

respect, though more than one seems to have in it a note of appeal to higher powers. Still more significant of the religious attitude is the ordinance that certain of the objects used in the rites must have come from the abode of ghosts or spirits. The methods of treatment, on the other hand, seem to be purely magical, and taking the rites as a whole they must certainly be regarded as magical rather than religious.

CONCRETE NATURE OF BELIEFS UNDERLYING THE RITES.

The rites of the Kai provide characteristic examples of the two kinds of sympathetic magic known respectively as imitative or homeopathic and contagious magic. The principle which has hitherto been held to underlie these forms of magic is of a more or less mysterious kind.

Thus, Sir James Frazer¹¹ refers the belief in the connexion between a person and a separated part of his body to a relation "which we may conceive as a kind of invisible ether, not unlike that postulated by modern science for a precisely similar purpose—namely, to explain how things can physically affect one another through a space which appears to be empty."

Sir James Frazer does not, of course, intend this explanation of contagious magic to be anything more than a figurative expression, in the language of modern science, of the modes of thought which determine the actions of savage man. Into whatever equivalents, however, we translate his language, the ideas thus held to form the basis of contagious magic will have an abstract, if not mystical, character which I believe to be opposed to the concrete nature of the mental processes of peoples of rude culture. Often the savage performs rites of the most complex kind merely because this course of action has been prescribed for him by the immemorial traditions of his community, but where direct motives for his actions can be discovered they have a concrete character very different from that suggested by the metaphor of Sir James Frazer.

The special interest of the blend of medicine and magic practised by the Kai lies in the concrete and definite character of the beliefs which underlie these elaborate rites. The savage has few concepts more definite than that of the soul and of its continued existence after death. We have only to qualify this concept by the addition of the belief that the soul is divisible to give us the principle which underlies the magic of the Kai, a principle as definite as any of those which underlie the religious conduct of civilised man. The contagious magic of the Kai rests, not on any mystical belief in action at a distance, but on the belief that the sorcerer has in his possession part of the soul of another person, part of the vital essence of the person he wishes to destroy. The conduct of the sorcerer might be held to imply a belief that action upon the part is equivalent to action upon the whole, but it is probable that there is rather confusion between part and whole, or more correctly in the case of the Kai between soul and soul-substance. That this is so is suggested by the confusion between soul and soul-substance which occurs in several parts of the account given by Keysser.

We only know of the concept of a divisible soul-substance in New Guinea and the Malay Archipelago, and we must await further evidence to show how widely diffused it is throughout the world. All that we can say now is that this concept affords an explanation of much in the ways of savage man which is at present mysterious and unintelligible.

There is probably as little justification for ascribing the other main variety of sympathetic

magic to any vague mysterious principle. The rites of the Kai are full of acts which show a belief in the efficacy of imitation, many of their features depending on the idea that the imitation of an event will bring that event to pass. This principle, often summed up in the phrase, "like produces like," is one in which there is nothing vague or indefinite. It may only seem so to the more scientific of our number because we have ceased to believe in it as a law of natural causation, though, as we all know, a variant of it forms the basis of a system of medicine which still flourishes among us. Such positive knowledge as we possess concerning the psychological processes underlying the blend of medicine and magic leads us into no mystical dawn of the human mind, but introduces us to concepts and beliefs of the same order as those which direct our own social activities.

CONTRIBUTIONS TO THE STUDY OF SHELL SHOCK.

BEING AN ACCOUNT OF CERTAIN CASES TREATED BY HYPNOSIS.

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II.¹

IN this communication I propose to describe a selected few of various cases of "shell shock" which I have had the opportunity of treating in the field by means of hypnosis.

Total Amnesia.

CASE 4 (Case-number 390).—Private —, admitted into a field ambulance and seen by me there three days later, having been found wandering in a neighbouring village, clad only in his shirt and socks. He was unable to give his name, regiment, or number. He thought his age was between 20 and 30. I tried him with various christian names, but he replied that none of them seemed familiar to him. He could remember two men finding him as he was strolling on the outskirts of a village, and could describe everything that had occurred to him since then. There was no means of identifying him, and his past was a complete blank; he could recall nothing, for instance, of the events of his childhood.

