto-occipital area behind. As the name indicates, these associate or bring into harmonious co-operation the other active nerve groups (see Plate IX., Fig. 1).

The association areas represent the higher intellectual or mental grades, and Dr. Bolton considers that they are the first to decay. These higher centres contain a large proportion of embryonic or rudimentary cells, showing that they are still in process of evolution. Dr. Watson has shown that the cortex of the human and the rabbit's brain are about equal in depth, except in the association areas, which in the rabbit are only half the depth or thickness of similar parts in man.

My hypothesis assumes that the pyramidal layer of the brain may be divided as a whole or in part into "districts." Diagrammatically we may conceive of these districts as being different levels in the cortex, especially in the association areas, the deeper inner ones representing more developed stages than the upper levels, because they are functionally older. Thus we may suppose there is a low level or district corresponding to the age of three or four; higher up would be the district coming into play at the age of twenty; a still higher one would become active at thirty, and so on; each in turn superseding and taking command of the lower districts. In senile decay we see the reverse process occurring; the upper layers decaying

or falling out of use, and the lower ones coming into play again.

Now these different districts may be supposed to correspond to different personalities. As a rule there is no apparent break in character as the individual grows up, because the change from each district to the next is gradual and continuous. But morbid conditions in the brain may throw back the individual to earlier stages, from which he may suddenly revert to others, or the later stages may be prevented by morbid causes from developing.

In the case of Mary Barnes, B1, the stage of mania, might be caused by congestion of the smaller blood-vessels, giving rise to an over-stimulation of the cortex.

In B2 spasm of the anterior cerebral arteries would shut off the frontal association centre, and paralyse the foot (see diagram of arterial blood-supply, Plate IX., Fig. 2). Intellectually B2 was a child of three or four. Though she had a storehouse of words, she could not use them or associate them with their proper meanings.

B4, the deaf-mute stage, might be caused by spasm of the middle cerebral arteries, supplying the centres for hearing and speech—perhaps only on the left or active side.

B7 resembled a state of senile decay. If the recently educated layers were paralysed, the lower cells with their early memories might become active.

B10 is easily explained by the shutting off of the blood supply to the sensory visual apparatus, the psychic visual centre, which has a different blood supply, being undisturbed. Hence she could originate the remarkable pictures described above. B10 gives strong support to my vascular theory.

In B9, where the lower animal instincts prevailed, there was probably uncontrolled activity of the deeper layers of the cortex with temporary paralysis of the upper layers. The theory would support the view that all our bad impulses are relics of our earliest ancestral development; or, in other words, the power of animal instincts and passions over intellect. On the other hand, the present stage of B6, which seems, intellectually at least, to be in some respects more highly developed than the original normal stage A, may only be the normal increase of brain activity during the last three or

four years. We must also remember that B6 is an arrested development. Now in 1904 Mary Barnes is actually 21 years of age, but she is intellectually only about 16 years old. In theory one would expect that the outer, less stable cortical cells, which are also embryonic and poorly developed, have not arrived at their full and normal activity. Vascular changes in the sympathetic might retard their development.

The whole conception is consistent with Mr. Myers's theory of the constitution of the Ego, according to which only a portion of it is manifest to us in our present life. While the whole Ego remains intact, one portion or another may become manifest according to different physical conditions and the environment of the individual, so presenting the appearance of a truncated personality or shifting series of personalities. What has to be attempted, then, in our present life is to facilitate the manifestation of the best personality of each Ego.

If so be that the mind comprises so many personalities, good, bad, and indifferent, does it not shed light on the duties of those who have the training of the young?

This case having led us to the belief that the varying personalities may to some extent be explained by a fuller knowledge of the structure of the brain cortex, also throws new light on the psychical question of habit.

The more recent ideas on habit are that it represents the path of least resistance along nerve channels. It is thought that constant use overcomes nerve resistance both in the fibres and at the junctions or synapses of the different neurones.

This theory is based on the knowledge that sensory tracts leading to the brain do not become active or insulated (myelinated) until stimulated from without. It is, however, contrary to the laws of conductivity and resistance in copper and other metals.

But if we consider habits involving skill, such as writing or piano playing or carving, are we to suppose that the optic nerves conduct better after two or more years' practice? Is it not rather that the visuo-psychic areas are more educated? Do the nerves from the cortical motor areas really conduct to the hand and fingers with more facility after years of practice? Or are not the motor cells more educated, and does not their increased functional activity direct and originate the more complex movements?

If my view be correct, habit is of the same nature as a personality. Habit may be regarded, then, as belonging to a brain area or district, or as a personality which is specially educated at some period of life. When the higher Ego is feeble or inactive, habits of lower type and absence of skill obtain. It is only by close attention or the influence of the highest intellect that good and skilled habits develop, which place the personality in a higher sphere of life.

This subject merits the attention of those who have to educate the young, and aid them in the formation of character, which is perhaps but a personality.

In science we speak of the mind possessing the power of inhibition. In popular language we call it self-control, or the power to resist immediate gratification for the sake of future good. But do we resist evil? or do we not rather flee from it and turn our backs on it? An evil personality may be tending to get the upper hand. Should we allow it to remain and fight it? or should not the process rather be that of striving to pass to another and nobler personality? Rather than a mere negative inhibition, is it not a power of switching off the vital current from the bad district or personality, and turning it into a more desirable channel?

If we go among the masses we find adverse circumstances working terrible havoc among the children, such as bad air, malnutrition, sickness from improper exposure, brain attacks, or meningitis, fits, and above all, bad heredity due to drunken parents. The children that survive are liable to become abnormal, even degenerate and criminal. But we cannot regard them as fully responsible for their actions and tendencies. We have to remember that they have never had a fair chance of developing their normal personality or their highest Ego. Circumstances over which they have no control have switched them on to a wrong path physically at the beginning of their lives, and prevented them from acquiring the self-control of the properly civilised man.

The case I have described illustrates the dependency of the mind on the body. From this we may infer the impossibility of overcoming adverse physical conditions after they have reached a certain point and with this fact before us, it follows that our first duty to the race is to attempt to

ameliorate those social conditions which now so largely handicap it.

APPENDIX I.

Writings of the Different Personalities.[1]

The following is a selection from some of the letters written by the different personalities :

(1)

[To her father : written forwards by B2, January 28th, 1896.]

My own dear farser,

ou is de versy best darlint in all de weald dere is no vone in de weald like you ou is doing to have a bath ~~y~~vitch I hope ou vill enjoy ve did go to see de dear doctor Vilson and lady Vilson but dey was jist doing out so I could oney just peak to dem Goodbye my dardint

~~y~~ou's oving ittle

daughter Good Shrine.

(2)

[To Dr. Wilson ; written backwards by B2, March 18th, 1896.]

the nice doctor

if you is coming to see me to night i wull be good if you do not hit a fing on me you was a bit naugthy when you did that you know old jim did not do that. the dear tom and mary ann say you is a nice man and i say you is and every body else

(3)

[To Dr. Wilson, to whom she now applied the name she had before given to a doctor who had attended her during the influenza ; written backwards by B2, November 1st, 1896, during the mania state.]

My dear old jim

you may expect a good old blowing up for not coming to see me today i was going to give you a grape but I wont now because you are a very wicked boy not to come and see me

good thing

[1] For reproductions of some of the writings and drawings see Plates I.-VII.

(4)

[To Dr. Wilson; written forwards by B2, probably in February, 1897.]

For the new jim or rather the gentleman who says he is a jim and who says he is jims brother but he is not because he has not got a gammy leg and my jim was only a lean short man and this one is a big tall man

good thing to Jim

(5)

[Postcard written by B3, addressed to her father, from M——, August 7th, 1896.]

My Pet

I wish you would bring those oil skins down with you as we have spoken to a boatman about them and he knows how to cure them and will be glad of them Mr. Hanley our boatman Goodbye dear I shall soon see my darling God bless him

Old NICK

(6)

[To Dr. Wilson; written by B3, August 26th, 1896.]

M——, Essex.

Dear Sir,

Just a line to tell you I am not in L—— but at M—— with my dear old Tom.

I am very sorry I did not write you the Post card you asked me to but I went away on the Saturday and quite forgot all about it but I know you will forgive me and I hope this will do as well.

The dear doctor Wilson I am enjoying myself lovely with boating bathing and paddling going on.

The dear old Tom and me are just going out to get the dinner so I have not any more time to say any more but I remain

Your ever loving

Old NICK.

in Haste.

(7)

[Written by B3. Received April 6th, 1897; see above, p. 376.]

In Bed

3 hours after I woke up

My dear Dr. Wilson

I am writing you a few lines to let you know Poor old NICK has woke up I will tell you all about it I woke up all at once at about ¼ to 2 o'clock & found myself in bed with the room all dark & with my night dress on & with Bottles on the drawers & all kinds of things that people would have if they were ill. I was all by myself & the place dreadfully quiet so I called out "Why have you put me in bed" then I really had to laugh till the tears ran down my cheeks because it was so strange and funny. Then Tom & Munger & Giggler came in all looking dazed & Frightened & I was so surprised that we did not know what to say for quite a little while. Do you know I felt so strange because I went to sleep in September & now they tell me it is April 1897 instead of September 1896. I cant make it out I dont know that I can believe but that it is the same day as when I went to sleep because you know I went to sleep on Sunday at the same time as I woke up. I went to sleep you know when we were having dinner one Sunday & I woke up on sunday when they were having the same dinner you know Mutton & Potatoes & greens all the very same except Fruit Pudding it seems so funny to go to sleep such a very long time Every thing was the same except I was in bed all cuddled up in wraps & Hot water bottle at my feet & every think so funny. I feels quite strong & cannot make out why I am in bed. But I am going to get up tomorrow I feel so very disapointed you are away but I hope very much you are enjoying your self & that you will soon behome because I have gallons of news to tell you.

I have done you a drawing and I am sending it to you with 2 of the others that another critter tom Tells me did for you while I have been asleep I will tell you that there are a whole Pile of Drawings here that she has done for you & there are 2 beautiful Pictures here that she has done for you Proper Pictures I mean with ladies & Birds & Trees & Fence all colored in too you know [see Plate IV. for reproduction of picture referred to].

I have a little more to tell you & that is that —— came for a few minutes almost directly after I woke up. I think I can tell you no more until you come home

I remain your Loving little Friend

Poor old NICK

(8)

[Written by B3.]

Aug. 12th, 1897.

Dear Dr. Wilson,

I daresay you will be surprised to hear that I am in M—— and am enjoying myself exceedingly. You told me you kept the other letters I sent you so I thought I would send you another as I want to tell you how I can swim and float and dive. I go in the water nearly every day for I like being in the water very much indeed. Dear Dr. Wilson last time I saw you, you were in your carriage, and you had Mrs. Wilson with you and she had some thing on her eye and I want to know if she has hurt it very much and if it is better I do hope so. We have been in M—— nearly a fortnight now and we have got to go home at the end of next week.

Hoping you are quite well

Your sincere little friend

Old NICK.

(9)

[Written by B6.]

2nd June, [1898].

