

Society Transactions

BOSTON SOCIETY OF PSYCHIATRY AND NEUROLOGY

Regular Meeting, Nov. 21, 1918

CHARLES G. DEWEY, M.D., *President*

THE TREATMENT OF NONPARETIC NEUROSYPHILIS BY INTRA-VENTRICULAR INJECTION. Presented by DR. KARL A. MENNINGER.

DR. MENNINGER informally discussed the above topic, speaking of the great number of hopeless syphilitic hemiplegics seen in the wards of general hospitals. The value of intraventricular therapy in cases of general paresis had led Dr. A. L. Skoog and the speaker to undertake similar therapy in the non-paretic forms of neurosyphilis. Two cases with favorable outcome were cited, and the statistical evidences of improvement given. The conclusions pointed preeminently to a justification for further study of this form of treatment of non-paretic neurosyphilis.

DISCUSSION

DR. P. C. KNAPP believed that the intraventricular method should be more used and with greater prospects of success in the forms of neurosyphilis mentioned than in cases of general paresis. He said that he had not seen a single case of general paresis treated by intraventricular methods which had not been somewhat benefited. And yet, the most brilliant results can be expected in the meningeal and vascular types. He had noticed the features of meningeal irritation described by the speaker, but had not investigated the fluid by another lumbar puncture. Dr. Knapp mentioned a neurosyphilitic hemiplegic who showed very marked improvement after only a few intraventricular treatments. He thought there was less headache after the intraventricular method than after the intraspinal.

DR. F. J. FARNELL asked if the patients who had responded so well to the intraventricular treatment received any previous treatment by intravenous or other methods. He also asked if the speaker had any explanation to offer regarding the reaction of turbidity not infrequently met in the form of treatment used by the reader. It was not infrequent to see marked improvement in hemiplegias due to syphilis by the more usual methods of treatment, making it unnecessary to resort to the more radical procedures.

DIAGNOSTIC PROBLEMS IN PSYCHIATRY. Presented by DR. LAWSON G. LOWREY.

DR. LOWREY emphasized the importance of a complete analysis of the entire patient before a diagnosis should be rendered. Incomplete analysis is a most common cause of error in diagnosis in psychiatric conditions. The tendency of the beginner is to overinterpret and underobserve. Diagnostic synthesis can be made by experienced men if the facts of observation have been accurately set down.

The object of the present communication was to report some statistics on the problem of diagnostic accuracy. Two types of study had been carried out. The first related to the accuracy of so-called snap diagnoses, and the second to the accuracy of the hospital diagnoses as measured by the diagnoses later established in the state hospitals to which the patients had been committed.

In 300 consecutive admissions to the Psychopathic Hospital, a diagnosis of the mental picture was made by the admitting physician, usually a younger member of the staff, and a diagnosis was recorded by the chief medical officer on the visit next morning. These opinions were then checked by the diagnoses made on the fifth day or at staff meeting later. By this measurement, 64 per cent. of the cases were correctly diagnosed by the admitting physician and chief medical officer on the first impressions. In 13 per cent. of the cases in addition, the chief medical officer made the diagnosis later determined by the staff as correct. In an additional 4 per cent. of the admissions, the admitting physician made the correct diagnosis, not agreed with by the chief medical officer. It can be said, therefore, that in 81 per cent. of the cases, a correct diagnosis was made within twenty-four hours of admission to the hospital. In 11 per cent. of the cases, there was disagreement in all three diagnoses, and in 7 per cent. of the cases the diagnoses of the admitting physician and the chief medical officer agreed, but were later found to be wrong.

In every group except epilepsy, the conditions were at first overdiagnosed. The least accuracy was found to be in the manic-depressive group of cases. By groups, the correct snap diagnoses were made in the following: Dementia praecox, 86 per cent.; general paresis, 83 per cent.; manic-depressive, 67 per cent.; feeble-mindedness, 91 per cent.; epilepsy, 100 per cent.; alcoholic psychosis, 82 per cent.; undiagnosed or unclassified agreed in 37 per cent. It is obvious then, that a brief and accurate analysis of the cases allows a correct diagnosis to be made in from 60 to 80 per cent. of the cases.

At the Psychopathic Hospital, where the patients are seldom seen for longer than a month, the diagnosis must be made on the symptom analysis and the history. The diagnoses of 419 cases as established in the state hospitals after observation were compared with those made at the Psychopathic Hospital after the short period of observation. In 23 per cent. of the cases, the state institutions changed the diagnosis made at the Psychopathic Hospital. Using the state hospital diagnoses as criteria of accuracy, the Psychopathic Hospital diagnoses were found to be correct as indicated (by disease groups): Dementia praecox, 85 per cent.; manic-depressive, 70 per cent.; neurosyphilis, 92 per cent.; acute alcoholic, 67 per cent.; chronic alcoholic, 70 per cent.; senile dementia, 78 per cent.; epilepsy, 100 per cent.; arteriosclerotic, 55 per cent.; Korsakow's, 64 per cent.

The question of the error in psychiatric diagnosis at large and in general diagnosis was raised. The only way to settle the question is for each hospital to collect careful statistics of its own patients and of the ultimate condition to which their disease progresses. The value of staff conferences and reconsideration of all cases within a year of their admission to the hospitals would greatly help in the problem of securing definite information in the matter of diagnostic accuracy.

The diagnostic difficulties in individual cases were next discussed by the speaker, using case records to illustrate the features calling for emphasis.

The first case quoted was that of a Jewish girl, aged 25, who, a month before, had been delivered of a normal baby. After delivery, she became restless, sleepless, fearful, and later depressed and deluded. When examined at

the Psychopathic Hospital, she had visual and auditory hallucinations, was deluded and apathetic, mute and resistive. She was finally discharged against advice and returned to the hospital in about three months, this time being talkative, obscene, excited and showed typical maniacal features, with good insight. She recovered from this attack and since has had another, the third being also of a typical maniacal character. The first attack looked like praecox, but the rôle of the delivery and the possibility of endogenous toxemia must be considered.

Another group in which error is easy is in those cases showing a praecox syndrome and in which, in addition, there seems to be a definite psychogenic factor, leading one to consider strongly the diagnosis of hysteria. The case to illustrate this was a woman, aged 44, who became much disturbed over a murder in her place of employment, her particular interest in the case arising from the great resemblance of the man accused of the crime to her dead brother. One day she was found much excited and trying to escape from the devil. When examined, she showed paralysis, was hallucinated and deluded, she was manneristic and inaccessible. Careful probing elicited a "spiritual" love affair with the superintendent of one of the state institutions, he having no knowledge of her attitude toward him, with the sexual features predominating. A great emotional complex arose and from it could be reasoned a psychogenic cause for the presenting picture. The possibility of the various paranoid conditions was discussed and the occasional close relationship of these conditions to manic-depressive psychosis was emphasized. A case was cited of a man, aged 45, prominent in his profession, whose presenting features were marked ideas of reference and who later showed typical features of manic-depressive psychosis. The diagnosis in such cases depends on the history and the character of the patient's restlessness and activity.

Another group of cases calling for careful differentiation is that of the neurosyphilitics with psychoses of a type not usually associated with syphilis. Dr. Lowrey quoted a case of a woman with praecox features, a chronic alcoholic and prostitute, who was a drug addict and had neurosyphilis. She was treated for the last named condition, though she never has shown any clinical features indicating neurosyphilis.

It seems obvious from these statistics and case reports that accuracy of diagnosis depends on careful and complete analysis of all the symptoms and a probing for symptoms not at once apparent. Only in this way can errors due to false impressions be ruled out. Another important lesson is the importance of uniform diagnostic standards. Then, even if the idea is wrong, workers in the same field will at least be on common ground. Many psychiatric terms are unnecessarily vague and should be replaced by less indefinite ones. The more accurately observations are made and the more accurately they are recorded, rather than deductions, the sooner will uniform standards be adopted, and a vast amount of clinical material be made available for general study.

DISCUSSION

DR. P. C. KNAPP asked the speaker by what criterion he decided that a given diagnosis was correct or not. He said that in some of the cases, necropsy or laboratory findings might establish the diagnosis, but in many cases these could not become available. Authorities still disagree as to the existence of some of the conditions as diagnosed and many of Kraepelin's ideas are being replaced. So it would be interesting to know how a diagnosis was arrived at.

DR. E. H. COHOON said that he had been fortunate in having had state hospital experience before going to the Psychopathic Hospital and his present associations had led him to appreciate the difficulties of making diagnoses at the Psychopathic Hospital where the patients are seen for such short periods. He felt that the staff at the Psychopathic Hospital were very good indeed to be able to do as well as they do. He asked if the statistics were made up with the alternatives in diagnosis considered.