He appeared considerably depressed at his condition; he said that he wished he could recover his memory and that it would be a worry to his "people," if he had any belonging to him. He did not complain of any aches or pains, only of numbness over the occiput. His legs were tremulous as he lay on his stretcher, his hands were tremulous when held out, and his tongue was faintly tremulous on protrusion. His left arm and leg and the left side of his face (not scalp), chest, and abdomen were hypalgesic; his voluntary movements were normal. His reflexes, superficial and deep, were normal, save that the knee-jerks were exaggerated, and a pseudo-clonus was obtainable at the left knee and at the right ankle. His pupils reacted very actively to light; no limitation of visual fields, eye movements normal.

He had slept fairly well since his admission to the field ambulance, but complained of a nightmare on the night before my visit, when he dreamed that he was in the trenches throwing bombs, and that the Germans threw one at him which hit him in the nape of the neck, waking him up "in a cold sweat."

Under hypnosis, into which he easily passed, he first repeated to me his dream. Then his thoughts turned to his mother living in a small house in the country, "near a big town," "where they make anchors and chains." He recalled working with his father as a labourer on hayricks. All this information had to be dragged from him piecemeal with considerable difficulty. He next recalled the names of the

¹ The first of these communications appeared in THE LANCET of Feb. 13th, 1915.

¹¹ Op. cit., vol. 1., p. 54.

village and of the manufacturing town near by. Then he gave me his own name, regiment, and number, but always with uncertainty, qualified, for example, by the words "I think." Finally, he was persuaded to describe what happened after the bomb-throwing (for his dream turned out to be an actual event), "I must have gone off my head and run away. . . . I must have taken off my clothes in a field. . . . I spent the first night under a hedge. . . . I spent the next two nights in a wood. I ate nothing. . . . The next night I was walking along a road on the outskirts of a village, and I was taken to a house by two men." These data, like the preceding, were only extracted with great difficulty and after much persuasion.

When he awoke from hypnosis the suggestion which I gave him before waking that he would remember all that he had told me proved only imperfectly effective. He could not remember his name, regiment, number, nor the names of his native village and the neighbouring town. But in reply to further questions he had a vague recollection of having been dreaming of his mother and of his wanderings, and he could be induced to recall them as well as his former occupation, the town where they make anchors and chains, &c.

When he was rehypnotised without delay, his memory became much clearer and ampler than before, and he was far more certain of his past history. He recalled, for example, the standard (7th) at which he left school (at 14) and a punishment he had received since enlistment for "cheeking" a sergeant. Then he told me that he had been in France for eight months and had enlisted nine months previously. A much more powerful suggestion was brusquely given, followed by a complete recovery of memory on waking from this second period of hypnosis. His entire expression changed, his pupils became larger, and his despondency disappeared. At the same time the previous occipital numbness and left-sided hypalgesia vanished.

Transferred to a base hospital, and thence for three weeks to a hospital in England, he has made an uninterrupted recovery and has now rejoined his unit.

Rhythmic Spasmodic Movements.

CASE 5 (Case-number 362).—Private —, aged 23, seen by me at a casualty clearing station the day after admission. Three days ago, he said, the Germans sent over "whizz-bangs and coal-boxes" in reply to our shelling, and he had been told that he "got pitched up in the air." But the last thing he remembered of the occasion was being on guard, the next was digging himself out of the fallen sand-bags. He remembered running then to the shell trench, but he "found this too hot" and returned to the firing trench, going to his dug-out, when he noticed that his eyesight was defective. He lay in the dug-out, flinching each time a shell came, and "trying to get into the smallest possible corner." At night he came out to endeavour to "do guard," but someone noticed that he was making involuntary spasmodic movements which had begun a short while previously. He was ordered to return to the dug-out, was helped to the regimental aid-post by a man on each side of him, and was sent to hospital. He had enlisted for the war and had been in France eight months. He had also "got shook up a bit" four months ago, when five or six bombs threw dirt in his face. His hands and his handwriting then became shaky, but he did not "report sick."