Dear Dr. Wilson

I am writing you a letter to tell you how I am enjoying myself in M——. It is such a glorious place I have never been to such a lovely place before. [see B3's letters of Aug. 26th, 1896, and Aug. 12th, 1897, written from M——]

We are having such dreadfully bad weather here, we have hardly had a fine day yet, and it is that bitterly cold here, that I have not been able to bathe.

Tomadod said that if I went in perhaps I should have a very great breckart and then get drowned so that he could never see me any more. I have not given up all hopes of going in the water yet as Munger says that if a very very warm fine day was to

come she would let me go in I should so love to go in because I believe I can swim and yet cannot be quite sure until I have tried. Dear Dr. Wilson I have enjoyed myself so much this Whitsun for on Monday we went out all day to a beautiful place called Mill Beach and on Tuesday we went for a drive but it came on to rain in the afternoon very badly I think this is all I have to say so

Goodbye your ever loving little friend

CRITTER BARNES.

[Correct surname given in original.]

(10)

[Written by B6 October 9th, 1898.]

Dear Dr. Wilson

I daresay you will be very much surprised to hear that I am staying in Suffolk for another Holiday I daresay this will be the last this summer so I am going to stay for a fortnight or a little over. I am enjoying myself immensly and I went blackberrying this morning and I daresay I gathered two or three lbs. I am staying with one of Mother's friends she is such a nice lady and she keeps a farm house there are plenty of Horses Ducks Chickins Pigs Bullocks Etc and I am feeling A1 and I am getting quite a country girl I shall soon know how to feed chickens and all kinds of things. I think this is all at present so Goodbye Hoping you are quite well

I remain yours Truly

M. BARNES.

[Correct initials and surname given in original.]

(11)

[To her father; written backwards by B9, October 12th, 1896.]

the dear tomadod just a line to you to tell you how much I wish you was here. I hope there is something in your pocket to night I remain yours truly

I dont know who I am so I cant Put my name

(12)

[Another letter written backwards on the same day, October 12th, 1896, was as follows:]

My dear tom

I have just got up. I hope you are not worried. I shall be glad when you come home so you can give me some browns.

(13)

[Letter addressed by B9 on November 22nd, 1896, to Dr. Wilson, to whom the name "Jim" had been transferred at this stage. It refers to the incident of B2 having a tooth extracted early in the same month. This letter was written forwards.]

The dear Jim

I thought I would write you just a line to let you know I really do begin to like you very much, after what you did to me three Tuesdays ago. You know what I mean when you brought that other naughty wicked man in your beautiful carriage. I can assure you I wish he was here now so that I could fight him like he fighted me.

I remain Your little friend

THE DREADFUL WICKED CREATURE.

The Jim.

(14)

[To Dr. Wilson; written by B10.]

Februgesy the fourteenth
18 ninty seven
Sunday

The dear voice I am writting a letter to tell you lots of things you come to see me last night and I was so jedfulls pleased and I did like the doctor Cross. when I went out this morning I was listening all the time to see if I could hear you but I couldnt and I shall like to go there to London soon because I like to ride quick goodby dear voice I hope I shall soon see you I am the Toms lamb and I have nearly made that sock what I showed you Goodbye dear voice

TOMS LAMB

Febugesy

(15)

[Written by B6 in March, 1904.]

Dear Dr. Wilson,

I am writing to say that I shall be able to keep appointment for next Monday, if you will write me full particulars.

Thanking you very much for all your kindness,

Believe me yours sincerely,

—— ——

Comments on the Writings and Drawings of the Secondary Personalities.

By Alice Johnson.

The letters and drawings of the different personalities of Mary Barnes show in many respects curious analogies with the trance or automatic performances of mediums. It often happens with mediums who write automatically that the handwriting differs from their ordinary hand and varies greatly at different times, and often the different handwritings are associated with different supposed "controls." Sometimes, even, the handwriting resembles more or less closely that of some deceased person who is thought to be controlling (*e.g.* in the case of Mlle. Hélène Smith, who wrote signatures resembling those found in some old documents, as recorded by Prof. Flournoy in *Des Indes à la Planète Mars*, p. 409; and in a case occurring among the trance phenomena of Mrs. Thompson described in the *Proceedings*, Part XLVII., pp. 235-243). I need not here discuss the question —which must obviously depend on the circumstances of each particular case—whether such resemblance affords evidence of the agency of the deceased person; but the fact of the variety of handwriting being found in a case of secondary personality shows that for this feature, at least, we need not seek for a cause outside the individuality of the writer. It affords, in fact, another link between the phenomena of trance and of secondary personality.

For this reason it seems worth while to analyse the writings of Mary Barnes in some detail, and in order that the reader may follow the description, several specimens taken from the letters quoted above in full are here reproduced.

Several distinct styles of handwriting are shown which, however, are not consistent in their connection with the different personalities. The principal styles are as follows:—

(1) The backwards writing in which, while the whole runs from left to right, each word is written from right to left. Both B2 and B9 at first wrote in this way (see reproductions in Plate I. and Plate III., Fig. 1). Indications of the

way the writing was done may be seen in three cases in which the last letter or letters of a word were first written and then crossed out, and followed by the whole word (see "gt" for "night" in Plate I., and "n" for "in" and "ur" for "your" in Plate III., Fig. 1). The backwards writing of B2 was closely similar to that of B9, but when they wrote forwards in the ordinary manner, their writings were quite different. The forwards writing of B2 in letter (4) is very much like her backwards writing, but more regular; in letter (1) her writing is like that of B7, to be next described.

(2) Writing of B7. This is a fully formed but uneducated-looking hand, characterised by superfluous tags at the beginnings and superfluous flourishes at the ends of words; also by the individual letters being compressed from side to side, while the strokes joining them are disproportionately drawn out. The same characteristics are found in much of the writing of the blind B10.

(3) Writing of B3. There are several different specimens of this, the earliest being the postcard addressed to her father on August 7th, 1896, and quoted above. In this the style is much more childish than that of B7, but contains slight traces both of the flourishes and of the compression of the letters found in the latter style. The writing is very careless and irregular. The next specimen was the letter written to Dr. Wilson soon after, on August 26th, 1896, evidently written with much more care. B9's letter (No. 13), written forwards on November 22nd, 1896, is very similar to the third specimen of B3, which was written on April 4th, 1897, and part of which is reproduced in Plate II., Fig I. This is a clear round childish writing, containing a rather peculiar form of the letter "k" which does not occur in any other of the writings. The latest specimen of B3 is dated August 12th, 1897. It retains the round childish character, each letter being formed with care and correctness, but the capital "D's" take on the form of those of B6 (see Plate II., Fig. 2) in that the return upward stroke stops short of the initial downward stroke. The whole writing of B3, in fact, is similar to the early writings of B6, as may be seen by comparing (1) and (2) on Plate II. Later B6 writes more flowingly and the letters become less correctly formed, the style developing into that shown in Plate III., Fig. 2.

(4) Writing of B10. This varies a good deal. The earliest specimens are dated January 3rd, 1897 (the B10 personality having first appeared on December 29th, 1896); some of these resemble planchette writing, being large and sprawling and characterless; other parts are like the writing of B7, already described; in others again the letters are long and sloping, like the writing reproduced in Plate II., Fig. 3, which was done a few weeks later, on February 14th, when she could see a very little, whereas at the beginning of January she was quite blind.

With regard to the contents of these writings a few points may be noted:

B2's first letter to her father (No. 1 above) dated January 28th, 1896, shows an excessively—not to say artificially—childish style of phonetic spelling; it is noteworthy that in two cases a word is begun with the right spelling and then the correct initial letter is crossed out, and the word finally spelt wrong;—she begins to spell "which" with a "w," then crosses it out and writes "vitch"; and later on begins "your" with a "y," then crosses it out and writes "ou's." The whole performance suggests not so much a child as an elder person imagining herself to be a child; as if the normal consciousness were deliberately, and not quite successfully, trying to suppress itself to give full play to the dramatic instincts of the subliminal. So little, indeed, in this case was the normal consciousness submerged that it cropped up spontaneously and required no external suggestion or artifice to elicit it, such as was used in the incident of the correct counting to which Mr. Piddington has drawn attention (see below, p. 411) when B10 could only count 1, 2, 1, 2; but was suddenly surprised into counting up to 5.

In a piece of writing by B7 there are indications of the opposite extreme, explicit knowledge being shown of a fact which the normal Mary Barnes had probably forgotten, or perhaps never consciously known. B7 wrote:

March 16th, 1895.

The dear old Dada and Mother. The dear old Doctor H——. The dear old doctor G——. The dear doctor Wilson. The dear old nurse who came from the Union to nurse mama when she had diptheiria.

MISS MLARIAN BEARNET.

The date given at the top of this writing was incorrect; it was really written on May 13th, 1896, on the back of a ticket for a public meeting at the Mansion House on May 12th, 1896. March 16th, 1895, was before the illness which started the series of varying personalities, and the mention of this date is perhaps another indication of the fact that the memory of B7 included incidents in the life of the normal personality A. This extended memory is shown in the interesting reference to her mother's illness which occurred when Mary Barnes was under two years old; in the reference to her parents as such, instead of as Tom and Mary Ann; in the use of the correct names of the doctors; and again in the signature "Miss Mlarian Bearnet,"[1] an obvious variant of the real name.

It may be remembered that Ansel Bourne adopted during his secondary personality a similar variant of his real name, calling himself A. J. Brown.

At a later stage, B6 signed herself "Critter Barnes," but only after she had been taught what her real surname was. Finally she dropped the "Critter," and used her proper signature, after having been taught it.

The drawings illustrate the development of faculties latent in the normal personality, and it is curious, though (as Mr. Piddington points out, p. 408) not without parallel, that they began in the blind stage, B10.

B10 having first appeared on December 29th, 1896, began to draw on January 3rd, 1897, when completely blind, and a large number of drawings were executed on that day. The first ones represent faces, drawn on a large scale and in bold outlines. Dr. Wilson notes that to produce these she felt her own face, and then drew her pictures by touch. The first of all is drawn in profile, the length of the face being about 5 inches. There are also four large full-face drawings, closely resembling one another, the faces being from 8 to 9 inches long. Next comes a half-length figure—apparently of a man—and another large profile face, with very elaborate head gear. After this, the fashion-plate type shown in Plate V. predominates, and there are about half-a-dozen half or full

[1] The signature actually written was as much like the real name as "Mlarian Bearnet" is like "Mary Barnes."

length figures of elaborately-dressed ladies—one, marked "Bride," with a veil, others with elaborate coiffures, and one with a hat and veil. In this last case, the veil is described as added after the rest of the figure was drawn. A note on it states that, as she could not see, she asked for her forefinger to be placed on the neck of the figure, and then drew a veil in the correct position. On one of the other drawings, it is noted that her father moved the paper as she was in the middle of drawing, so that the skirt was drawn at a considerable distance from the upper part of the figure. Dr. Wilson states that later on her sense of touch became much more acute, so that, if the paper was moved while she was in the middle of drawing, she could find out for herself, by feeling it, where to continue the lines.

