mixed with red blood. After the dressing the patient expressed himself as feeling comfortable. He passed a fairly good night but towards morning became very restless, and his speech was slightly affected; he was less responsive and appeared stupid; everything was said with great difficulty, and there was partial loss of power on the right side. The reflexes and sensation were impaired on the right side and exaggerated on the left. This loss of power gradually increased accompanied by progressive stupidity, the breathing became quick and shallow, and the pulse 125 and small.

I saw him for the first time on August 5th, the day after the accident. With the history as above given of first, unconsciousness, then recovery almost to a normal condition, followed by one-sided paralysis and increasing stupor, I at once came to the conclusion that the case was one of meningeal hæmorrhage, and that the sooner relief was attempted the better.

The head having been shaved and the usual procedures for rendering the parts aseptic having been practised the patient was etherised. At the upper end of the incision where the depression existed, a piece of bone was taken away with a large trephine, and between the skull and dura mater a thin clot was seen, which seemed to extend over the vertex. As there was free bleeding another trephine opening was made a couple of inches lower, and in the line of the fissured fracture. Here a very thick clot was met with, and on cleaning this away the empty meningeal artery could be seen ramifying on the dura mater and blood freely welling up from below. The incision was extended down as far as the zygoma, the temporal muscle and periosteum pulled aside, and a piece of bone 2 inches wide by 3 inches long was chiselled away in the hope of reaching the bleeding point. After removing a large quantity of blood clot the artery could still be seen quite empty on the dura mater. As soon as the clot was removed there was furious bleeding from below. The brain and its membranes were held aside by broad retractors, and now the fracture was seen to run through the foramen spinosum and then across the body of the sphenoid. The artery was evidently torn in the foramen and bleeding furiously. As the man had lost and was losing a considerable amount of blood, to stop the hæmorrhage I decided to tie the common carotid of that side. This was done very quickly, the artery being divided between two ligatures; immediately the free hæmorrhage was arrested, though there was still some venous oozing. All the blood clot was washed out, and the space at the base of the skull packed with moist iodoform gauze. The gauze was brought out at the lower end of the wound, and the rest of the wound closed with silkworm-gut sutures. There was a spot at the upper end, however, where the first trephine hole was made, which had no skin to cover it, this having been torn away at the time of injury; this also was packed with iodoform gauze. Over all was placed sterilised gauze and a firm bandage. On leaving the table the condition of the patient was not good; the pulse was 180 to 198, the respirations 30 to 40, and shallow. A large enema of hot saline solution was administered, which had the immediate effect of lowering the pulse to 140. By the evening the patient regained consciousness, and could converse intelligently.

Next day his condition was much improved; the pulse was 120, and the respirations 20. There was some paresis of the left side, and the patient's articulation was unimpaired. There was much oozing of bloody serum through the dressings.

On August 7th the patient continued to improve; the temperature was normal, the pulse 84, and the respirations 20. In the afternoon the gauze was carefully removed, and, as the last piece came away, there was a tremendous spurt of red blood; the wound was therefore again packed quickly with iodoform gauze, and the hæmorrhage was arrested. Almost immediately the patient complained of severe pain in the head and over the left eye; the pain was so severe that a hypodermic injection of morphine had to be administered.

On August 9th, although the patient's general health remained good, he seemed dull. Cheyne-Stokes respiration was noticed for two hours in the afternoon, with an interval of 20 seconds. On August 10th he had a chill, followed by a temperature of 102.5°; he was decidedly stupid and drowsy, and answered with difficulty and very slowly. The tongue when protruded deviated to the right side, and there was

paresis of the right side. Next day there was slight right-sided facial paralysis, articulation was thick and indistinct, and by night complete motor aphasia had set in, but the stupor was not so marked as on the previous day. The stitches were removed from the wound in the neck, made by the ligature of the carotid; healing had taken place by primary union.

On August 13th his condition was much improved, stupor had entirely disappeared and also the paralysis. He could say "Yes" and "No." Sensation was normal. The temperature was 98°, the pulse 72, and respirations 20.

From this time the patient rapidly improved, the aphasia completely disappearing by August 15th. The gauze was cautiously removed day by day until the last piece came away on August 17th, and there was no hæmorrhage. The wound was repacked lightly. By September 1st he was walking about, and he was discharged on September 7th apparently perfectly well, with two small granulating surfaces at the upper and lower end of the wound.