His appearance was that of a strong, robust, and honest man. He seemed depressed and begged me to make him well. His most noticeable movements were in his legs, but occasionally he shrugged his shoulders. On admission, I am told, the latter movements were much more marked, and he kept diving beneath the bedclothes, bringing up his knees to meet his chin. To-day the leg movements were due solely to strong, periodic, simultaneous contractions of the two sartorius muscles, the rate of contraction of which varied from 60 to 70 per minute, increasing to 90 during the excitement of examination. These involuntary movements were observed by the sister to continue during apparent sleep. Pulling down the patella was found to inhibit one or two contractions of the corresponding sartorius. His knees remained extended when the thighs were passively raised from the bed. He complained of severe headache, "as if I had had a hammer dropped on my head." His legs were very tremulous, especially when he lifted them; his hands and tongue were only faintly tremulous. His right leg and arm and the right side of the face and chest (not the abdomen) presented certain disturbances of sensibility which can

be better described in a later communication devoted to this subject. His voluntary movements were normal. Only the patellar and plantar reflexes were examined. Of these the former were much exaggerated, while the latter could not be elicited, probably owing to the rigidity of the feet. His pupils were of moderate size and reacted normally to light; visual fields and eye movements appeared normal.

Under hypnosis he was able to recall all the events during the period of his previous amnesia. He remembered the direction from which the shell came, how he was lifted up, how he fell on his back, &c. As he passed into a deeper state of hypnosis the contractions of the sartorius muscles became very much diminished, but did not absolutely disappear. Before rousing him from hypnosis, I suggested that now and on waking he would lose his headache and his involuntary movements, and that he would recover his spirits and his memory. The movements at once ceased and he awoke able to stand, absolutely free from his headache and spasmodic movements, with recovery of memory, and, as other observers spontaneously remarked, "looking another man." The previous unilateral disturbances of sensibility were found to have disappeared.

He was transferred to a base hospital.

Mutism.

CASE 6 (Case-number 19).—Private —, aged 32, seen by me the day after admission to a base hospital, completely mute, but able to read and write. He wrote: "I was buried alive on — and again on — (5 months and 4½ months respectively before admission), and then I had the misfortune to have two shells burst over me on — (four days before admission). There was shelling for about 20 minutes and then two burst over my head. I did not remember any more until you came to see me, but I am still living in hopes to regain my speech back." In reference to his first burial he also wrote that he afterwards wandered with Lance-Corporal — for two days, but that his memory for these two days was completely gone; his comrade and he finally came across men of the French artillery, who enabled them to rejoin their regiment. He could not recall how he got his food during those two days. He said that this time, although he found a piece of shell in his tunic, he was unhurt, but that on the first occasion he fell and hurt his back, and suffered for some time from pains in the back and head and from insomnia, which had recurred now.

His understanding seemed slow and his look was vacant. Occasionally he made jerky movements of the arms and a noise like a snore came from his naso-pharynx. His voluntary movements were restricted, weak, slowly executed, jerky, and incoördinated, but they were not tremulous. He could not raise his arms above his head, nor could he keep them raised in front of him. Even with his eyes open he failed to touch his nose with his index finger-tip and he stood very unsteadily. The sense of position appeared to be unimpaired (cutaneous sensibility not examined). The only vowel he could imitate was A (continental pronunciation), the only consonants S and P. His knee-jerks were exaggerated, the plantar reflexes were flexor, the abdominal reflexes could not be obtained. His pupils were widely dilated, but reacted well to light. His eyes moved normally. His visual fields were somewhat restricted on the temporal side. He could not hear a faintly ticking watch, even when in contact with either ear, but he heard better by air than by bone conduction. His bowels had not been opened since the shock—i.e., for five days. He passed urine voluntarily now, but during the journey to the base he was catheterised in the train. On my visit the third day after admission he seemed much brighter, and his movements had improved in extent, speed, and coördination. He began to imitate monosyllables, and he explained in writing that he "cannot think how to speak," feeling "just like an infant."

By the seventh day all signs of stupor and ataxia had disappeared. With great difficulty he managed slowly to repeat after me the names of the county borne by his regiment and of the village in which he lived. Next day he could give me these names in response to my questions and could give me the christian names of his wife and child. He sweated profusely during these efforts. He never spoke of his own accord.

Sixteen days after admission his speech was improving, but he showed me a report he had written out for me of his

condition, and in so doing burst into tears. Apparently to-day he had overheard a sister expressing the opinion that he was a malingerer.

Under hypnosis he spoke distinctly more fluently, although still with feeble voice power, but on being questioned about trench life he became extremely emotional and suddenly awoke, wiping the sweat from his chest.