These early drawings are mixed up with a good deal of writing, either mere lists of names and words, or apparently casual remarks,—possibly referring to conversations going on around her,—or fragmentary reminiscences of music-hall songs, such as the following:

Dear Father
I want some pudding Toms Lamb

She was a dear little dickey Bird
Chip, Chip, Chip she went
Sweetly she sang to me till all my money was spent
She went of song we parted on fighting terms
For she was one of the eary birds and I was one of the worms.

We will retire to the other room for a short interval to discuss nessessary matters Old Sam.

The writing, both in form and contents, strongly resembles the elementary stages of automatic writing with which psychical researchers are familiar.

A series of pictures executed about a month later are much better drawn; the faces are more correct, and have a certain variety of expression, though fundamentally similar and all in profile. The figures, again, are of the fashion-plate type. They are drawn in pencil and coloured with chalks. At this time B10 had begun to recover her sight, but was extremely short-sighted, not being able to see anything clearly more than about three inches from her eyes (see Dr. Tweedy's report).

Her habit of occasionally holding up the crayons to her eye, so close that they sometimes touched the cornea, suggested, however, that for practical purposes she could not see at all, and Dr. Wilson thought that these drawings, too, were really executed by touch. It was a significant feature of this condition that the cornea was completely insensitive, as sometimes occurs with subjects in a deep state of trance.

Later in February, as described in Dr. Wilson's account, the B6 or B2 personality appeared again; but in the middle of March the imbecile state, B10, returned, and was even worse than before, being paralysed, blind, deaf, and dumb. Her sense of touch in guiding the pencil and copying was now even more acute than before, and the drawings were still better executed. It is to this period that the two drawings reproduced on Plates V. and VI. belong. The one given on Plate IV. belongs to a slightly earlier period, March 7th to 14th, when B10 was alternating with B2, and it shows more imagination and power of composition than any of the other specimens.

Diary of Appearances of Different Personalities.

A = Normal state.
B = Abnormal state, of which there were ten varieties, as follows:
B1—Mania of 3rd and 4th weeks of the acute illness.
B1[a]—Coma cephalgia of the 2nd and 3rd weeks of illness in 1895.
B2—Childish; "a thing," "good thing."
B3—"Nick."
B4—Deaf and dumb.
B5—Thinks herself only 3 days old.
B6—"Pretty dear," "good creature," or "Tom's darling."
B7—"Adjuice Uneza."
B8—Thinks she was only born last night.
B9—Various degeneracies, "dreadful wicked creature."
B10—Blind, and draws; "Tom's Lamb."

In the following table, the first appearance of each personality is indicated by the black type. When no date is given, the personality is continued from the last date mentioned. Details of A are given separately below.

1895.	
Easter, .	. Influenza. Relapse.
Ap. 21–May 5,	. **B1[a].**
May 6–19, .	. **B1.**
May 20–26, .	. **B2.**
May and June to July 20,	. B2.
July 20–23, .	. B2.
July 24–Aug. 8,	. **B3.**

Aug. 8, . . **B4**.
Aug. and Sept. . B4 and B2.
Oct. and Nov. . B4 for 14 days and B2.
Oct. 27, . 1st tooth extraction. B2.
to Nov. 26, . . B2.
Nov. 26 to Dec. 20 **B5**.
Dec. 20 to Jan. . B1.

1896.

Jan. 12 . . B1, B1^a.
Jan. 14–Feb. 7, . B2.
Jan. 22, . Shown at Clinical Society. B2.
Feb. 7, . . B1 and B1^a.
Feb. 9–22, . . B2. Seen by Dr. Savill.
Feb. 26, . Seen by Drs. Jones, Meikle, Bramwell, Barrett as B2.
Mar. 1, B2 changing to B1.
Mar. 1–4, . . B1 and B2.
Mar. 6, . . B1, finally B2.
Mar. 7, . . B2.
Mar. 7–18, . . B2, B1^a for half hour.
Mar. 18–27, . B2, B1^a for half hour.
to Apr. 4, . B2, convulsions.
Apr. 18–23, . . B3.
Apr. 23, . . B2.
May 5, . . B1^a.
May 6, . . **B6**.
May 7, . . B2.
May 11, . . B1^a.
May 12, . . B6 and **B7**.
May 17–30, . . B7 leaving, B2 coming.
May 31, . . B2 and B7.
June 7–13, . . B7–B6–B2.
June 14–20, . B4–B6.
June 20, . Convulsions, B6.
June 21–24, . **B8**.
June 24–30, . B7 and **B9**.
July 3, . B6. Dr. Tuckey's visit.
July 6, . . B6–B2.
July 8, . . B3.
(Paralysed in legs from May 31 to July 8.)
to Aug. 1, . . B3.
July 18 and Aug. 8, } B1 for few minutes.
Aug. 1–Sept. 20, . B3.
Sept. 20, . . B6.
Sept. 26, . . B3 and B6.
Oct. 10, . . B6, B7, B9.
Oct. 10–16, . . B9.
Oct. 16, B9, B3 for half hour.
Oct. 17, " "
Oct. 18–30, . . B9.
Oct. 31, . . B1.
Nov. 1–20, . B2. 2nd tooth extraction.
Nov. 20–Dec. 10, . B9 and B2.
Dec. 10, . . B6.
Dec. 29, . . B6–B9.
Dec. 29, . . **B10**.

1897.

Jan. 31, B10. Seen by Dr. Enraght.
Feb. 13, B10. Seen by Dr. Cross.
Feb. 26, Gradually B6 or B2. Shown at Clinical Society.
March 14, . . B10.
Mar. 25–Apr. 4, B10 with coma.
April 4, . . B3.
May 3, B3. Seen by Dr. Cross.
May 12, . . B3.
May 13–June 26, . B6.
June 26–30, . B1. Seen by Dr. Barlow.
June 30, . . B3.
Aug. 22, . . B6.
Nov. 9, . . B6.
Nov. 9–19, . . B1^a.
Nov. 20, . . B6.

1898.

to March 24, . B6.
March 24–31 to Apr. 10, } like B9 and B1^a.
April 7–10, . Changing to B6.

From this date, viz. three years after the illness began, B6 continued for the next six years, up to the present date, 1904, and seems now to have become permanent.

DIARY OF APPEARANCES OF THE NORMAL STATE A.

1895.

May 20. . . .	B2 arrives. A comes for 2 to 6 or 7 hours.
July 6. . . .	A less frequent and shorter, appears only 3 or 4 times, and lasts 5 minutes to 2 hours.
Aug. 8. . . .	A comes more often, but not for longer periods.
Oct. 27. . . .	A less frequent; may be absent for 2 or 3 days. Father can call A back.
Dec. 20 . . .	A very irregular. Perhaps once a day or misses 3 or 4 days, and only comes for a few minutes at a time.

1896.

Jan. 13. . . .	A came back at 3 A.M., and twice at 8 and 9 A.M.
Jan. 18. . . .	A came lately many times, but for a few minutes only.
Jan. 26 to Feb. 1. .	A came only once, and for 10 minutes.
Feb. 2 to Feb. 8. .	A came only once, and for 2 minutes.
Feb. 9 to Feb. 15. .	A did not come once.
Feb. 16 to Feb. 22. .	A came only twice, for a minute.
Feb. 28. . . .	A came four or five times, once for half an hour.
Mar. 7. . . .	A came several times, once for twenty minutes.
Mar. 8 to 14. . .	Frequently normal. Her father brings A back by cuddling.
Mar. 20 to 21. . .	Frequently A.
Mar. 27. . . .	Seldom A.
Mar. 29 to Apr. 4. .	Seldom A.
Apr. 5 to 11. . .	Not once A.
Apr. 12 to Apr. 18. .	Not once A.
Apr. 19 to 25. . .	Not once A.
May 1. . . .	A for 1 hour.
May 2 to 9. . .	Not once A.
May 17 to 30. . .	Very seldom A.
June 7 to 13. . .	A comes often; may be able to walk or may be paralysed.
June 13. . . .	A for 2 hours.

July 3. . . . A came for half an hour. Has been absent many days.

July 7. . . . A came for 1 minute.

July 19 to Aug. 1. . A comes only for a moment, and is brought by caressing.

Aug. 18. . . . A is only brought by caressing.

Aug. 23 to Sep. . A comes frequently for about 2 minutes in a particular road at———.

Sep. 4 and 5. . . A comes often after bathing, often for 10 minutes, once for an hour and a half.

Sep. 6 to 19. . . A not often.

Oct. and Nov. . . A is very rare, and can only be brought by caressing.

Dec 27. . . . A comes nearly every day since 11th for 3 or 4 minutes, sometimes spontaneously, sometimes brought by caressing.

1897.

Jan. 14. . . . A came for 4 minutes during the blind stage.

Jan. 16 and 23. . A came 3 or 4 times for a few minutes; and momentarily on several other days towards the end of January.

Jan. 31. . . . A came when blind, being induced by use of the ophthalmoscope.

Feb. and Mar. . . A almost entirely absent.

May 3. . . . A will not come now, not even in place where she used to come in a certain road. Resists her father's calling.

May 13. . . . A came after B3, and was succeeded by B6.

June, July, and Aug. A almost always absent now. The patient was at ——, but A came very seldom.

Aug. 22. . . . A came once for 4 minutes.

Oct. 30. . . . I tried to photograph A, but failed.

1898.

Mar. 24. . . . A practically gone. If A is called, the patient resists and strikes out.

May 24. . . . When father calls A, the patient falls down unconscious.

Description of Illustrations.

Plates I.-III. Reproductions of handwritings of the different personalities.

Plate I.

Writing by B2. In the original each word was written backwards, *i.e.* from right to left.

Plate II.

(1) Writing by B3, (2) by B6, (3) by B10.

Plate III.

(1) Writing by B9 (in the original each word was written backwards), (2) writing by B6, in March, 1904.

Plates IV.-VI. Reproductions of drawings by the different personalities.

Plate IV.

Drawing by the blind personality, B10, during the week March 7th to 14th, 1897; reduced from the original, which is 17 ins. by 11½ ins.

Plate V.

Drawing by the blind personality, B10, on March 18th, 1897; reduced from the original, which is about 6 ins. by 10 ins.

Plate VI.

Drawing by B10 on March 22nd, 1897, reduced from the original, which is about 6 ins. by 10 ins.; intended to represent the nurse who attended her in that stage, but not at all like her. The nurse said she would like to be drawn holding a bottle in her hand; so B10 asked to be allowed to feel the bottle, and then drew it. She made five other drawings on the same day.

Plate VII., *Fig.* 1.

Drawing by B3 or "Nick." This took two days to do—April 11th and 12th, 1897.

Plate VII., *Fig.* 2.

Drawing by B6, or "Good Creature," on May 13th, 1897. When she drew this, she burst out laughing at the picture "Nick" had drawn on April 11th and 12th.

Plate VIII.