DR. J. V. MAY thought that it was remarkable that the Psychopathic Hospital diagnoses were correct in such a high percentage of cases. He spoke of the difficulties encountered in the hospital in the way of student help and an ever-changing staff. He asked how the series as presented had been prepared and suggested that it would be of value to collect the end-results and diagnoses on a larger number of cases, possibly including all consecutive admissions for a period of a year.

DR. LOWREY, in closing the discussion, said that when the Psychopathic Hospital sent diagnoses to the state hospitals, only one diagnosis was given—sometimes unclassified—and the alternatives were not used. He mentioned the difficulty of being sure what was or was not the correct diagnosis in any given case, but the standards which had been adopted in collecting the statistics were the most dependable obtainable. He said that the plan of withdrawing cases of neurosyphilis from other mental groupings on the finding of syphilis of the nervous system was not completely followed and that the cases were put in the neurosyphilis group with the added diagnosis of type. He also said that it was evidently true that cases of epilepsy were being missed for it could not be expected that the diagnoses could be correctly made in 100 per cent. of those cases. The possibility of making direct commitments instead of keeping patients for ten days, since the diagnoses could be made in a majority of the cases at once, is not practical because of the danger of missing the diagnosis in individual cases.

BOSTON SOCIETY OF PSYCHIATRY AND NEUROLOGY

Regular Meeting, Dec. 19, 1918

CHARLES G. DEWEY, M.D., *President*

A CASE OF CYSTICERCUS RACEMOSUS (TAENIA SOLIUM) OF THE SPINAL CORD. OPERATION, SURGICAL RECOVERY AND DEATH. Presented by DR. P. C. KNAPP.

The patient had been on the nerve service at the Boston City Hospital and later operated on by Dr. A. R. Kimpton. The case seemed worthy of report because tumors of this character in the spinal cord are distinctly unusual.

History.—The patient was a Russian, aged 25, who, since childhood, had had momentary periods of unconsciousness and dizzy spells, with occasional convulsions in which he bit the tongue. There had been headache and aura. Of late years, he has had three or four attacks a year. A year ago, he had had an attack, without losing consciousness, after which he had a dead sensation of his right arm and leg and marked headache. In the winter of 1916, he had severe pain in both sides of the chest and several attacks of it since. In October, 1917, intermittent pain and dyspnea developed and his legs felt numb. Three weeks before entrance to the hospital, there was severe pain

in the abdomen, high up on the left side. Ataxia and pains in the legs were noted.

Examination.—When examined, the neck was not stiff, the reflexes were exaggerated, there was double clonus and double Babinski, the abdominal and cremasteric reflexes were absent, and there was ataxia and astasia. The Wassermann test was negative; pupils normal. There was hypalgesia and sensory changes below the area of the fourth and fifth dorsal segments, and over the corresponding vertebrae there was distinct tenderness.

Operation.—The patient was operated on March 5; a laminectomy of the fifth dorsal vertebra was done. The spinal fluid was under tension and at the level of the fifth vertebra, an irregular, translucent, cystic mass measuring 5.5 by 1 cm. was discovered. It was enucleated and, at pathologic examination, found to be a cyst containing the *Taenia solium*. The patient did poorly for a time and developed a paraplegia with neurological signs much as previously noted. An extensive decubitus developed together with paralysis of the bladder. He returned home in June, against advice, and died in August.

DISCUSSION

DR. A. R. KIMPTON said that the operation was decidedly difficult. The anemic area which was found in the cord and which looked but little abnormal was distinctly hard and cystic to his touch. Incision of the cord permitted the mass to be popped out without difficulty, when it was found to be a multilocular cyst. Dr. Kimpton showed some photomicrographs of the sections. He said that so far as he knew, his was the only case of its kind in which the tumor was removed during life. Cases have been reported in which the *Cysticercus* has been found at postmortem examination.

PROTHYMIA: NOTE ON THE MORALE-CONCEPT IN XENOPHON'S CYROPEDEIA. Presented by DR. E. E. SOUTHARD.

In a short communication Dr. Southard called attention to the material in Xenophon's *Cyropedia* as forming material of great value in a historical study of the morale-concept and one which might enliven the ethics of the day. The itemizing of morale-measures in the *Cyropedia* indicates the probable success of a behavioristic version of a large part of morale as the Greeks saw it.

In particular, the roots of most of the words employed in Xenophon's morale-description are roots having to do with movement and speed (rather than with mere strength) and having little to do with mere feelings. Many of the words indicate the thoracic seat of the emotions engaged rather than a seat in the head or in the muscular system at large. Xenophon's description is more a matter of heart than of brawn or of head, but "heart" gets a behavioristic accounting rather than one in terms of felt emotion.

The morale of Xenophon's account in the *Cyropedia* is plainly far from the story of morale in the modern sense, especially the morale developments in armies and nations subsequent to the French Revolution.

The term *prothymia* is indicated for the morale situation as depicted by Xenophon and has several advantages. It is a leading term in Xenophon's list. The root word has hints of motion in it, as well as general usage in compounds suggesting "heart" in a figurative sense; the prefix—*pro*—has suitable intimations of pushing forward in space. Modern psychiatry has come to use the term—*thymia*—in many compounds describing variants of emotion,

such as hyperthymia, parathymia, etc. The term prothymia is euphonious and readily suggests variants and readily lends itself to use as an adjective or a substantive.

THE MILITANT. Presented by DR. EDWARD B. LANE.

Dr. Lane gave the paper of the evening on this subject. He said that alienists are quite frequently asked their opinion about such individuals and what can be done with them. These cases present distinct problems and it is not an easy matter to make the diagnosis and advise appropriate treatment. The reader said that several cases had been referred to him and that an efficient remedy was very difficult to find, if it could be found at all. He had ventured to bring the problem before the Society with the desire for an exchange of opinions.

The typical case, usually a woman, presents a history of having been very efficient and capable when young, perhaps difficult to get along with and regarded by her friends and family as temperamental. Often, she has been a business woman or a teacher. If she has married and has children, she has had little difficulty until along about 40 when the children have reached an age of more or less independence, when trouble begins. The children, especially the daughters, find that they are not permitted to do as other children and appeal to the father who may well sympathize with the children. The mother sees her authority questioned and becomes at once disturbed. Being aggressive, she sets out to maintain the authority. Petty faults and nagging tactics are employed until the entire family becomes arrayed against her. Friends desert the children who cannot bring them home because of the attitude of the mother.

Servants are kept with difficulty for they will not endure living in such an atmosphere or remain under the authority of the housewife. Such a woman may well hold social offices and be tolerated for her administrative ability or social charm. But real friends drop away for one reason or another, invitations to social affairs grow fewer, social calls are not returned, ugly rumors about her family relations are heard and friends dislike to be seen in her company. Petty jealousies and frictions arise and the husband and wife become less cordial to each other. The daughter finds life miserable, for she can do nothing without meeting criticism and opposition from her mother, who feels that she has not been fully consulted about the plans and activities of the child. If the daughter has been receiving attention from some worthy young man, the mother can still find nothing good in him and attempts to villify the young man's character and even goes so far in some instances as to raise questions as to the daughter's virtue. Such tactics lead the father and family to more openly defend the daughter, whereupon the mother attacks the others with equally vile or even worse accusations and insinuations. She may even go so far as to spread suspicion among the business associates and friends of the husband.

Soon she is brought to the physician and before him she is a fine actress. She denies that she mistrusts the husband and that she has made any of the statements for which she has been given credit. She maintains that she has made no insinuations about the daughter and her friends and enters into a long and detailed defense of her desire to do the best for her children. There is usually little or no documentary evidence. She challenges the physician to continue the examinations, hinting that after he has found her sane that she would like to have the husband examined for his actions need explain-

ing. Private detectives may be employed by the wife to secure evidence, though usually the wife is unwilling to divulge any evidence. A lawyer may also have been employed in anticipation of future legal difficulties. The daughter continues to have an unhappy time, in part because of the jealousy on the part of the mother.

Finally, the husband has her sent to some institution for observation. There, the physicians probably find nothing of special note and the conduct of the woman has been without comment, there is no depression or elation, no impulsivities or other features signifying mental disease. The picture she paints of herself to the staff is that of the abused, misunderstood and unappreciated wife and mother. Nothing can be done and she is ultimately released, triumphant.

More and worse trouble is in store for the family. She never stops to inquire if she may not be entirely or largely to blame for the entire situation, but instead, her militancy becomes more aggressive. She consults a lawyer and threatens to sue the physician who suggested the possibility of insanity. She makes many more and far reaching accusations against others. The children either run away from home or resort to means of being there as little as possible. If they do run away, the mother is likely to follow them, especially if the daughter leaves, and all manner of complications arise in the new surroundings. The daughter is haunted from place to place and the insinuations of the mother ruin the girl's reputation. The cunningness and brutality of the tricks played by such a mother may be indeed remarkable. The entire business relationships of the husband may be undermined and his bankruptcy brought about by the methods she employs in her attacks on the husband.