On the following day, under hypnosis, his speech was at first slow and hesitating, as if he was disinclined to speak. Finally, after repeated suggestions and encouragement, he was induced to recall the forgotten events on the second occasion of being buried. He named the man who pulled him out of the trenches and described the hospital to which he went and his train journey to this base. He responded readily to post-hypnotic suggestions that on waking he would remember all that he had told me, would be able to speak louder and more fluently, and would perform certain somewhat eccentric actions.

Three days later (three weeks after admission) he appeared a normal man save for slight deafness and the complaint of "coming all over of a shake" when he heard a gun fired. He moved and spoke naturally and his spirits were excellent. He had no recollection of telling me his forgotten experiences under hypnosis, but he could now recall all that he had told me and more. His loss of memory had wholly disappeared save in reference to the two days' wandering which followed the first occasion of burial. Under hypnosis to-day he recalled that he spent those days wandering over open country with Lance-Corporal —, that they fed during the first day mainly on potatoes which were cooked for them in a farm by a woman and her husband, that they spent that night in the open, and that they found the French on the following day.

He was transferred to-day to a hospital in England.

Stupor.

CASE 7 (Case-number 63).—Private —, aged 29, admitted into a base hospital and seen by me on the following day. He was in a condition of pronounced stupor and had to be repeatedly roused from his apparently dazed condition in order to obtain his attention. He could not recall his name, regiment, or age. He could neither write nor read words; he could name a few letters in very large type, but was liable to confusion. Twice he said "water," "comrade," and then made a gesticulation of falling. He was not deaf. He agreed that a shell came. He complained by gesture that he had pains in the forehead. His gait was normal, but he could not hold his hands out for many seconds without dropping them. His patellar reflexes were brisk; his pupils reacted to light normally. (Cutaneous sensibility not examined.)

Four days later his condition was only slightly better. He had never spoken voluntarily, he was still unable to give his name, but he was more readily attentive, and replied "Yes" when asked if his name was —. With great effort and after much encouragement he wrote his name. Again he complained, by gesticulation, of severe headache.

On the following day he could give me voicelessly the names of his two children. He could still only read capital letters, but once more confused some of them. He could not read aloud the figure 2, but could express its meaning by holding up his two fingers. The next day he showed me his wife's photograph, and with great effort, syllable by syllable, of his own accord gave me her name.

A week after admission, his speech being still extremely limited and laboured and his memory of his recent experiences being still unobtainable, I subjected him to hypnosis, in which state, after much persuasion, I induced him to talk about the events that had preceded the onset of his disorder. He became very excited, breathed rapidly, and made gestures showing the positions of the various items in the scenes he began to describe, evidently visualising them vividly. Hoarsely and breathlessly he explained in broken sentences how he was in the trenches and was sent to draw water at a pump when two or three shells burst over him, knocking him down. This seeming a sufficient recovery on the first trial of hypnosis, he was awakened after certain post-hypnotic suggestions had been made to him; these he carried out. He could repeat all he had told me under hypnosis, speaking with considerable effort, but with far less emotion and with enormously improved fluency and speed. He could now give me his home address.

Two days later, no further recovery of memory having occurred, I hypnotised him a second time, whereupon he described to me how, after being shelled, he lay on the ground in a dazed condition for some minutes, and how he then rose, picked up the bottles, and returned to the trenches, after which he "lost all sense and reason." He said, "I remember my mates telling me I was silly. It was time for us to be relieved at the trenches, but I don't know how I went back with the boys; it was only a short distance to the village. After that I remember nothing until you tried to make me speak." By further persuasion I elicited from him full details of the still forgotten interval, how he got back to his billet, took off his equipment, then lay down, and was wrapped in a blanket by one of his comrades. "I remember going to the doctors, complaining of a bad headache. . . . I remember a jolting ride, and then I lay on a blanket in a big room full of men." By now he recalled the whole of his forgotten experiences, including the train journey down to the base.

On the following day, being asked whether he did not feel himself again, he complained that he still wrote with very great difficulty and inaccuracy, that his speech, like his writing, was not so rapid as normally. His writing was certainly very laboured. Consequently he had not liked to write home to his wife, but had been obtaining the services of a fellow-patient for the purpose. Under hypnosis his speech and writing were restored to their normal rate. He learned to say with astonishing rapidity the verses, "Peter Piper picked a peck," &c., and was induced to write a letter to his wife at very good speed. Post-hypnotic suggestions that on waking he would repeat these verses and write the same letter to his wife, and that he would hereafter write and speak with normal ease and rapidity, were absolutely successful.