Diagram of sections through the cortex of the human and the rabbit's brain, reproduced by the courtesy of Dr. G. A. Watson. The cortex in both is divided into five layers (marked here I, II, III, IV, V) which develop from below upwards. At birth all layers are already formed. The deepest layer (V) is called the polymorphic from the varying shapes of its cells. It is the first to develop, and with layer IV appears about the sixth month of foetal life. The pyramidal (II) and other layers appear about the 7th to 8th month of foetal life. They are then about three-quarters of their depth in the adult. At birth the polymorphic and layer IV are not quite their final thickness, while the granular layer (III) is only three-quarters of its final thickness, and the pyramidal layer only one half. These details illustrate the fact that the course of development is from below upwards or from within outwards. We can, therefore, safely infer that the functional activity of the layers comes into play in the same order.

The polymorphic layer is as large or thick in animals as in man. In this diagram it is seen to be even thicker in the rabbit than in man. For the rabbit has but little intelligence, and therefore has to rely on well-developed instincts.

The granular layer (III) does not demand special notice here. It receives impressions from the sensory organs.

The pyramidal layer (II) is the most important one for us to consider here. It is the last to develop, and the first to go in dementia. It also decays first on the outer surface, for in this part many of the cells have not reached perfection, being of the type called embryonic.

Compare the depth of this layer in the normal human brain as shown in the diagram (·86 mm.) with its depth in the rabbit (·14 mm.). It is thus six times as thick in the human as in the rabbit's brain, which alone indicates an enormous difference in intellectual power.

Plate IX. *Fig.* 1.

Right side of the brain, showing the association and sensori motor areas of the certex. M is the motor area. The foot centre is at the top, and the lips and speech centres at the bottom; other centres intervene. H points to the centre of hearing; V to the sensori-visual centre, that is, the centre where the images of objects seen and focussed by the eye acting as a photographic camera are, so to speak, finally developed or perceived. In the blind imbecile the pyramidal layer is here undeveloped and thin (according to Bolton).

The clear spaces P, OT and F represent the association areas, which associate the impressions received in the sensory areas for purposes of higher mentation.

Drs. G. A. Watson and J. S. Bolton regard the visuo-sensory area (V) as of relatively little psychic value, comparing its development in the human and other "seeing" animals with the much larger visual psychic or association area (P) which surrounds the visuo-sensory.

In this visuo-psychic area all sight impressions are stored and analysed. In copying or drawing from a copy or painting from nature, the image of the object is focussed by the eye, which is like a camera, with the retina as a screen. From the eye the image is impressed on the visuo-sensory area (V) and thence it is analysed and stored in the association centre P. From the visuo-psychic area (P) messages for guidance as to the form and colour of the drawing are sent to the hand centre in M.

Plate IX., *Fig.* 2.

Right side of the brain, showing the arterial blood supply. There are three areas, marked PC, MC and AC, supplied by three arteries. Posteriorly (PC) the blood supply comes from the posterior cerebral, a branch of the vertebral artery. Anteriorly, and along the top of the brain (including the foot centre) in the region marked AC, the blood supply comes from the anterior cerebral artery. In the middle region marked MC, which includes the large motor area, and also the hearing and taste centres, the blood supply is from the middle cerebral artery. The two last are both branches of the carotid artery. But all these arteries intermingle in the capillaries. The anterior association centre, which is the highest psychic centre, is supplied by the anterior cerebral artery. The posterior association or visuo-psychic centre is supplied by the posterior cerebral artery. The middle cerebral artery divides up into many arteries supplying several different centres. Thus speech and hearing may be shut off by one large branch being narrowed; the optic mechanism by another, the hands by another, and the legs by another.

PLATES I.—IX.

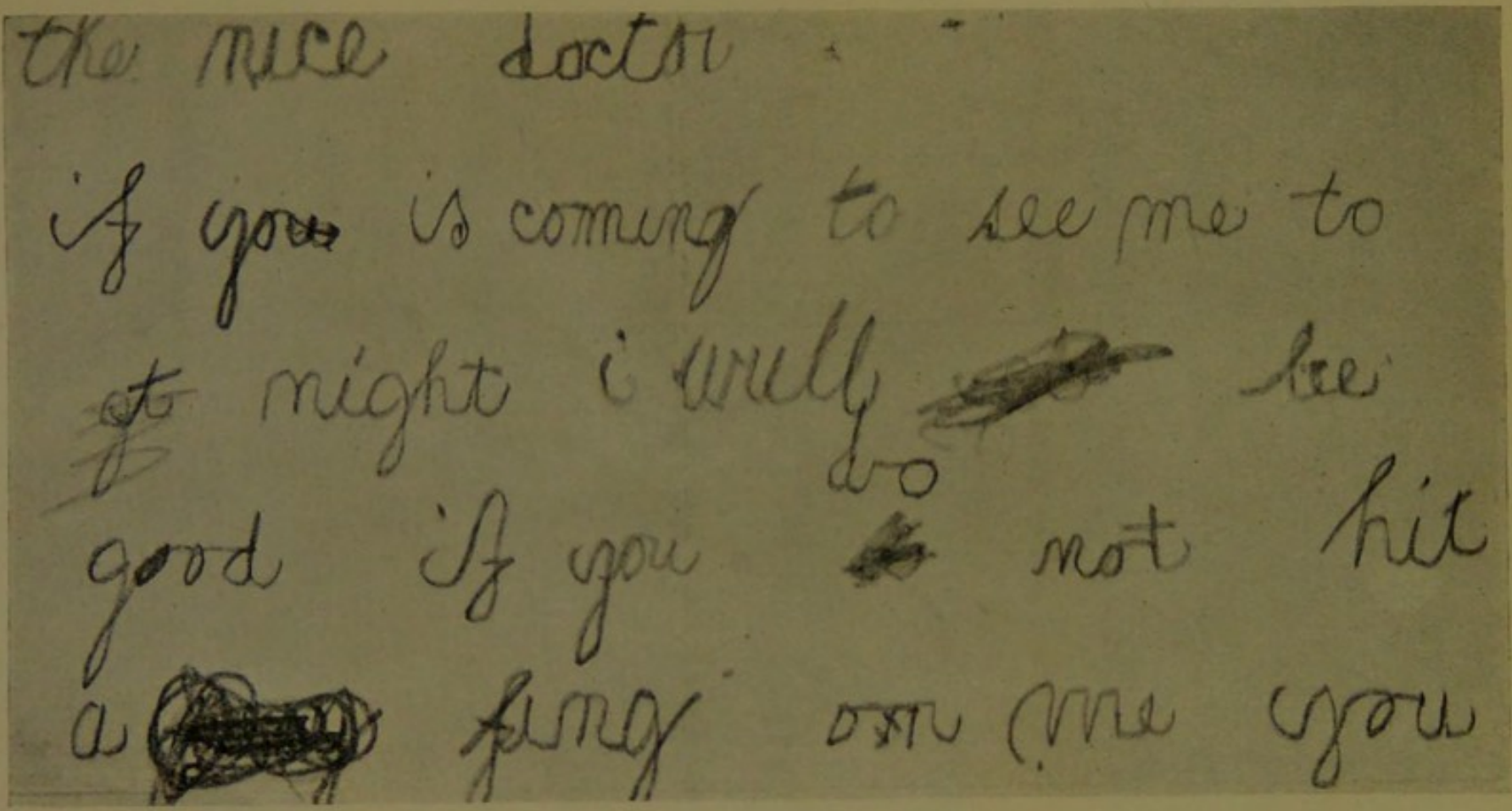
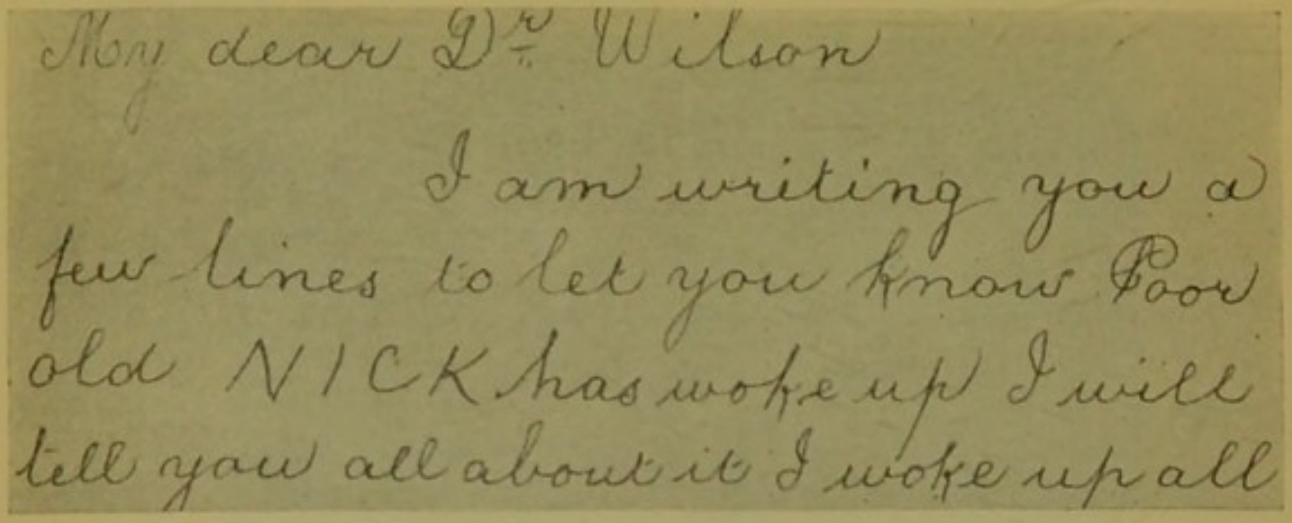

the nice doctor
if you is coming to see me to
to might i will do see
good if you not hit
a fing on me you

Plate I.

PLATE II.