These cases, which need not be further elaborated, bear resemblance to the paranoid states in many respects. But it is difficult to establish any insane delusions. Some of the acts suggest the presence of delusions and true delusions may be expected after years of this state of mind. They are not psychasthenics with obsessional fears, for they do not show fear, they are aggressive. They love the sense of power and become excited and belligerent if it is denied them. They are not imbeciles, their judgment is not impaired except in one field. Like paranoiacs, they add to the list of their opponents all who side with their enemies. The brutality and extremes to which some of these people may go reminds one of the crimes of Jesse Pomeroy and the Huns in Belgium. These people are allied to those who have uncontrollable impulses. The feeling of power destroys affection and overcomes judgment. This same motive stimulates their inventiveness and summons all their resourcefulness to gain gratification of their abnormal appetite. They really belong in the group of the litigant and querulent, in that the age incidence is similar and treatment as hopeless. If they live, mental deterioration may be expected. Actual restraint seems the only logical manner of controlling them.

If legislation is needed for such cases, it will first be necessary for psychiatrists to recognize the condition. Laymen acquainted with the persons concerned recognize that the individual is abnormal and should not be considered criminal. These people are not really deluded, it is on this point that alienists have failed to convince the courts. After all, the truest test of mental disorder is the conduct of the individual in question, by which criterion the militant is assuredly insane. These individuals should not be dismissed as conscious evil-doers, and the family and friends of such an individual fully

realize that they are not responsible. Punishment, if resorted to, merely aggravates the militant and makes matters worse. And no end of criticism is heard from those acquainted even remotely with the situation. If commitment as insane is resorted to, such a person is a most uncomfortable individual in an institution and an early attempt to get rid of the patient is made.

These people act insanely, they lack insight and are without repentance. They are not demented and they cannot be forced into the group of paranoiacs. Their lives are not delusions; hallucinations and confusional states cannot be invented for them. They should be recognized by alienists as a type, and then we should not be obliged to look for the more usual symptoms of insanity, such as delusions. Then alienists could go before a court and present the case as one of a patient who acts insanely, who is irresponsible on the ground of an uncontrollable impulse, and ask for commitment on that ground. No further legislation is needed to cover such a case. The reliance in these cases which must be placed on the history was emphasized and attention directed to the need of special care in that feature.

DISCUSSION

DR. H. B. HOWARD said that he had seen several cases like the type case which Dr. Lane had discussed and spoke of a man whom he had observed over a period of ten years. During that entire period, he had known of but a single delusional idea being expressed. In this instance, the militancy and jealousy were directed toward the son who was a better business man. The father resorted to all manner of accusations and insinuations against his son and finally undermined the confidence of all the son's business associates, bringing failure to him. There had never been any delusions except a single rather trivial one about being afraid to sleep in a certain room because the angle of the roof was such that it might fall on him.

DR. E. E. SOUTHARD wondered whether Dr. Lane's so-called militant group was intended to be limited as to sex and civil condition. He also wondered whether deterioration was to be regarded as a constant characteristic of such cases, which were perhaps more parabolic than paraphrenic. It was exactly in these cases of parabulia that the judge was hard to convince in the matter of committability. Was there not possibly a relation between these cases and a sort of mild sadism?

DR. G. A. BLUMER said that, in his experience, the condition was not as rare as might be supposed and that he too thought that most of the patients eventually deteriorate. He spoke of a man whom he had known a long time, a man holding a very responsible position and discharging his obligations without flaw, who had for thirty years been harboring a secret suspicion against his wife. Not until a recent trip to Europe had the fact been known, for then the husband had interviewed the various men on board ship as to the conduct and behavior of his wife. He even insisted on having a medical examination of his wife on her return. The man has since developed definite delusions and is at present confined as insane.

DR. LANE closed the discussion by saying that not all of the cases which he had known had been among women or the married. An understanding of the unreasonable and entirely incomprehensible actions of some of these people is impossible. When they are sent to institutions, the staff of the hospital hedges and little satisfaction or relief can be given the afflicted person or family. They are a terrible nuisance, though not common. He said that there was no hesitancy in committing cases of kleptomania and pyromania, and he thought that this group should be committable.

CHICAGO NEUROLOGICAL SOCIETY

Regular monthly meeting, held jointly with the West Side Branch of the Chicago Medical Society, Dec. 19, 1918

Clinical Meeting

HERMAN CAMPBELL STEVENS, M.D., *Vice-President, presided*

LESION OF BRACHIAL PLEXUS. Presented by DR. S. KRUMHOLZ.

The patient was a laborer, aged 21. His previous history was negative; no alcoholism or syphilis. On July 1, 1918, he fell from a scaffold 50 feet high. He was unconscious for five hours. On regaining his senses he was found to have a number of contusions and paralysis of the right arm which has persisted. Patient complains of constant pain over the thumb and index finger.

On examination the patient presents complete flaccid paralysis and wasting of the right arm, with the exception of slight motion in the fingers. The scapulae were on an even line; no displacement of the inferior angle, no winged appearance of the back on the affected side, showing that the serratus magnus was not paralyzed. The triceps and biceps reflexes were absent; sensory disturbance present over the entire radial side of the arm, forearm and hand, and radial side of index finger. The cranial nerves were normal; there were no ocular changes, that is, no pseudoptosis, no contraction of the pupil on the affected side, no narrowing of the palpebral fissure, no anophthalmos.

LESION OF BRACHIAL PLEXUS. Presented by DR. S. KRUMHOLZ.

The patient was a laborer, aged 34. Previous history negative. On July 13, 1918, he fell from a racing car, while standing on the running board. He regained consciousness after nine hours and found the left arm paralyzed, which still continues; four weeks after the injury neuralgic pains appeared in the arm.

Examination: No motion in the forearm or wrist; abducts arms not quite to a right angle; shrugs shoulders quite well; arm atrophied; no sign of serratus magnus paralysis; all deep reflexes of left arm are absent; normal in other extremities; anesthesia of the entire arm, except an area extending over the inner border of the upper two thirds of the upper arm; cranial nerves normal; Horner's syndrome absent.

In traumatic, as in other nerve lesions, the chief difficulty rests not in the detection of the lesion, but in the determination of its seat. For the purpose of localizing the lesion the speaker favored Frazier's method, of dividing the plexus into three portions: (1) the intravertebral portion, which contains the separate anterior and posterior roots within the dura; (2) the intervertebral portion, where the roots leave the spinal canal enclosed in a separate sheath of dura and the spinal ganglia lie in the intervertebral foramina; and (3) the extravertebral portion comprising that portion of the nerves from the intervertebral foramina to a point where they unite to form the various nerve trunks. In extravertebral lesions, the symptoms will depend on whether the nerves are injured distal or proximal to the point at which branches are given off to the serratus magnus and rhomboideus, or still lower down to the supraspinatus or infraspinatus muscles.

In these two cases none of these muscles were affected; there was no displacement of the inferior angle of the scapula, and no so-called "winged"

appearance of the back; likewise the ocular symptoms shown by Horner's syndrome were absent. Therefore, we must conclude that we are dealing here with extravertebral lesions of the brachial plexus.

In the treatment of these cases, surgical interference is indicated, when there is no diminution of the paralysis at the end of three or four months, and in the opinion of the speaker the operation ought to be performed immediately after the injury, followed by massage, etc. The operation should be an end-to-end anastomosis of the nerve or an autot fascial tubulization.

In Case 2, about four weeks after the injury, the patient had intense, intermittent, darting, neuralgic pains, which, according to Frazier, can be relieved by section of the posterior roots.

DISCUSSION

DR. GEORGE W. HALL brought out an interesting and unusual finding in Case 1, showing that the affected shoulder was higher than the unaffected, although the trapezius was not involved.

DR. SIDNEY D. WILGUS asked whether the anesthesia could be explained on the ground that the posterior roots were damaged, the motor disturbance being due to injury of the trunk.

DR. H. C. STEVENS asked whether fibrillary contraction of the muscles was observed during the course of the atrophy.

DR. H. J. SMITH asked what the findings were at operation.

DR. KRUMHOLZ, in closing the discussion, stated that in Case 1 the surgeon's record shows that a lesion was found in the lower part of the brachial plexus, one-half to one inch above the upper border of the clavicle, the distal portion being connected with the proximal cord by fibrous tissue embedded in the scalenus anticus muscle. The distal nerve was located readily, the proximal with difficulty. The cords were not severed, but the connections were left after removal of the scar tissue.

In Case 2, the surgeon's record shows degeneration of the nerve trunk and scar tissue. This scar tissue was removed, which was all that could be done at the time.

It is possible that the posterior roots in Case 2 were torn with an intradural lesion of the fifth and sixth cervical and also a lesion of the trunk. An exploration of the plexus and a laminectomy are advisable. Such an exploration might reveal reparable nerve bands, while the laminectomy would reveal such an injury, and the section of the posterior roots might stop the neuralgic pains.