He was discharged two days later to a hospital in England, and has since been passed for foreign service, occasional severe headache preventing him from active service in the field.

General Remarks.

Malingering.—After nine months of special work in France and Belgium upon these disorders I have not the slightest hesitation in maintaining the genuineness of the cases above described. The condition of hemi-hypalgesia in Case 4 and the peculiar disturbances of sensibility mentioned in describing Case 5 have occurred in numerous other cases which have come under my observation. The persistence of the spasmodic movements during sleep, their confinement to the sartorii, and the spastic condition of the legs in Case 5 also point to the absence of malingering. So, too, do the severe constipation and retention of urine in Case 6 and the mode of progress towards recovery in Case 7.

Condition before hypnosis.—Although these cases have been described under headings which are determined by the most prominent disorders characterising them, it will be seen that certain disturbances are common to all, e.g., amnesia, varying from complete obliterations of the past to obliviscence of the scenes occasioning and following the shock, severe headache, and a mental condition varying from slight depression to severe stupor. Disturbances of sensation and movement might be absent or, if present, were extremely variable. Mutism, when present, had begun to disappear by the time hypnosis was attempted. The stuporose condition was also disappearing by that time.

When in a state of severe stupor all that could be obtained from the patient were remarks as to the shelling, as if his condition were due to the concentration of the patient's attention on the scenes which had upset him. A little later an alternation of states often occurred. One subject, for example, whispered to me, "Did you see that one? . . . It went up on top." "What now?" I asked. "They keep going over," he replied. Unable to catch a remark, I asked, "What did you say?"

"I was talking to my mate" was the reply. To my question "What were you saying?" he answered "Get rifles." This patient could be made to realise he was in hospital, but explained his inconsistent behaviour by the remark, "Can't help it. I see 'em and hear 'em (the shells)."

In another case of apparent depression accompanied by deafness the latter symptom was found to be very largely due to inattention, his thoughts repeatedly flying to the trenches. For a few minutes his attention could be gained, then his answers became absurd; the question "How old are you?" for example receiving the reply, "It passed my right ear." He would often ask me to speak louder when on the point of lapsing into thoughts of trench life. In another case the alternation of states was so marked that on being unduly pressed for his thoughts when in a stuporose condition he assumed an attitude of hostility, rushing about the room with an imaginary rifle in his hands.

Indeed, in all these cases whenever the memories dissociated from the normal personality were revived they were accompanied by an outburst of emotion, sometimes of frenzy, but generally of fear. But in the cases described in this communication it was impossible without the help of hypnosis to obtain any revival of the lost memory. Not even in dreams did it return. When such patients endeavoured to think of their forgotten experiences their headache became so severe as to prevent them from further effort. When, if mute, they endeavoured to talk they complained generally of a pain in the throat, usually as if someone were gripping their thyroid cartilage.

Condition during hypnosis.—These pains appear to constitute the guardians of the condition of amnesia; any effort on the patient's part to break down the latter generally resulted in increased severity of the former. It is, therefore, not surprising that pains frequently caused the patient to wake from hypnosis as soon as his attention was directed to his forgotten memories or when attempts were made to get him to speak. Experience soon taught me that before I could induce free speech during hypnosis I must first dispel, by suggestion, all pain, soreness, or discomfort in the throat, and that before I could hope to revive lost memories during hypnosis I must first suggest the disappearance of headache and prevent the recurrence of any trace of it. Even then there was frequently a strong disinclination to talk of the forgotten periods, as if they were being actively inhibited or "suppressed" rather than as if they had been passively "dissociated." When at length this reluctance was overcome the attitude of the patient often changed from depression to excitement, especially when the former condition had been well marked. His pulse and respiration increased in frequency, he sweated profusely, and not infrequently showed clear evidence of living again through the scenes which were coming vividly to his mind.

Condition after hypnosis.—There usually followed a distinct change in the attitude of the patient. His previous despondency vanished: he was delighted at having recovered his speech and memory. Sometimes the change was so well marked as to appear like an alteration of personality. In the case of one patient, for example, who had recovered considerably from stupor and mutism before I saw him, but who was still in a miserably lacrymose and dejected condition, I was

able to cure his amnesia by means of hypnosis and to bring about the following changes, the account of which I extract from my note-book.