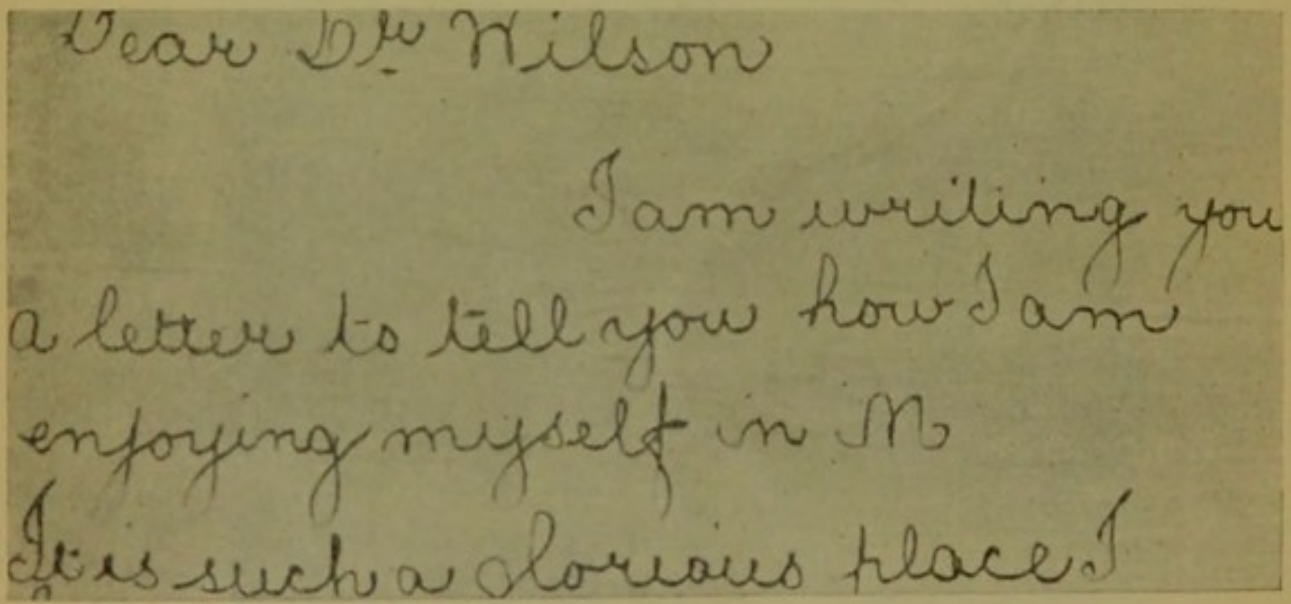
(1)



My dear Dr. Wilson

I am writing you a few lines to let you know Poor old NICK has woke up I will tell you all about it I woke up all

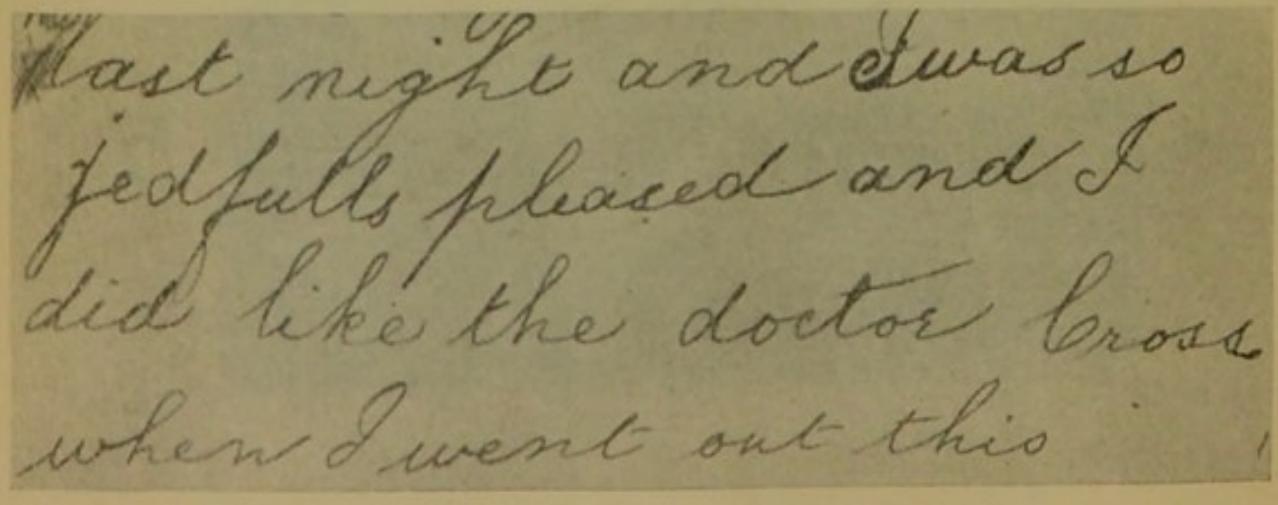
(2)



Dear Dr. Wilson

I am writing you a letter to tell you how I am enjoying myself in N. It is such a glorious place I

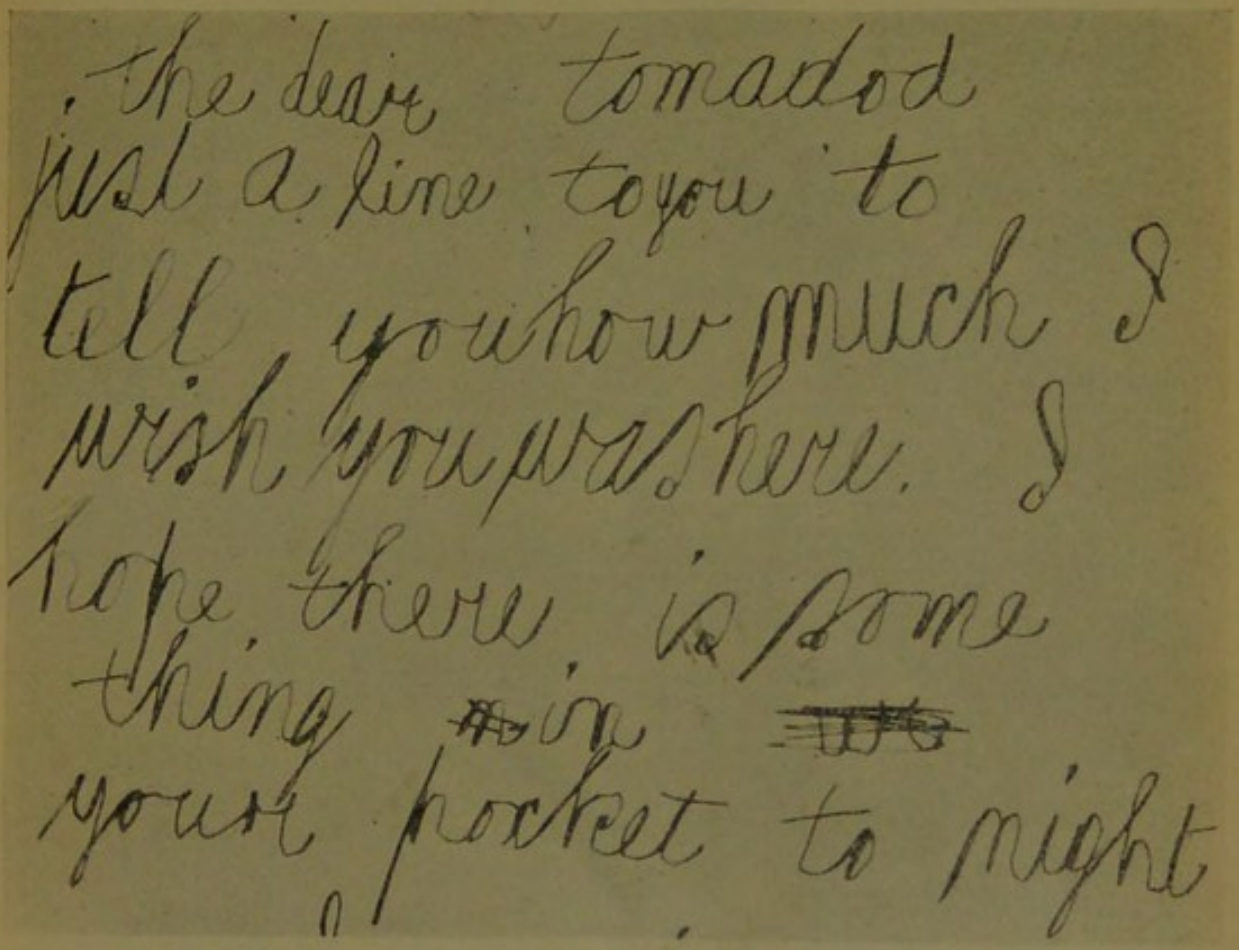
(3)



last night and I was so fed full pleased and I did like the doctor cross when I went out this

PLATE III.

(1)


Dear tomadod
just a line to you to
tell you how much I
wish you was here. I
hope there is some
thing ~~in~~ ~~the~~
your pocket to night

(2)

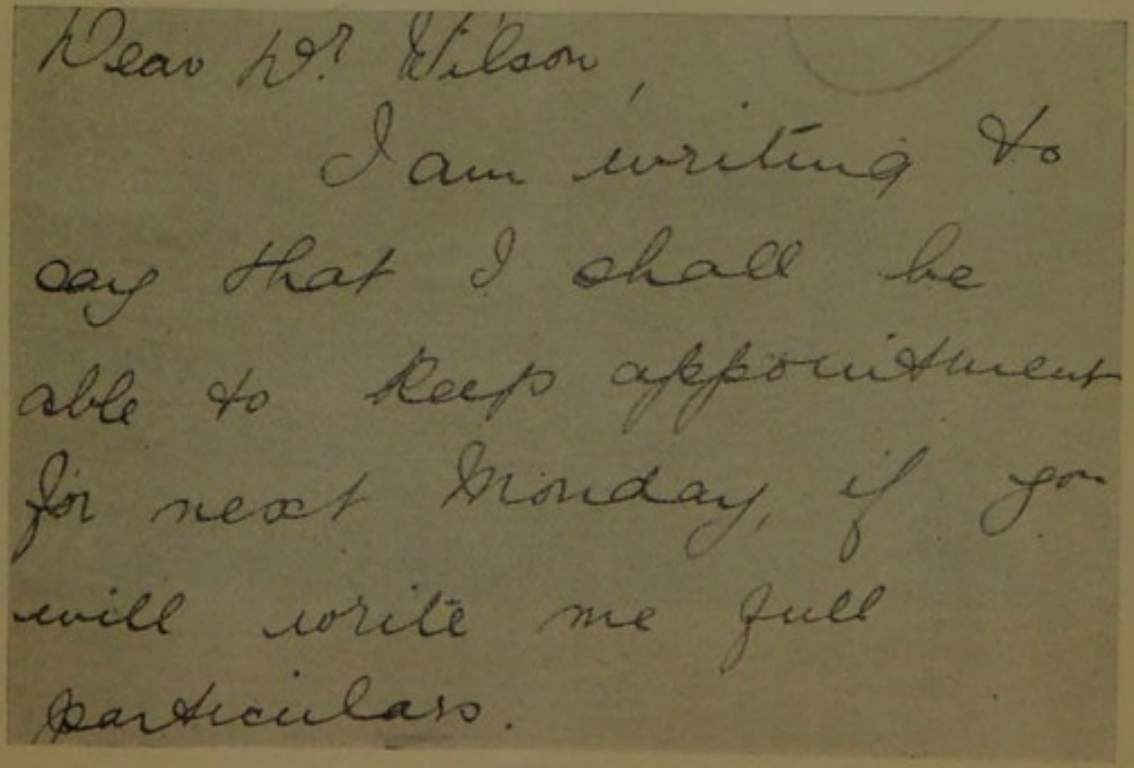

Dear Mr Wilson,
I am writing to
say that I shall be
able to keep appointment
for next Monday, if so
will write me full
particulars.

PLATE IV.

PLATE V.