PROBABLE CEREBELLAR TUMOR. Presented by DR. GEORGE W. HALL.

The patient was a laborer, aged 30, who denied venereal disease. He complained of dizziness, disturbed vision, marked weakness of the lower extremities and disturbance in speech, which symptoms appeared in August, 1918. At about 5 p. m., when coming home from work, he had noticed impairment of vision which lasted for a few moments. Half an hour later there was a similar attack, and vision had been impaired constantly since that time. Two weeks prior to this he had complained of severe headache but could not remember the exact location. The headache was accompanied by dizziness, and this had been persistent since the impairment of vision. On account of weakness and dizziness he could not walk and was so weak he could not hold a spoon.

Examination revealed marked bilateral coarse nystagmus, more marked toward the right. Vision, right eye, 6/200; left, 5/200. The disks were slightly

pale; no evidence of choked disk. There was also slight disturbance in speech; syllables were not sounded very well. The reflexes were very brisk in both upper and lower extremities. No sensory disturbance, no Babinski, no ankle clonus. He could touch the nose with the left forefinger fairly well, but there was some evidence of ataxia in the right upper extremity. Ataxia of the lower extremities was more pronounced—right was worse than left. There was no disturbance of the muscle-sense as found in ataxia of spinal origin. No bladder disorder. He complained of external objects going to the left; although his body did not appear to deviate.

These findings, together with the reeling gait, made possible a diagnosis of a lesion in the cerebellum perhaps extending a little more to the right than to the left of the vermis. He had a tendency to fall backward rather than sideways so the lesion was probably in the vermis of the cerebellum rather than in the left lobe. In wrist movements there was better power over the left than over the right. The sudden onset was difficult to explain, but possibly a growth of a gliomatous nature could give this sudden onset on account of a hemorrhage around the growth. Such patients often have slight attacks of paralysis which clear up, and subsequent necropsy shows evidence of hemorrhage. The chief point which spoke against its being a tumor of the cerebellum was the absence of choked disk, but this sometimes occurred. The Wassermann reaction was negative both on the blood and spinal fluid. The fluid showed from 15 to 20 cells with a slight Ross-Jones reaction. The intraspinal pressure was normal. No Abderhalden test had been made. Gordon and Oppenheim reflexes were absent.

DR. PETER BASSOE asked if it was possible that the poor vision and pale disks might be due to secondary atrophy, and whether the outlines were perfectly clear? It might mean that he had had an optic neuritis, not very severe, and that suggested that there might have been a time when pressure was much higher than now. They might be dealing with a tumor of the fourth ventricle rather than of the cerebellum proper. Many such tumors gave cerebellar symptoms. It was characteristic of these growths that they may cause sudden pressure symptoms; a sudden hydrocephalus might account for the sudden onset. Such a tumor might exist for a long time without symptoms. Another thing in favor of this diagnosis was the increase of cells and globulin, which is commonly observed in ventricular tumors and more frequent than in pure cerebellar tumors. If it was a ventricle tumor one might expect increase of headache and dizziness in changing the position of the head. This was sometimes true of cerebellar tumors, but was more constant with ventricular growths.

DR. HALL replied that the Bárány test showed nystagmus lasting about twenty-two seconds on each side. The chief things which attracted him were the unilateral character of the symptoms, more marked on the right than on the left. Another thing which was quite characteristic of cerebellar lesions was the ataxia which was so much more marked in the lower than in the upper extremities.

TRANSVERSE MYELITIS SHOWING BEEVOR'S SIGN. Presented by
DR. GEORGE W. HALL.

This patient was a man who had a syphilitic transverse myelitis in the twelfth dorsal region showing a beautiful Beavor sign. (Demonstrated marked movement of the umbilicus upward by having patient raise his head from the pillow.)

PROGRESSIVE MUSCULAR ATROPHY. Presented by DR. GEORGE W. HALL.

The patient was a teamster. There was no history of syphilitic infection. Marked fibrillary twitchings were present in the muscles of the back and upper extremities; no sensory disturbances. The onset was gradual, beginning in the right arm and then extending into the left arm. There was marked weakness as well as atrophy of the muscles of the shoulder group and atrophy of the muscles of both hands, a little more marked in the right. There was no Babinski reflex, and no stiffness or spasticity of any kind in the lower extremities.

With the gradual onset in one arm gradually extending to the other a diagnosis of progressive central muscular atrophy had been made.

AMYOTROPHIC LATERAL SCLEROSIS. Presented by DR. GEORGE W. HALL.

This patient was a man with marked spasticity. There was no history of syphilis. There was marked atrophy of the muscles and fibrillary twitchings in the upper extremities. The upper extremities were much the same as in Case 3, but the marked spasticity in the lower extremities showed involvement of the lateral column of the cord in addition to the anterior cells. The symptoms had existed for one and one-half years and the two cases could be classified as the same disease. Amyotrophic lateral sclerosis and progressive muscular atrophy were different types of the same disease, and if one of the cases was possibly a multiple sclerosis it was certainly of the amyotrophic type. The Babinski sign was very pronounced, but the spasticity was so great it was difficult to demonstrate it. Oppenheim's sign was not present and there were no sensory disturbances.

SYRINGOMYELIA. Presented by DR. GEORGE W. HALL.

The patient was a man who presented atrophy of the tongue which was seen much better when the tongue was held back in the mouth. Fibrillary twitchings were present and marked on the right side only. The patient also showed evidences of sensory disturbance, the pain sense being much less marked on the left than on the right side. The disturbance extended upward to some extent and involved the region of the fifth nerve on the opposite side from the atrophy. The same area showed complete loss of temperature sense. As there was the disturbance in sensation in addition to the findings in the other cases, a diagnosis of syringomyelia had been made. No trophic disturbances were present as yet.

These three cases were presented to show the forms of atrophy that might occur and the differences between them. In Case 4 there was a pyramidal tract involvement, while in Case 5 the involvement was more centrally located, involving the pain and temperature fibers as they crossed over to the opposite side. There was a thickening of the vocal cords which accounted for the change in voice; there was no paralysis, the cords moving normally.

Such cases were not very amenable to treatment. If it was decided that the lesions were of toxic origin, as often happened in organic changes in

the spinal cord, efforts would be made to remove the infection and prevent additional trouble. The destruction that had already occurred, of course, could not be overcome.

DISCUSSION

DR. PETER BASSOE asked regarding roentgen-ray treatment, stating that in syringomyelia they were dealing with an overgrowth of glia and gliomatous growth with caries formation, and it was known that the roentgen ray had an effect in inhibiting the growth of many kinds of tissues—such as on lymph glands and in proliferative changes in the skin—and it seemed reasonable to suppose that if the roentgen ray could be brought into use it might have an effect in checking the symptoms. No destroyed fibers could be restored but it might diminish the growth of the glia. This treatment had been used, especially in France, for about ten years and there had been quite favorable reports. The speaker has used it in a few cases of syringomyelia and other cases of tumors affecting the spinal cord and thought it exerted some influence. He thought it was worth trying, particularly because of the futility of the other known methods of treatment.

DR. HALL stated that syphilis could produce symptoms exactly like these, but this disease was not present in these cases. He felt that multiple sclerosis as well as changes of this character in the central nervous system could be produced by some focal infection. He felt sure that clinically he had seen cases that could be traced back to the teeth, tonsils, or sinuses as the origin of changes in the spinal cord. Some cases of muscular atrophy where there was no positive history of syphilis were nevertheless proved to be due to that disease. The Wassermann test could not always be depended on in cases of tumor of the cord or brain. A positive Wassermann reaction was sometimes obtained on the blood when syphilis was not present, while on the other hand, cases of tabes sometimes gave negative Wassermann findings.

DR. A. W. ROGERS asked what the prognosis was in the case of transverse myelitis.

DR. HALL replied that he did not consider it good. He had been under very thorough treatment for several weeks without any improvement.

DR. PETER BASSOE stated that the man had received treatment for syphilis before there was any nerve involvement at all. The total paralysis developed within ten to fifteen minutes while the patient was in the Presbyterian Hospital being treated for a burn.

DR. H. C. STEVENS suggested that the cause of the atrophy of the tongue was the incessant action of the fibrillary contraction of the muscle fibers. The contractions continue throughout the whole period of atrophy and disappear with the regeneration of the nerve. The contractions occur not only in central lesions but in peripheral nerve lesions as well. There was not much justification for the theory of a trophic influence of the nerve on the muscle. In attempting to find a treatment for muscular atrophy it had occurred to him, following some experimental work, to attempt the injection of calcium, barium and magnesium salts. This was done on guinea-pigs after section of the sciatic nerve. Certain of the operated animals were treated with subcutaneous injections of salts known to have a sedative effect on muscular activity. Other operated animals were used as controls. The weights of the gastrocnemius muscles in the treated and nontreated animals were compared to determine whether the salts injected retarded the rate of muscular atrophy.