During hypnosis I suggested that on waking he would remember the past, forget that he had already told it me, and say that he felt quite fit and ready for a job of work in the hospital. This he did, but talking in the same semi-stuporose manner as before hypnosis. Just as he was going out of the door I clapped my hand on his shoulder and asked, "Now what about those shells, D—?" His manner almost instantaneously changed. His voice and way of speaking seemed as if of another person. He brightened up as he rattled off a quite coherent and interesting story. He bore himself like a good soldier, and returned to his ward, where everyone was amazed at his changed demeanour, and he proclaimed himself quite well.

In the four cases described at length in this communication similar but less marked changes followed the awakening from hypnosis. Increase in the size of the pupils was also noted in one of them, while in two other cases, not here recorded, the pupils, widely dilated before, now returned to a normal size. In another case the patient said that before his memory had been restored to him through hypnosis his mind was continually "rambling" from one train of thought to another, whereas afterwards it "worked as usual." Other post-hypnotic changes also occurred in which previous suggestion (during hypnosis) played no direct part. The best marked of these was the disappearance of disturbances of cutaneous sensibility (Cases 4 and 5):

The results of hypnotic treatment.—At the time of writing² I have hypnotised, or attempted to hypnotise, 23 cases of shell shock. The conditions under which I worked were such that no patient was subjected to further hypnotic treatment unless he proved readily hypnotisable on the first trial. The immediate results may be summarised:—

(1) Apparently complete cures	26 per cent.
(2) Distinct improvement	26 ..
(3) Failure to hypnotise	35 ..
(4) No improvement after hypnosis	13 ..

The patients included under (4) were: (a) two afflicted with deaf-mutism, to whom suggestions of hypnosis could consequently be conveyed only in writing and could not readily be enforced during hypnosis by such relatively ineffective method of communication; and (b) one suffering rather from aphonia and incoördination of speech movements than from true mutism, who I suspect artificially maintained, at least in some degree, his symptoms and the hypnotic state into which he seemed to pass.

A point of greater interest, however, is the further history of the apparent cures. Even in France I had ample evidence to show me that recoveries after hypnosis need not be immediately complete or permanent. One case, for example (not included under (1) in the above table), is perhaps worth recording at length.

CASE 8 (Case-number 272).—Rifeman —, aged 30, who was admitted, four days before my first visit to him at the base, into a casualty clearing station, "having the air of an imbecile, and having wandered about in an aimless fashion, not knowing where he is or what he is doing, but having a fair knowledge of recent events." On his way down to the base he had passed through another casualty clearing

² Since this was written I have had opportunities of practising hypnosis on several other cases.

station, where he was described as "remaining absolutely speechless and terrified on being questioned."

On examination I found him in a state of evident terror, but after persuasion he talked (in a faint voice) of his wife, home, and previous occupation. He gave the present month as October (actually August), and said that he had been out in France two months (actually 12). He had no recollection of getting to this hospital. He last remembered himself at the trenches, the scenes in which he described with obvious emotion. His mind then wandered to his wife whom he pictured sewing. When not actually terrified, he was in a miserably depressed condition.

Under hypnosis he remembered going into a dug-out after running away from the shells falling in the trenches, but he could not recall anything later. He could be made to talk in a loud voice, but he awoke spontaneously from hypnosis, with little change save an improvement in his headache.

On the following day, when hypnotised, he gave me correctly the present month and the month of his arrival in France, and could give me the names of two towns, V— and B—, close to the firing line. On waking he believed himself to be at the latter of these towns. He was again much worried about his wife, mentioning her christian name and the words "no work." I got him to write a letter to her, the first he had sent her since his illness. It was the ordinary letter of a soldier, containing no reference to his condition.

The next day he was considerably changed in behaviour and was now active, busily engaged in making the beds in the ward. But he was mute (possibly affected by a case of mutism then in the same ward). Under hypnosis his speech returned, and he recalled the immediate cause of his condition, his visit to a horse show at B— with a man named R—, and his return towards his billet at night, when shells began to fall on B— railway station, and something hit his back. He said that he ran to a shed not very far from his billet. He was found hiding in the shed that night, and was brought into "a sort of hospital" in a motor ambulance. After he awoke from hypnosis his power of speech was maintained, but it failed whenever he was asked about the incidents described above. After much effort it returned, but his voice was weak and again mutism followed when he was pressed about these incidents.