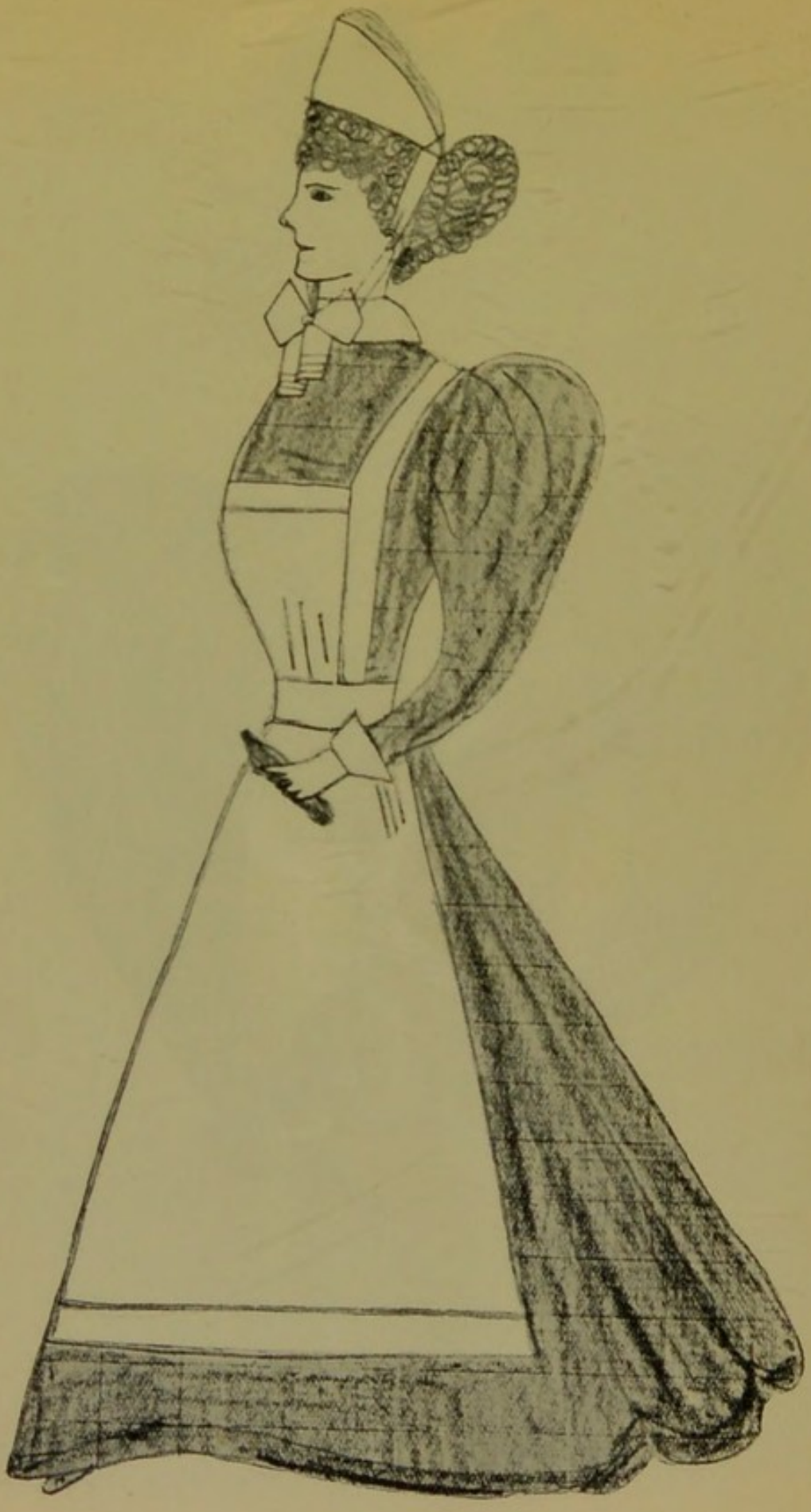


PLATE VI.

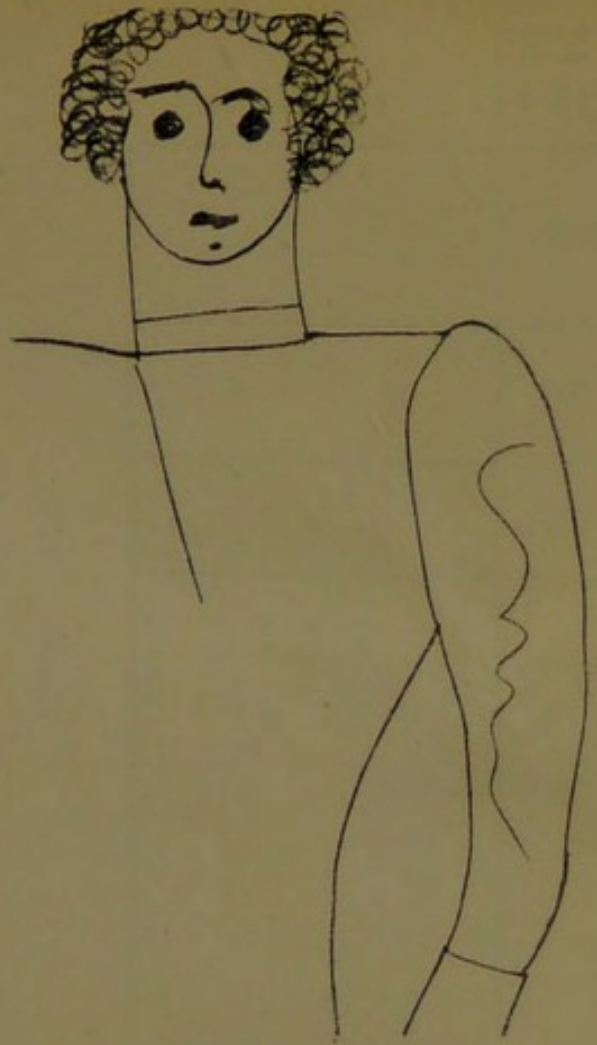


Fig. 1.

Fig. 2.

Plate VII.

PLATE VIII.

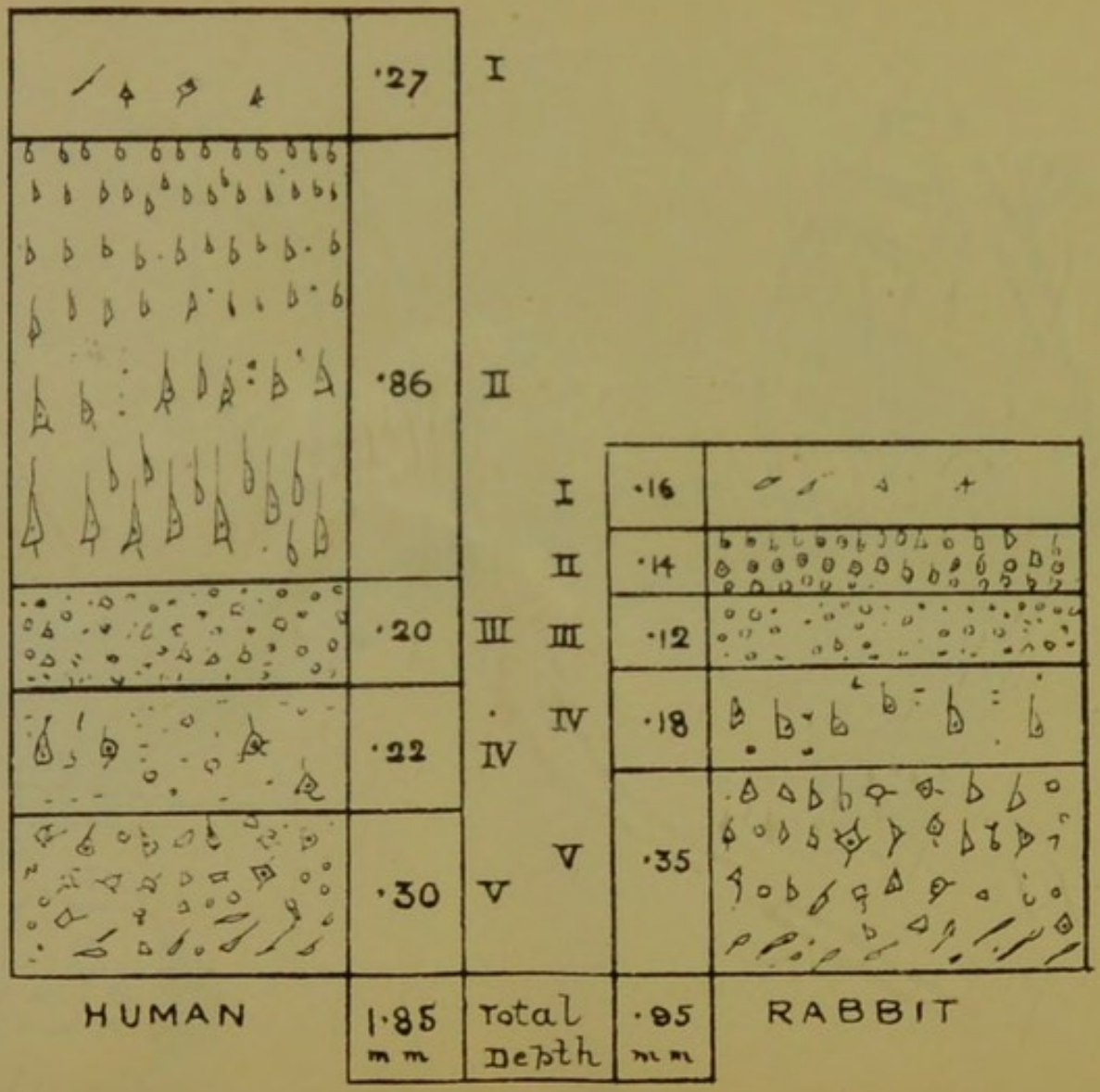

·27
I
·86
II
·20
III
·22
IV
·30
V
HUMAN
1·85 mm
Total Depth
·95 mm
RABBIT
·16
I
·14
II
·12
III
·18
IV
·35
V

Plate IX.

Fig. 1.