CHICAGO NEUROLOGICAL SOCIETY

Joint Meeting with Chicago Medical Society, Jan. 22, 1919

HERMAN CAMPBELL STEVENS, *Vice-President, presided*

WAR NEUROSES. Presented by DR. HUGH T. PATRICK.

Dr. Patrick said that the neuroses of the war just finished differed from those of peace times not fundamentally but principally only by the tremendous number and the high proportion of severe cases and of anxiety states. The term "shell shock" was first used as a convenient blanket to cover ignorance and a multitude of sins. Now it is an unfortunate term because it implies something new, portentous and not understood.

A convenient way to approach the subject of war neuroses is as the soldier approaches the disorder—by degrees. Some of us cannot comfortably adjust ourselves to the perplexities of civil life. In other words, an unusual trial is too much for us, we "go to pieces," develop a psychoneurosis. Some of our soldiers are barely equal to the adjustment of civil life and the added difficulties and apprehensions connected with mobilization and camp existence are too much for them. They cannot abolish the war, they cannot leave the camp; their only refuge is a neurosis. More stable individuals go through the home training and even the training just behind the lines without difficulty but the inordinate strains, mental and physical, of life at the very front make the situation insupportable. The soldier's deep laid instinct is to fly, hut honor, ideals and military machinery make this impossible. Occasionally a man escapes by self mutilation, occasionally by suicide. Others, unwilling to avail themselves of these means, develop a neurosis which is merely a psychological dug-out into which he creeps for safety. But he does not deliberately do it; he is not a malingerer. He is merely a sentient human being whose instincts are too much for his ideals, intellect and stability.

SOME LESSONS IN PSYCHIATRY TAUGHT BY THE WAR. Presented by DR. H. DOUGLAS SINGER.

1. *The Size and Importance of the Problem of Mental Health.*—Discharges from the Army for mental or nervous disability were made in 1.6 per cent. of men accepted by the exemption boards. These were three and one-half times as many as for tuberculosis. The failure to exempt by the boards may have been due in part to the instructions given to the draft boards but was also due to lack of training in psychiatry on the part of physicians. This lack of trained psychiatrists was also emphasized by the difficulties experienced by the Army in securing them. Just as in Army life, so in the civil community, mental and nervous disability are most potent factors in social inefficiency, and there is the same need for physicians with psychiatric training.

2. *Types of Breakdown in the Army.*—The striking fact has been a great increase in psychoneuroses without corresponding increase, and possibly even a diminution, in the frank insanities. No new types have been observed in either form. These facts suggest that even a comparatively well constituted man may develop a neurosis but not an insanity, although they might be explained by the elimination of those of poorer construction at an early stage. They also emphasize the importance of environmental factors in determining a mental breakdown. It must further be remembered that we have no statistics concerning the frequency of psychoneuroses in civil life.

3. *The Effect of War Conditions on the Civilian Population.*—In England the commitments for insanity have steadily decreased, there being 3,278 fewer in 1915 than in 1914, and 3,159 fewer in 1916 than in 1915. This cannot be explained by assuming that the diminution in the civil community was due to army enlistment of those who would otherwise have been committed, for the number of insane in military hospitals on Jan. 1, 1917, was only 2,000, and of these only a proportion would need commitment. In Russia, on the other hand, where the organization for the care of the insane before the war was very defective, the number of commitments has increased. In New York the commitments during the forty-four months following the beginning of the war were 3,995 more than in the forty-four months preceding the war.

The English figures suggest very strongly that better social organization, improvement in conditions of employment and recreation with possibly the closer regulation of alcohol are important factors in preventing insanity. It is also noteworthy that crime has diminished very markedly, although for a time juvenile delinquency increased owing to lack of proper supervision and control.

4. *Effects of Treatment.*—Prognosis even in such disorders as dementia praecox has been decidedly better than in peace times. At the Renfrew district asylum in England for military cases, among 500 patients discharged 39 per cent. are reported fully recovered (31 per cent. returned to duty), while only 27 per cent. were committed to a civil asylum.

These figures suggest that prompt recognition with immediate and adequate treatment are highly important even though it is true that the conditions under which the breakdown occurred were very severe and not liable to be met in civil life. They also again emphasize the importance of environmental factors in determining the breakdown. They should teach us the immense importance of first-aid stations or hospitals with adequate facilities for treatment in every community.

REPORT OF NEUROSES IN SOLDIERS, WITH PRESENTATION OF CASES. Presented by DR. PETER BASSOE.

CASE 1.—A private soldier, aged 27, was stunned by a shell explosion on the battlefield in France in March, 1918. He remembered nothing for five days, and then found himself unable to move the left arm and leg or to use the left eye and ear. The whole left side was devoid of sensation. There was a superficial wound of the left leg but none elsewhere. By June he could move the leg well and the arm a little. When he returned to this country in August, he walked well and could raise the left arm to the horizontal, but the grip was so weak that he could not hold anything in the hand. In September, while he was in bed at an eastern camp, a gas stove exploded with a loud noise about 50 feet away from him. He was not injured, but became very nervous, shook all over, was not unconscious. Since that time he has not been able to make any movement with the left upper extremity.

When first seen by Dr. Bassoe on Dec. 4, 1918, he walked well but the left arm was flaccid and completely paralyzed. There was complete left hemianesthesia, involving all forms of sensation. Even a very strong faradic current, applied with a pointed electrode to the tongue and sufficient to curl it up completely, evoked no sensation. The limitation of the anesthesia at the median line was very sharp. He could not distinguish objects with the left eye, nor hear spoken words or the watch with the left ear. The tendon reflexes

and superficial reflexes were normal. The paralyzed muscles reacted normally to faradism and galvanism. Examination of the eye by Dr. Brown Pusey and of the ear by Dr. H. C. Ballenger revealed no lesion of these organs.

Several faradic treatments have been given without any change in the patient's condition.

CASE 2.—A private soldier, aged 37, a railroad switchman by occupation, enlisted in the engineering corps and worked on the railroads in France some distance from the firing line. In August, 1918, while on a furlough he spent the night at a hotel in Rouen. During the night an enemy airplane dropped a bomb which exploded outside the hotel with sufficient force to throw him out of bed, but he was not injured. Thirteen days later while getting on a train far away from the battle-front he fell off the last car but was not injured, though stunned and frightened. He began to tremble all over, could not speak above a whisper, nor feed himself. After a time the tremor became limited to the right leg and has persisted.

Tremor of the right leg was the only symptom when the patient was first seen by Dr. Bassoe on Dec. 6, 1918. He improved somewhat and felt sufficiently encouraged early in January to return to his former occupation of switchman. He worked only three days, however, when he became extremely nervous and finally so excited that he was unable to walk away from the railroad yard and an ambulance was called to take him home. No evidence of organic disease was elicited.

CASE 3.—A young soldier, whose mother is nervous, while in camp in this country, in June developed a coarse tremor in right leg. This was the principal feature when the patient was seen on Oct. 23, 1918. There was also moderate tremor of both hands. The reflexes and sensation were normal. No signs of organic disease.

CASE 4.—A private soldier, aged 30, formerly a telephone operator, was said to have had a sunstroke while in the Army. He had nervous attacks with trembling and palpitation, and in December, 1917, was discharged from the Army with a diagnosis of multiple sclerosis. Examination by the writer in August, 1918, failed to reveal any signs of organic disease. He was apprehensive and nervous, with a coarse tremor of both hands.

In most of the nervously disabled soldiers seen by Dr. Bassoe there has been an association of local trauma and superadded hysterical phenomena. Examples are the following:

CASE 5.—A private soldier, a Polish Jew, aged 23, fell off an army wagon in September, 1917, and sustained a fracture of the right foot, which healed without deformity. When examined in August, 1918, he could barely step on the foot, all foot movements appeared to be very weak and to cause pain. An orthopedic surgeon called in consultation found no physical cause for the difficulty. There was a little atrophy of the leg muscles, but the reflexes were normal. There was anesthesia of the entire foot and the lower half of the leg. The patient later contracted influenza and died in October, 1918.

CASE 6.—A private soldier, aged 24, a Roumanian Jew, fell on an icy walk at a camp in this country and had pain in the right arm for two months afterward. The hand was cold and blue. When examined in August, 1918, the arm was very weak and completely anesthetic. There were pseudocontractures of the wrist and fingers. The reflexes and electric reactions were normal.

CASE 7.—A soldier sprained his shoulder in October, 1917, while in camp, and following this the shoulder gradually pulled down and the back became curved. When seen by Dr. Bassoe in August, 1918, the patient presented the appearance of so-called camptocormia. This man has gone to his home. A letter recently received from him shows a mental attitude exactly like that of the usual damage-seeking, traumatic neurosis patient of civil life. He says: "When I entered the United States service I was as robust and as stout as any man, and since then I am unable to work. I have to take a measly \$30 a month when I should draw \$57.50. This is what the insurance policy calls for, but if they want to give the balance of my claim to some faker, why it is up to them. . . . They won't have a real man alive after another year of grafting."