The following morning he awoke, speaking in a normal voice. His neighbour said that he nudged him, asking, "Is it me that's talking?" To-day the change in his appearance was still more striking; he was now quite garrulous, and seemed a very intelligent, agreeable fellow, whereas before he was depressed and dull. His memory was now far more reliable and complete as to his past history.

At V— he had been in the trenches up to a week before the onset of his present condition. He was now able to give me his reasons for worrying about his wife. He had only married just before crossing to France, and some months ago he had heard that she was pregnant. He had been troubled with the feeling that she was in money difficulties and kept thinking of the experience of a friend whose wife had lost her first baby at birth.

Since his return to England this patient has written to me that his recovery has been permanent and, save for occasional headaches, complete. He is now serving in his reserve battalion.

In another case, one of mutism (also excluded from the "apparently complete cures"), hypnosis was followed by a sufficiently complete recovery of speech for the patient to tell me his regimental number, but an hour later he was found to be again quite mute and "as dismal as ever." In this case, however, rehypnosis proved futile. He could not even be induced to write during hypnosis, although he had written out his history earlier. In my notes he is reported as being "too dazed and unintelligent during hypnosis, bordering, I fancy, on a hysterical attack (he had had two 'fits' while in the trenches); frequent tremors and clonus of arms."

Yet another patient completely recovered from his depression and amnesia at the first trial of hypnotic treatment, but was accidentally discharged

from hospital on the following day by a medical officer who, judging from the patient's appearance and in ignorance of his past condition, pronounced him fit for duty. Two days later he was re-admitted to hospital in the same stuporose, depressed, lacrymose state as before.

These and other cases show that hypnosis is of relatively little value when the condition of stupor is too profound, and that any subsequent worry (e.g., over home affairs) or terror (e.g., of scenes of the trenches or of returning to the front) is apt to induce a relapse. Accordingly, nearly all the severer cases of shock which I have seen have, at my advice, been sent to England.

The value of hypnotic treatment.—Despite the slow progress just recorded in certain cases, I have not the least doubt that the hypnotic treatment which these and other cases received here invariably proved of great assistance towards recovery, and would have proved of still greater value if it could have been occasionally repeated later. It may be argued that mutism, rhythmical spasms, anaesthesia, and similar purely "functional" disturbances disappear after a time without specific treatment. But no one who has witnessed the unfeigned delight with which these patients, on waking from hypnosis, hail their recovery from such disorders can have any hesitation as to the impetus thus given towards a final cure. More especially is this the case in regard to the restoration of lost memories. Enough has been already said here about the striking changes in temperament, thought, and behaviour which follow on recovery from the amnesia.

To go further into the subject would involve detailed consideration of the rationale of hypnosis in such cases, but this can be more conveniently postponed to a separate communication devoted to the psychology of shell shock generally. Nevertheless, surely this much may be taken for granted here, that the restoration to the normal self of the memories of scenes at one time dominant, now inhibited, and later tending to find occasional relief in abnormal states of consciousness or in disguised modes of expression—such restoration of past emotional scenes constitutes a first step towards obtaining that volitional control over them which the individual must finally acquire if he is to be healed. Thus the minimal value that can be claimed for hypnosis in the treatment of shock cases consists in the preparation and facilitation of the path towards a complete recovery.

BRITISH FIRE PREVENTION COMMITTEE.—The activities of the British Fire Prevention Committee for the year just brought to a close include the preparation and free issue of a large number of public "fire warnings" in the form of posters, circular letters, or as notices. Special notices were issued for hospitals, convalescent homes, refugee hostels, schools, billets, factories, and farms, whilst air-craft hazards were dealt with on general lines. The total issue exceeded 250,000. At the outbreak of the war a special fire-survey force of 100 surveyors was formed to undertake at short notice, and in an honorary capacity, any fire surveys required by the Government. The results of the work have been far-reaching. The greater care taken by the public to prevent outbreaks of fire by sensible and inexpensive precautionary measures has been most marked, as also the effort to meet fires with organised self-help and simple hand-fire appliances. A material reduction of the annual fire loss during the war has been achieved. The loss of life from fire has been reduced, and large quantities of produce and goods important to the conduct of the war have been thereby preserved.