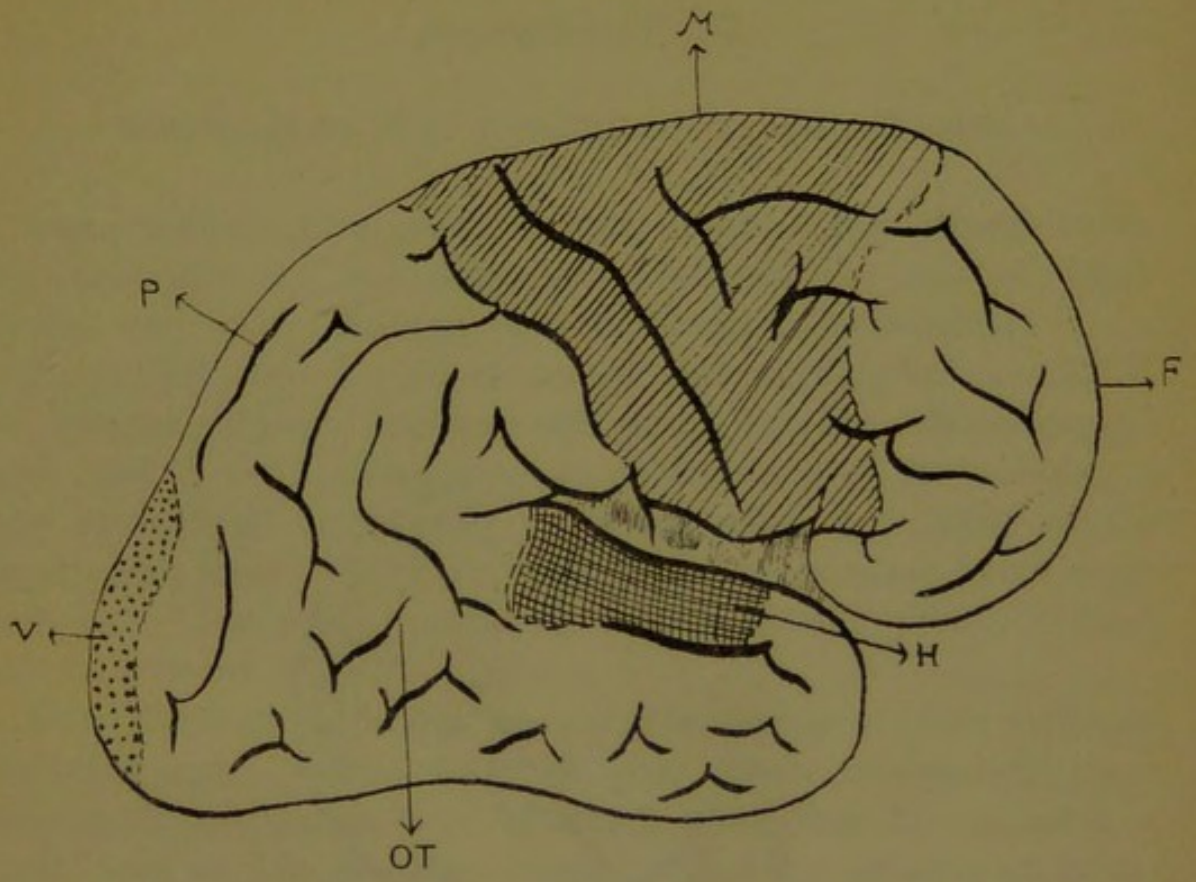
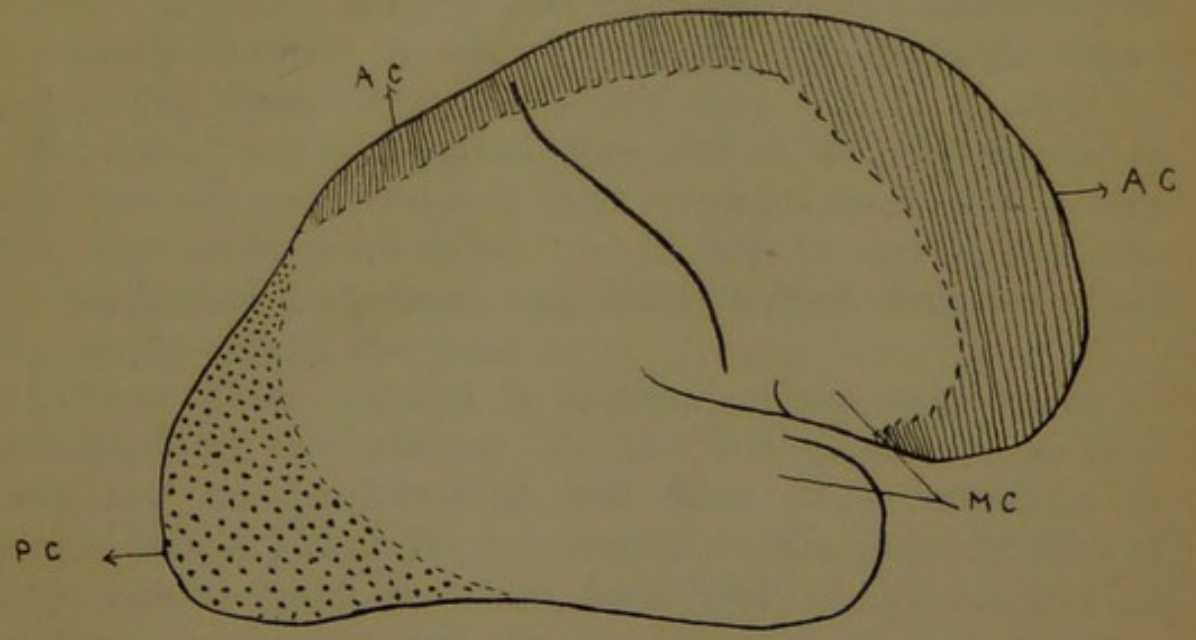


Fig. 2.



APPENDIX II.

Letter from Mr. Piddington to Dr. Wilson.

Since reading your paper, I have noted a few resemblances, and also one or two differences, between the case of Mary Barnes and other cases of dual or multiple personality.

Some years ago I read at one of the meetings of the S.P.R. Dr. Morton Prince's preliminary report on the "Beauchamp" case; and I well remember how, at the close of the meeting, a lady member of our Society asked me what I thought of the paper; and how, after, I suppose, I had made some *banal* reply such as: "It's very interesting," she retorted: "Well, *I* don't believe a word of it!"

Now, although I do not imagine that many of your audience the other night, or that many of your future readers will share this lady's scepticism, and although your case is not such a "tall" one as Dr. Morton Prince's, still some amount of incredulity is not unnatural when people learn of these things for the first time and are unacquainted with the literature of the subject. Nor do I imagine that scepticism in the matter would be entirely confined to the lay reader, but might be found even in the ranks of your own profession.

If, then, some undesigned coincidences can be shown to exist between your case and other recorded cases of a similar type, they might serve as an "aid to faith"; and in any case the comparison may have some little interest even for those who readily accept the facts.

I think I am justified in speaking of the coincidences as undesigned for two reasons. In the first place because, as I think any fair-minded critic will allow, it is ridiculous to suppose that a girl of the age, station in life, and education of Mary Barnes could or would have read up the subject of multiple personality, and on the strength of her acquired knowledge have maintained a plausible and wearisome imitation of this form of mental instability during several years.

In the second place, because the appearance of the coincidental symptoms cannot be ascribed to your suggestion; and this for the very good reason that, although you were, of course, aware of the alleged existence of cases of dual personality, you were not, as I know from your own assurance, acquainted with the details—nor, for that matter, even with the broad outlines—of the classical cases of alternating personality. And it is to coincidences in little details and not to the salient points of resemblance, such for instance as the epileptiform attacks, or the mutually exclusive memories of the various personalities, that I refer.

The coincidences are not many; but then I do not pretend to have made an exhaustive list, for my collation has been little better than cursorily made; and, moreover, the recorded cases of dual and multiple personality are not numerous, and but two have been described with anything approaching even tolerable adequacy. Not that I imagine that such cases are really so very rare; but that their apparent rarity is due to the rarity of intelligent observers. This infrequency of recorded cases, however, helps my argument; for it leaves only a narrow field for chance coincidence to disport itself in, and if the resemblances cannot be assigned to chance or design, then it is reasonable to attribute them to some common spontaneous cause which is at work in all the cases; or, in other words, they tell against the view that the phenomena are spurious.

This is a very long overture to a very small body of facts, but I want to explain the object which I have in view in comparing the case of Mary Barnes with others.

The case may be compared:

(1) With that of Mary Reynolds:

In her secondary state Mary Reynolds did not recognise her parents, brothers, sisters, or friends; and "she was very slow to learn, and indeed never did learn, or, at least, never would acknowledge the ties of consanguinity, or scarcely those of friendship." These words might not apply with absolute exactness to Mary Barnes; yet I take it that her nicknaming of her father, mother, family, and of yourself and other doctors who visited her implies a loss of memory, not perhaps so complete, but similar in tendency.

Mary Reynolds and Mary Barnes both had to be re-taught

reading and writing; and both acquired, or rather re-acquired these arts within a far shorter period than is needed in the case of children learning them for the first time.

Mary Reynolds' was a case of dual personality only, and not of multiple personality, and she did not therefore display the multifarious changes that your patient did. Still, both finished up by remaining permanently not in their normal, but in an abnormal state; for after alternating between her two states for a period of 15 or 16 years, Mary Reynolds at the age of 36 settled down for good, namely, for the last 25 years of her life, into her secondary condition. This secondary condition was undoubtedly superior to her original normal personality. This cannot, it is true, be said of Mary Barnes' present and apparently permanent state, for I understand that B6 is not superior to the original normal personality as it existed before her illness; but at any rate B6 is vastly superior to several of the other personalities.

(2) With that of Miss Beauchamp:

You narrate one instance in your paper where one of the abnormal personalities recalled an incident which had happened when Mary Barnes was only two years and a half old; and in conversation you told me that you thought that there was some reason for supposing that her memory in one of her stages went back even earlier than this. I know that you do not attach much weight to this point, because you recognise the enormous difficulties of excluding the possibility of such memories of babyhood being really due to imagination, or to the girl having heard her elders recount incidents belonging to the time when she was a tiny child. Nevertheless, though of course the same objections apply, it strikes me as rather remarkable that Dr. Morton Prince believed that the personality whom he christened Sally remembered events of her babyhood, such, for instance, as learning to walk; and at any rate she *professed* to remember all this long way back. That you and Dr. Morton Prince, both in entire ignorance of each other's case, should have been led to the same surmise about two different subjects, lends some mutual confirmation to the observations of both. There is, however, one point of difference between these two cases. The otherwise omniscient, or nearly omniscient, Sally did not know French or other foreign

languages with which the normal Miss Beauchamp was familiar; whereas while the normal Mary Barnes knew no French, and would not learn it, and could not draw, B6 and B9 knew some French, and B10 could draw.

(3) With that of Lurancy Vennum:

The phenomena were entirely of a spiritualistic type, the various personalities, in this case styled "controls," purporting to be the spirits of deceased persons. With the exception of one "control," and that the most persistent, there does not appear to be any evidence to show that these controls were anything more than secondary personalities. Yet in spite of the wide divergences between the symptoms recorded of Lurancy Vennum and those of your patient, I note one little point in common. When supposed to be controlled by the spirit of a woman named Katrina Hogan, Lurancy Vennum called her father "Old Black Dick," and her mother "Old Granny": much as Mary Barnes nicknamed her parents and other members of her family.

(4) With that of Miss Anna Winsor ("Old Stump"):

"Old Stump" (which was the name given by Miss Winsor to what was really her right arm, though she refused to recognise it as such) executed a series of drawings; whereas Anna Winsor in her normal state never learnt to draw, nor cared to try to draw. A parallel is to be found in the performances of B10.

"Old Stump" wrote poetry, and it is stated that the handwriting of the different pieces of poetry "differs greatly": another point of contact, and that in a most interesting particular, with one of the phenomena which you were fortunate enough to witness in the case of Mary Barnes.

Again, it is recorded of Miss Winsor: "She became blind, 4th of January;" [1861: nearly six months, that is, after the first manifestation of her peculiar symptoms] "is still blind," ["still" meaning two months later] "sees as well with eyes closed as open; keeps them closed much of the time. Reads and draws with them closed. Draws in the dark as well as in the light; is clairvoyant."