CASE 8.—A soldier, aged 23, had served in the British Army, and at Mons, had been wounded by shrapnel in the left side of the neck, and at Loos, above the left eye. Some shrapnel and bone had been removed from the forehead. A month after the operation he began having attacks in which he stated that he would fall and become unconscious for from ten to fifteen minutes. The attacks were preceded by a sensation of a ball coming from the left side of the neck and rising into the throat. They occurred about once a week. In November, 1917, that is, about three years after his injuries, he was admitted to the Presbyterian Hospital. When first seen there he stated that he had been blind in the left eye ever since the second wound, but he was able to count fingers well with this eye and the fields were only moderately narrowed. The fundi were normal. When sensation was tested and the vicinity of the scars in the left side of the neck was touched with cotton he jumped up and said it felt like rough scratching. Immediately afterward he could feel neither cotton nor a pin prick in this region, and the same condition existed about the scar on the forehead. All reflexes were normal. The roentgenogram of the head was negative. While in the hospital he had several attacks of unconsciousness and others in which he seemed dazed and irrational. After seeing a patient's stomach aspirated he said he felt queer and then proceeded to vomit. Altogether, the attacks suggested hysteria rather than epilepsy. One attack began with a choking sensation, then he moaned with pain which passed from the left side of the forehead to the neck, and he became unconscious. On awaking he was hilarious for a time, then again moaned with pain. While in the hospital his urine showed considerable albumin and granular and epithelial casts, but he had no edema and the heart was normal. He was discharged, Jan. 2, 1918, and later admitted to the Psychopathic Hospital, where he died on May 4, 1918. A necropsy by Dr. LeCount failed to reveal any brain injury, but there was a well marked chronic nephritis, with ascites and edema. Uremia was considered the cause of death.

MENTAL CASES

CASE 9.—A musician, aged 18, fell in love with a young lady in the summer of 1916. She became pregnant and a marriage was planned. The girl was to go home for two weeks and when they parted, on looking back, he saw tears on her left cheek. He never saw her or heard of her again, as some days later he enlisted in the Army without communicating with her or letting his family know. He was sent to Panama and after six months he began to think that this girl was there. On hearing a woman behind him in the evening he would get a distinct vision of the girl's face with tears on the left cheek, and hear her sobbing. On at least half a dozen occasions he

turned around and asked, "Woman, why are you crying?" whereupon the accosted woman accused him of being drunk and he felt very sheepish. He always instantly realized his mistake, but the vision constantly recurred, always when he was looking backward. Some time ago he came back to his home town and had no sooner stepped off the train than he had the same vision and heard the sobbing, but did not dare look around. A few days later he went to the nearest military post, asked medical advice for insomnia, and requested permission to turn in his pistol as he feared he might injure himself. He had good insight and showed no other mental symptoms.

In a recent letter he states: "Through will power and the care of myself I believe this case of mine will be cured. . . . The tropics and its diseases are all I dread now and my only hope is to get out of these soon. Two years in a place with no diversion or pleasure is enough for any white man, or else insanity would not predominate the troops so." Later the Army surgeon to whom he had first applied for aid reported that the patient has given up his search for the woman, has married another and is returning to duty.

CASE 9.—In a small town near a large military establishment six or eight women within a month had been frightened by meeting a man in uniform at night who said "Look" exposed his genitals and then walked on. The police finally arrested a young man wearing the kind of uniform described and though not caught in the act he promptly confessed. He is a man, aged 24, of a good family, well educated, who never dissipated in any way and never had sexual intercourse. He admits having masturbated occasionally before enlisting at the beginning of the war. He could not give any reason for his action and showed nothing abnormal mentally except a lack of realization of the possible consequences of his actions if his identity should become known. He apparently had reflected very little about it, had not at all been upset, but readily admitted the seriousness of the matter when it was pointed out to him. Whether this exhibition is merely a feature of a compulsion neurosis in a neuropath or an early manifestation of dementia praecox remains to be seen.

DISCUSSION

DR. GEORGE W. HALL related his experience in military camps examining nervous and mental cases culled from 60,000 to 80,000 soldiers. Ordinary neurasthenics were prevalent, hyperthyroidism not uncommon but the incidence varying greatly with the habitat of the recruits. Cases of mental deficiency attracted attention because of the large number in the draft which had to be weeded out. The proportion of these also varied enormously with the geographical source. From Kentucky the mentally defective among the whites seemed to outnumber those among the colored. This would not hold for some of the other states.

A few cases of infantilism were sent into camp but were promptly dismissed because of the inevitable effect they would have on the normal soldiers. The number of malingerers was comparatively few.

The speaker reported in detail one case of *camptocormia* (bent back), a name given by Souques to cases of forward flexion of the trunk with or without lateral inclination. Many such cases had been observed during the war both here and abroad. Rosanoff-Saloff had gathered particulars of sixteen unpublished cases and had treated the condition very fully with ample illustrations. The disorder is purely or almost purely functional, and the patients generally rapidly recover when proper treatment can be given.

CAPT. HARRY R. HOFFMAN had had an experience of eleven and one-half months in camps in this country and ten months abroad as division neuropsychiatrist. He went through all the big "pushes," with the exception of Chateau Thierry, and stated that much depended on the place where the examiner was situated when he had cases of neuroses to deal with. He stated that Major Pollock, whom Dr. Patrick had quoted, saw cases which did not come to him for two weeks after they had left the firing line. The division psychiatrist was stationed directly behind the front line where mental and nervous cases were classified as well as possible and dealt with at once. All other cases of injuries were classified and sent to the evacuation hospitals. The cases of neuroses among the American soldiers could not be compared with those of the French and British, for the reason that the American soldiers always had been on the offensive and never assumed the defensive. Therefore, they rarely or never entrenched themselves for any length of time. In the battle of the Argonne, the first day of the great push (September 27), only very few cases of neuroses came in, but during the following days they began to come in rapidly. On account of unfavorable weather conditions, insufficient clothing, lack of water and scarcity of food, in a very few days they had 1,400 cases on the outside of tents, without blankets, without litters, the men practically lying in the mud with nothing to cover them but their rifles. There were also 800 at an advanced dressing station.

The majority of cases of so-called war neuroses in his opinion were exhaustion neuroses, coupled with the intense firing at the front. A large number of cases of definite neuroses were found in noncommissioned and commissioned officers. In this class there was the same exhaustive neurosis plus the responsibility. The same applied to civil life, in that very seldom did a brick-layer have nervous prostration. It was usually the higher intellectual types of men who had the exhaustion neuroses when the impending strain came. There were no cases of psychoses at the front during the active fighting.

There was great lack of facilities for treating these various conditions, and the cases could not be treated individually in accordance with orders. They succeeded, however, in sending back to the front line 50 per cent. of these patients after their faces were washed by the Salvation Army girls and hot coffee was given to them by the Red Cross. Much, he said, could be accomplished in dealing with these patients by persuasion and suggestion. The two principal factors in war neuroses were early diagnosis and prompt treatment.

CAPT. WILLIAM D. J. DE NAPHEYS corroborated the statements made by Captain Hoffman, and said that if the cases of neuroses were handled properly the men recovered to a surprising extent. The men that were picked up on the field or in the trenches were the ones that could be returned to duty if they were given a cup of coffee, a cigaret and a good night's sleep. The farther back from the firing line the neuroses cases were taken, the more difficult it was to cure them.

DR. J. O. COBB, U. S. Public Health Service, said that at present one of the great problems is that of claims. The men had found out about war insurance, and many of them had doubtless gone into the Army with the idea of getting some of this insurance. He was certain this was true of a few cases he had seen at the hospital. Some of the men coming back from overseas were not altogether heroes, and in the beginning they figured out how they were going to get some of this war risk insurance. Those who were dealing with neurotic cases knew that some of the men were worthy of good treatment from

the government, while others were not, but just where the dividing line came was difficult to determine, not only for specialists in nervous and mental diseases, but for general practitioners. The joint cases were very hard to deal with, almost as hard to deal with as the traumatic neuroses. The war was not going to end the traumatic neuroses cases—not all of them. Many of them were going to continue to be traumatic cases right along if they could get their war risk insurance; they would not get well because they were going to have this pension, and after this pension is settled on them they would get well just as the armistice cured a great many. The practitioner must be on his guard in dealing with them. Some of the traumatic neuroses cases recover because the conditions of war are ended and they are anxious to get back home and be discharged. General practitioners and specialists might have some of these men coming to them because of having been refused treatment after their discharge and refused compensation by the War Risk Bureau, and they will have to decide whether such men have genuine neuroses or not.