Leaving aside the clairvoyance, which Dr. Isa Barrows, Miss Winsor's medical attendant, so airily disposes of in a couple of words, there are two points of resemblance to your case: namely, the psychical blindness, and the drawing in the

dark or with the eyes closed. I do not know whether Mary Barnes actually executed any of her drawings in the dark; but she was able to copy written words and to copy fashion-plates under conditions which seem to have excluded dependence upon her sense of sight.

I remark, however, one point of difference in connection with the blindness, or rather with the recovery of the sight. Thus when Anna Winsor recovered her sight after eighteen months of "erratic vision," she found the light painful to her eyes, and in consequence the room in which she lived had to be darkened. When Mary Barnes recovered her sight, she seems to have experienced no painful sensations.

One point which you have recorded of "Nick" interested me greatly, because a parallel to it can be found in a most unexpected quarter.

Professor William James quotes in *The Varieties of Religious Experience* the personal narratives of a certain number of people who have undergone "religious conversion"; and one of the leading characteristics of the converted state, of the "new man," as exemplified in these narratives, is not only a magnified appreciation of nature, but a perfect tranquillity in the presence of nature in her savage moods.

One convert writes:—"When a boy, I was standing under a tree which was struck by lightning, and received a shock, from the effects of which I never knew exemption until I had dissolved partnership with worry. Since then lightning and thunder have been encountered under conditions which would formerly have caused great depression and discomfort, without [my] experiencing a trace of either."

And another says:—"And scarce anything, among all the works of nature, was so sweet to me as thunder and lightning; formerly nothing had been so terrible to me. Before, I used to be uncommonly terrified with thunder, and to be struck with terror when I saw a thunderstorm arising; but now, on the contrary, it rejoices me."

This latter is the declaration of Jonathan Edwards: and, the phraseology apart, might have been made by "Nick"; except that, for all we know, "Nick" was unaware of Mary Barnes' fear of thunderstorms and Mary Barnes of "Nick's" enjoyment of them.

We may perhaps compare with this relief from physical fear what is described of Mary Reynolds in her secondary state:—"She knew no fear, and as bears and panthers were numerous in the woods . . . . her friends told her of the danger to which she exposed herself; but it produced no other effect than to draw forth a contemptuous laugh, as she said, 'I know you only want to frighten me and keep me at home, but you miss it, for I often see your bears, and I am perfectly convinced that they are nothing more than black hogs.'" One day she encountered a "black hog" when riding; the horse was frightened and refused to move; so Mary Reynolds dismounted, and stick in hand went close up to the bear, which "walked away, slowly and sullenly."

There may be, and indeed is, an important difference here between the fearless behaviour of Mary Reynolds in the presence of a bear and that of "Nick" during a thunderstorm; for "Nick" did not mistake the thunderstorm for anything less terrifying, while Mary Reynolds seems to have owed her absence of fear to an opportune and protective illusion. And as regards the feeling of security typical of the religious convert and the fearlessness of "Nick" and Mary Reynolds, the latter should perhaps be attributed to what Myers, commenting on the case of Mary Reynolds, calls "the childish insouciance of the secondary state," that is to a *lower* stage of *intellectual* development; while the former one is rather inclined to ascribe not to an intellectual inability to recognise the risk of danger, but to a *higher*, or at any rate altered, condition of the *moral* character, in which the individual finds himself in perfect tune with all the manifestations of nature, and welcomes and enjoys them as the workings of a loving God.

Still the interesting fact remains that, in these various cases of altered personality of widely divergent origin, this sense of fearlessness crops up often enough to warrant one in regarding it almost as a typical symptom.

While on this topic I might add that the first oncoming of Miss Beauchamp's changes of personality dated from a thunderstorm. An incident of a painful character was in progress, and this alone may have been sufficient to have upset her equilibrium; but the thunderstorm may also have played a

part. "The surroundings, too," writes Dr. Morton Prince, "were dramatic. It was night, and pitch dark, but a storm was coming up, and great peals of thunder and flashes of lightning heightened the emotional effect. . . . From that time she was changed."

I cannot find that Miss Beauchamp either before or after this time is said to have shown fear of thunderstorms, though, as she seems to have been of a timid disposition, it would not be surprising if she had. Nor can I find it noted that in any of her abnormal states she showed delight in them; though it would be quite consistent with the character of that saucy young secondary personality Sally Beauchamp to snap her fingers in the face of even Nature with a capital N. But I am getting too fanciful, and will trouble you with only one more observation.

I cannot help regretting that you have not in your paper laid greater stress on one incident that you dismiss in a sentence or two. You record how on one occasion, when your patient was in a particular phase in which she did not count beyond two, you asked her "very quickly" (the "very quickly" is the pith of the statement) how many fingers there were on her hand, and although she was supposed at this time not to count above two, she replied "five." It is true that she at once corrected herself and started counting again on her "one, two" system; but the correction came too late, and I would say that the romancing secondary personality had given itself away. In other words, you surprised her momentarily into her normal state. I wish that you had made other attempts to catch her; not, of course, by direct questions, but by employing artifice. I do not mean that I think that Mary Barnes was shamming; I think nothing so foolish. But it does look as if the normal personality is not really obliterated or entirely unconscious during such times as the abnormal personalities are active, but as if it is really there all the time, only sent to Coventry by the usurping secondary personality. If this really was the case, then the mental phenomena exhibited by your patient would accord with what I cannot help believing is really true of all hypnotised subjects: namely, that whatever the subjects themselves may assert, or whatever conclusions their observers may draw from their behaviour, the normal person-

ality, although in abeyance and although difficult to get at, is never really extinct. I should be inclined to say that by your sudden question you provoked an automatism of the normal consciousness.

J. G. PIDDINGTON.

COMMENTS BY DR. C. LLOYD TUCKEY.

I saw "Mary Barnes" some years ago with Dr. Wilson. She then called herself "Poor Thing," and had the manners and speech of a child of six or seven, though she was twice that age. I tried to hypnotise her, but failed, and other operators had also found her insusceptible. This was unfortunate, for hypnotism would probably have supplied a bridge of memory, and enabled us to establish a connection between the various personalities, as in the case of Ansel Bourne recorded by Prof. William James and Dr. R. Hodgson,[1] and in a recent case of my own. The latter was that of a bank clerk, and was investigated by Dr. Leaf, Miss Goodrich Freer, and myself. The subject disappeared from the bank on a Friday about mid-day and "woke up" late on Saturday night in a strange hotel at Southampton. He could not give any account of how he had passed the 36 intervening hours until he was thrown into a deep hypnotic trance. He then answered questions, and gave a complete history of his proceedings. Subsequent investigation proved the truth of his story, and that his actions in the "second state" were quite purposeful. The man was neurotic and given to occasional alcoholic excess, and in two or three of the other cases I have seen there was a history of epilepsy or aggravated hysteria. The most recent case I have come across was that of an Oxford undergraduate, who after a period of overwork disappeared from his home without warning and telegraphed ten days after from Malta for money to bring him back. It appeared that he "woke up" on board a steamer at Tunis in the act of knocking a man down who had tried to steal his portmanteau. The excitement seems to

[1] In *Proceedings*, S.P.R., Vol. VII., p. 221.

have brought him round, perhaps by shifting the connection of the neurones. He knew nothing of what had happened during the ten days, but his actions had evidently been rational or he would have been arrested. We hoped to obtain a key by hypnosis, but unfortunately the young man, on the advice of an eminent brain specialist, refused to be operated on, so we may have lost an interesting story.

There is a good deal of literature on the subject since the publication of Professor Azam's exhaustive monograph[1] in 1887. The S.P.R. did much to elucidate this fascinating and puzzling problem at a time when its importance was not generally recognised. Members will recall papers by the late Dr. A. T. Myers, and a recent one by Dr. Morton Prince.[2] Now the subject is often referred to in the daily papers, and cases of lapsed memory and dual consciousness are discussed by the man in the street.

The physiological explanation put forward by Dr. Wilson is a most valuable contribution towards the scientific understanding of the subject. The case is one of the most striking hitherto recorded, and it is most fortunate that it has been under the notice of such a painstaking and accomplished investigator.

Comments by Dr. Robert Jones.

Dr. Wilson seems to me to have made an able and careful summary of many observations in an almost unique case. It had been suggested that "Mary Barnes'" different states might be due to hypnotic conditions, but it is obvious that they are rather to be looked upon as cataleptic or in some way related to that post-epileptic trance condition described as post-epileptic automatism, and one which is familiar to those who have the care of the insane. The stages may also remind us of the imitative aptitudes of children, which cause them to acquire ideas and ways of acting current in the community to which they belong, and in this case there was no stage

[1] *Hypnotisme, Double Conscience et Altérations de la Personnalité*, Paris, 1887.

[2] *Proceedings*, S.P.R., Vol. XV., p. 466.

which was foreign to the natural experience of the ages through which Mary Barnes had passed. As to the reality or unreality of these personalities, when the attention is engrossed upon one line of thought, there is generally a forgetfulness of other states, arising from the fulness of concentration. As is known, in health the life-history of every individual consciousness embraces many diverse and often incongruous states and tendencies, and all self-consciousness implies a possibility of a division of the total self, so that there is, so to speak, one self and many selves. At any moment of time the attention may be fixed upon one or other of these "selves," and only in so far as they differ from each other and the *present* self do they seem separate states or stages, and we regard them accordingly as distinct selves; for instance, the self of dreams is regarded as quite distinct from the waking self, and the man sober can reflect upon the man drunk and draw many lessons and resolutions from the revived disgrace and the remembered reproach. After having been overcome by some sudden and exceptional condition in which he is impelled to act injuriously to the interests of another, he may refuse to recognise the lower self and explain it away under the excuse that he was not master of his actions. Also in states of mental conflict when moral principle struggles against temptation, two personalities may be assumed, the one the higher self, the other what appears to be a foreign and intrusive personality.

Cases of double personality are not to be confused with the ordinary delusions of insanity; for in the latter case there are not two separate threads of memory, but the memory is continuous in the intervals of the delusion. Thus I have at the present time in the London Asylum, Claybury, one patient who believes that he is taken out every night against his will, and also against his will is compelled to work in an adjoining brickfield. His tired sensations in the morning—possibly the effect of rheumatism—confirm his delusions, and no reasoning as to the absence of clay or the want of confirmation of his story by others who slept in the next bed are of any avail. Other characters are assumed by other persons: the prophet Daniel, Napoleon Bonaparte, the King, and Miss Hickman—all these figure as altered personalities. The present is with these persons so persistent and over-powering and engrossing

that the past is ignored; but this is mere temporary forgetfulness of the past, and does not involve the formation of a completely separate chain of memories referring to the delusional state alone, and carried on from one to the next appearance of the state.

The organic sensations, *i.e.* the emotional tone, probably has much to do with these cases of delusion.

Dr. Wilson's physiological explanation of the alternating personalities seems to be a theory well worth considering.