NEW YORK NEUROLOGICAL SOCIETY

Three Hundred and Sixty-Eighth Regular Meeting, held at the Academy of Medicine, Dec. 3, 1918

FREDERICK TILNEY, M.D., *President*

A CASE OF INTRACRANIAL INFILTRATING ANEURYSM AT THE BASE. Presented by DR. S. PHILIP GOODHART.

The patient was a middle-aged woman who gave a history of a long standing rheumatic disorder for which she had taken a number of cures. There was at present evidence of arthritis, especially of the hands and feet. She had also suffered from headaches, mostly confined to the left side. Three years ago these headaches suddenly became intense and persistent and were accompanied by a ringing sound in the left ear. To this ringing were finally added noises of different character which, after a period of six weeks, involved also the right ear. The patient noticed that the headache was less when lying down, and that she could diminish the noises in both ears by pressing deeply into the soft parts of the neck slightly below and a little anterior to the left ear, manifestly over the carotid. This also diminished the headache to a large extent. The left eyelid was edematous in the morning. There was a point of tenderness over the left mastoid, hyporeflexia of the cornea and a relative diminution of all forms of sensation over the left half of the body, doubtless purely functional. On auscultation a distinct bruit was heard behind both ears; with the aid of a soft rubber stethoscope a loud bruit could be heard in the right ear synchronous with the pulse. The eye-grounds were practically normal. Systolic blood pressure was 130, diastolic 80. Roentgenologic examination revealed no abnormal bony changes. The case was probably one of intracranial aneurysm at the base posteriorly.

DISCUSSION

DR. L. PIERCE CLARK remembered a woman who had an aneurysm of the left frontal sinus and acute exophthalmos. The condition was diagnosed first by an ophthalmologist. The ear bruit on auscultation did not decrease on sitting up; in fact, it was intensified and she had violent vertigo in lying down.

This condition was rarely diagnosed. The speaker had seen but two other cases. The only thing to be done was to use iodids, but one patient got on better by using morphin.

DR. CHARLES A. ELSBERG remarked that he had seen a metastatic new growth give exactly the same symptoms as those of Dr. Goodhart's patient.

A METHOD FOR IMPROVING THE TREATMENT OF FACIAL PARALYSIS. Presented by DR. CHARLES H. JAEGER (by invitation).

The patient was a child who three years ago had complete left facial paralysis. Following orthopedic principles which had been found to be sound in poliomyelitis, it was decided to rest the muscles, avoid irritaton and motion and prevent distortion. When the patient was brought to Dr. Jaeger, he decided that here was a chance to see what complete rest and maintaining the physiologic position and shape of the muscles would do to restore the normal tone of the muscles. The problem seemed to be one of holding up the affected muscles permanently. The simplest thing was to have some sort of a net made into a cap to fit snugly over the head and then to apply a brace consisting of two strips of adhesive plaster with attached ribbons, the ends of which could be tied into the net cap, while the cheek was drawn up to correct the sagging; or a small hook could be attached to the end of each ribbon and these hooks could be slipped into the net cap. This procedure was followed, the child willingly cooperating in the treatment, and the attachment, with frequent renewals, was worn constantly for three months. Within one week after applying the brace, the condition showed signs of improvement. The facial expression had become more natural, there was less drooping of the left corner of the mouth and the left eyelid could be more nearly closed. At the end of three months the child was entirely cured. She was not seen again for nearly two years, but three weeks ago her mother had brought her to Dr. Jaeger's office with a history of Spanish influenza and a return of the paralysis.

DISCUSSION

DR. J. A. BOOTH considered that Dr. Jaeger's arrangement of the adhesive plaster, instead of a hook to fit in the corner of the mouth, might be an improvement on a method of treatment that had been in common use for years.

DR. L. PIERCE CLARK said that after all it must be remembered that however severe facial paralysis might seem, the great majority of these cases practically recovered spontaneously. It was only in the severest grades that one might expect contractures, and then the majority of the contractures were in the line in which the splint was here applied. It might be well to see what this method would do to overcome the marked sagging following mastoid disease and injuries of the face of severe grade. In regard to hypoglossal anastomosis and the relative improvement in Bell's palsy, Sir William Gowers said that whenever the paralysis was shown, by electric reactions, etc., to have existed over three months, some part of the function of the seventh nerve would remain lost. He had a patient who had his beard trimmed by a tonsorial artist so as to make both sides of the face appear symmetrical, and the improvement was so great that his own friends did not know he was paralyzed.

DR. WILLIAM M. LESZYNSKY did not consider Dr. Jaeger's analogy between the paralyzed facial muscles and those of an extremity affected by poliomyelitis a good one; but for many years he had been accustomed to recommend

the use of a small hook inserted at the angle of the mouth, and retained in position by a thin strip of adhesive plaster fastened over the malar bone during the early stage of facial palsy, in order to give support to and prevent stretching of the paralyzed zygomatic muscles. He thought that Dr. Jaeger's idea of the application of the plaster to the skin in order to elevate and support the upper lip was preferable to the hook which occasionally set up irritation of the mucous membrane. The additional strip of plaster over the masseter, as demonstrated in this case, however, was superfluous and could be dispensed with. It should be remembered that in many cases which appeared severe at first, recovery might take place spontaneously. If recovery in bad cases could be hastened by simply keeping the paralyzed muscles at rest indefinitely, then all of the customary methods of treatment such as electricity, massage, etc., could safely be discarded. Attempts on the part of the patient at voluntary effort to move the facial muscles has always proved one of the most important measures leading toward ultimate recovery.

DR. A. P. LENSMA, Seattle, Wash. (by invitation), said that having had a unilateral facial paralysis himself, he had tried every method to correct it, with the exception of the use of adhesive plaster, and his personal experience was that rest was not an effectual method of treatment. He had a great deal more success with diathermia, though it did not have any effect on the ptosis. The discomfort of the condition came more from the contraction than from a nerve pain, and the patient always felt very much better for some time after massage. The principle of rest for contracture did not appear to be a physiologic measure. It might be that the use of the adhesive plaster itself, its composition, had some effect on the circulation and thereby brought about the result achieved by Dr. Jaeger, but that a cure was effected by the immobility produced by the brace itself would seem to be doubtful.

DR. SMITH ELY JELIFFE said in response to Dr. Leszynsky's suggestion that "if this form of treatment be effectual we will have to lay aside all our old methods of handling these paralyses," that he hoped that we would wake up and learn that the older methods were inadequate, if not stupid, for physiologic stimulus of muscle action was not obtainable by the old methods of massage and electricity. Real stimulus was received through the motor cortex through ideation. In recent experiments in physiologic laboratories where extensive studies on peripheral nerves had been carried out, they had shown that electrical stimulus was not a stimulus at all, and that degenerated nerve processes were not helped in the slightest by electric stimuli.

DR. RICHARD B. KRUNA said the effect of massage was the accomplishment of concentrated rest, as elimination of the products of fatigue thereby took place considerably more quickly than if the muscle were left to itself. Neither rest alone nor stimulation alone would accomplish what one wanted to achieve, but a combination of the principles of stimulation and of concentrated rest by massage and the principles of ideation together had to be utilized. In the treatment of infantile paralysis a combination of the three often gave a better total result than under the application of any single method.

DR. M. NEUSTAEDTER asked what was the condition of the palpebrarum.

DR. JAEGER, in closing the discussion, expressed his gratification that the subject had aroused so much interest from the society. He himself felt that as this was merely a single experience, one could not from this make general rules or laws governing the treatment of all cases, especially those of nerve injury during a mastoid operation. He presented the child to show results in

this particular case where electrical stimulation had been carried out for almost a year without benefit, and the opposite of this treatment, or complete rest, had brought about the most satisfactory results.

There was absolutely no similarity between this method of broad external support and Dr. Leszynsky's method of dragging up the cheek by means of a small hook placed in the corner of the mouth and fastened over the ear. The latter was unphysiologic; it produced traumatism to the already weakened muscle by attempting to carry the entire weight of the cheek on the very small area engaged by the hook. Dr. Jelliffe's remarks coincided with his own views about the regeneration of muscle; that is, that it must be a central regeneration and that the muscle should not be regarded as a single entity but in its relation with the brain and cord. It was one organ in three parts, and one could not, by applying external stimulation, expect regeneration from the muscle when the normal physiologic process was ideation and central stimulus. That was the modern treatment of poliomyelitis, and that was the way in which the speaker expected to continue to treat cases such as the one he presented. The two plasters were applied for a very definite reason: the first plaster was placed over the affected muscle, the second alongside of it to assist in supporting the weight of the cheek.

TEN YEARS OF WORK OF THE NATIONAL COMMITTEE FOR MENTAL HYGIENE AND SOME PLANS FOR ITS FUTURE DEVELOPMENT. Presented by CLIFFORD W. BEERS.

Mr. Beers, founder and secretary of the National Committee for Mental Hygiene, delivered this address by invitation of the society. He began with a brief explanation of why he published his autobiography, "A Mind That Found Itself," which was a frank description of conditions as he saw them while a patient in hospitals for the insane from 1900 to 1903. His motive in publishing his book was to organize a movement to improve these conditions and to help prevent mental disorders. Following this, he was instrumental in organizing a society with these aims in view and to do work similar to that done by another national agency in the fight against tuberculosis. The success of the National Committee for Mental Hygiene, which was founded in 1909, had in part been due to the fact that it did not antagonize the hospital officials, but gained their cooperation by proving to them that it was working also in their behalf. The preliminary plan was formulated in 1906, and in 1907 the speaker got in touch with Dr. Adolf Meyer, who believed that results could be obtained by inducing a group of psychiatrists and others to participate in forming a national committee, the purpose being to improve conditions among the insane and to institute methods for the prevention of mental troubles. In considering a title for the committee, the inclusion of all these words would have proved unwieldy, and Dr. Meyer suggested the use of the phrase "Mental Hygiene," which proved to be a very happy choice, as it included the idea of prevention.

It was not an easy matter to organize the National Committee for Mental Hygiene. The organization was founded, as stated, in 1909, but it was two and one-half years before funds for initiating the work were secured. Mr. Henry Phipps then contributed \$50,000 for the first three years of work, and Dr. Thomas W. Salmon who, during the war, had been in France in charge of the neuropsychiatric work of the American Expeditionary Forces, was appointed medical director.

There were many difficulties encountered in beginning the work, as there was no other organization's experience to draw on. In consequence, the first task was to gather reliable data regarding a variety of subjects. The most immediate necessity that presented itself was to get accurate information regarding the institutions for the insane. Before very long a wealth of information poured in.

The fact that the initial work was under the direction of Dr. Salmon was very fortunate. He at once won the confidence of every one with whom he dealt. The managements of the various hospitals welcomed the help of the committee and extended every assistance. The next work attempted, after gathering information and starting the library, was that of surveys. The method of making these was to send a well-trained psychiatrist into a state to make a personal study of the situation, yet not necessarily to look for abuses. The committee did not resort to unwise publicity by overfeaturing shortcomings, but tried to enlighten the public as to actual requirements so that, when necessary, new laws should be enacted. Twelve or fifteen surveys had been made to date, with funds provided for that purpose by the Rockefeller Foundation, except in South Carolina, Texas, Wisconsin and Pennsylvania, which were financed in other ways. After a report of the conditions existing in South Carolina was made to the legislature of that state, it appropriated \$500,000 for a new institution, and today South Carolina had a modern state hospital, whereas prior to that, conditions were on the same low scale that obtained fifty or more years ago. The people of Texas made an appropriation of \$600,000 for the remodeling of one old institution and the building of one new one, for it had been found that for lack of places to care for them the insane were held in jails and almshouses. Similar conditions were common in other states, which, fortunately, however, were fast decreasing in number. It was the hope of the committee that in time the entire country might be surveyed. If funds for this sort of survey work continued to be available it would be possible to put an end to the so-called legislative investigations which did more harm than good, as surveys made such legislative investigations unnecessary.

The activities of the National Committee also included work in behalf of the feeble-minded. Indeed, this phase was developing more rapidly than any other. Surveys, as was to be expected, formed an important part of it, and far-reaching effects were being produced in a number of states. Another special activity consisted of the studies in the psychopathology of crime. Many of those present were familiar with the work of Dr. Bernard Glueck at the Psychiatric Clinic at Sing Sing Prison, which had been supervised and financed by the National Committee. His studies led him to the conclusion that the mental factors were the main ones in the problem of crime, and must be considered in any efforts at prevention of crime. The work done at this clinic had already influenced the management of crime in these states.

Another activity lately started was the Bureau of Uniform Statistics of the National Committee. Statistics of mental diseases were most inadequate, and in addition had heretofore not been gathered on a uniform basis. Within the past year, however, 144 of the 1,500 hospitals for the insane in the United States had agreed to use uniform statistics blanks, all of which were sold to them at cost by the committee. The work was also being extended into Canada, where the idea was cordially welcomed. In time dependable statistics on mental diseases would be available.

These were some of the committee's special activities. The National Committee was carrying on educational propaganda, which was having its effect,

not only among physicians, but among the general public. Mental hygiene exhibits had been found to be most useful in enlightening the public, as were public lectures. It was the intention of the committee to create as soon as possible new exhibits with duplicate sets for lending purposes.

When the phrase "mental hygiene" was adopted, more was accomplished than was realized at the time. The solution of the problems of feeble-mindedness, prostitution, vagrancy, delinquent children, were all included under the term "mental hygiene," so the scope of the work originally planned had been greatly extended.

Because the National Committee was already in existence when the United States entered the war, it was used as a rallying point, and was able to lay out plans for the United States Government in providing proper care for the nervous and mental cases in the Army. Through the war work of the committee some 50,000 recruits had been rejected for various nervous and mental conditions, and the analyzing and classifying of these cases would provide wonderful material for research into the causes of these conditions. The war had undoubtedly done a great deal for the sciences of neurology and psychiatry, especially in the way of securing public recognition of their importance.

Some eighteen state societies for mental hygiene had been organized in this country and a number of states. It was hoped that within a few years all states would be organized, and all of them would have such agencies. Furthermore, an international movement had been begun. The speaker had personally organized the committee in Canada, where he met with the most enthusiastic cooperation, some of the most prominent people in the Dominion having taken a personal interest in getting the work under way. Meetings were held at Quebec, Montreal, Toronto and Ottawa, and everywhere the movement was most cordially indorsed. A report had lately been received from the Canadian National Committee (which was only 6 or 7 months old) showing wonderful results. It was doing war work, carrying on studies of different kinds, notably in regard to immigration and the correction of laws, and in regard to juvenile delinquents, etc. After ten years of work it might safely be predicted that the mental hygiene movement had come to stay, and that it would in time spread to all parts of the world.

DISCUSSION

DR. L. PIERCE CLARK said that Mr. Beers had presented the problems confronting the Committee for National Hygiene and the work they were doing in so fascinating a manner and so completely that there was hardly anything left to be said. It was surprising to note what they had accomplished while laboring under the disadvantage of being so shorthanded and having such a small amount of money, and yet the good will and good offices of the different members of the committee were always generously furnished. Dr. Salmon had once said he hoped the time would come when the committee would get all the obvious work done through laymen and the medical profession as a whole, and then be able to turn its attention to research and investigation. Of course, there had already been research and investigation in the directions mentioned by Mr. Beers, but there was still considerable to look forward to in the functions medical hygiene would meet in the domain of research. One of the most important functions in future of the National Committee should be to search into the nature of the economic and social factors that played a rôle in the induction of mental disorders. To carry this out to best advantage,

there should be mental hygiene clinics where all types of conduct disorders could be investigated and treated on the basis of their causative defect. The scope of such a clinic should embrace such general conduct disorders as defective nursery ethics, disorders of puberty and adolescence, and lying, thieving and swindling, before they advanced so far as to require legal measures. Unfortunately, in the past many of these patients had been sent to medical clinics where they were not given proper attention, as they had only too frequently been considered as nonmedical. There should also be departments in the clinics which would deal with defective adaptations in the domestic relations, and with economic and social maladjustments. The coming need at present, so far as could be foreseen, was to socialize a part of the psychiatric activity outside the institution and clinic per se, and make it a real part of the community life. It had already been learned that one had to reach the individual at an early period of life, and therefore earnest attention should be given toward reaching back in point of time toward the earliest life of the psychopathic individual, so it was worth while considering whether the Committee for Mental Hygiene could not establish an ideal type of clinic of mental hygiene to be worked out first in some large city. Educating the schoolchildren should be handled scientifically, and an effort made toward a better attitude and relationship to society as a whole. Some of the functions of mental hygiene were gradually being extended in the courts. To do this work, there had to be trained workers. The social workers, the individuals who had cared for society's psychiatric attitude toward the public, needed to be augmented. There was opportunity here for the after-war activity of the intelligent men and women who had been engaged so earnestly in war work committees, Y. M. C. A. enterprises, etc., and from them would come a great revival of humanistic interests helping the whole problem of mental hygiene in research as well as in practical activity. If this idea could be arranged and developed it would serve a great function for the future and would prove of benefit to the whole community as well as those psychopathically inclined. It was time for the fields of psychiatry and neurology to be regenerated, and this could come through an extension into peace conditions of the reconstruction planned during war.

DR. SMITH ELY JELLIFFE said that from the beginning of the movement which Mr. Beers started, he had felt, in watching its gradual evolution, that a real genius for this type of work, an account of which has been epitomized here tonight, was with us, and in all activities of our related societies he felt sure that no one could do more than to lend hearty support and cooperation to work so ably started and so ably carried on.