He was shown to the Montreal Medico-Chirurgical Society on October 18th, and was then perfectly well; he has been attending to his business ever since. I saw him in December, when he showed but little trace of his accident, the wound was soundly healed, and where the bone had been taken away was a firm non-pulsating cicatrix. His intelligence was normal. He had forgotten or rather remembered nothing of the accident. He said he did not believe he was ever foolish enough to coast down such a steep hill. He remembered taking his bicycle out for a run that Sunday, but could not even recollect being near the vicinity of the hill where the accident occurred. That afternoon and the next night were completely blotted out from his memory.

The case is interesting because of the situation of the hæmorrhage at a spot where a ligature could not be applied. Ligature of the carotid seemed to me at the time to be the only rapid means by which the hæmorrhage could be arrested and the man's life saved. I tied the common carotid because it was easier, and also because after the ligature anastomosis would be more slowly established. What the source of the hæmorrhage was which took place on the removal of the gauze two days after operation I know not; probably it was the cavernous sinus.

The paresis and aphasia were probably due to the compression of the large quantity of firmly packed iodoform gauze, and not to ligature of the carotid, for they came on only after the second and voluminous packing, and were very temporary in duration. The brain was still further compressed when the gauze got soaked with blood. The efficacy of saline injection *per rectum* was well exemplified in this case. Throughout the case there was no sepsis, and with the exception of the seventh day the temperature never went above 100° F. Instead of tying the carotid I might have plugged the foramen spinosum, but I feared to separate the fracture in the base of the skull; still further, the blood oozed out all along the line of fracture.

A CASE OF ALCOHOLIC NEURITIS WITH PROMINENT MENTAL SYMPTOMS.¹

By JAMES NEIL, M.D.,
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THE patient was a middle-aged widow, who had acquired the habit of secret drinking from the medical prescription of whisky for the relief of facial neuralgia.

After the lapse of several years numbness began to be felt in the soles of the feet, causing the act of walking to be insecure. There were also sensations of "pins and needles" in the feet. Then numbness was noticed in the hands and fingers. Soon after the appearance of these insidious symptoms she had two severe falls, the second one causing such prostration that she kept her bed for three weeks. Urgent symptoms now rapidly developed, and, until the true history of the case became known, were attributed to the shock of the fall. Mental derangement was so active that treatment with a special view to it had to be adopted. The following is a summary of the symptoms as they then existed:

¹ Abridged from notes read before the Oxford Medical Society.

Motor.—There was a general impairment of muscular co-ordination. Her gait was tottering. She could not feed herself, and fumbled in dressing. The articulation was thick and indistinct. There was a slight wrist and ankle drop; the knee-jerk was absent.

Trophic.—The muscles of the legs and arms were flabby; the thenar muscles were wasted. The feet and ankles were oedematous.

Sensory.—There was partial anæsthesia of the fingers and toes. There were spontaneous sensations of pricking and tingling in the hands and fingers; these sensations she attributed to nails and wires which she thought stuck to her hands. There was tenderness on pressure in several muscles of the arms and legs.

Mental.—There was great general weakening and derangement of the mental powers. The memory was a complete wreck. She repeated every remark she made after half a minute or so; and when asked a question that required some exercise of memory, she would return an absurd answer at once with the most cheerful confidence. There was an emotional exaltation of a childish kind. The mental symptoms continued to develop for some time, and formed a striking clinical group. All the special senses were hallucinated, and a distinct delusional judgment was based on each hallucination.

Light.—She saw persons moving about in the room at night, and believed that the phantoms were the figures of certain friends, and that these persons were really present.

Hearing.—She heard the voice of her late husband calling to her at night from the adjoining room, and believed that he was really there.

Smell.—She had a subjective sensation of smell, which she attributed to the vapour of chloroform. She believed the room to be full of the vapour.

Taste.—Certain articles of food tasted badly to her. This was due, she thought, to poison introduced into the food by a particular nurse, and she refused to be fed by this nurse.

Touch.—At first she attributed the tingling sensations in the hands and fingers to nails which stuck to her hands, then to wires, and finally, as the sensation increased in severity, to fish hooks. She would sit for an hour at a time, scraping the fish hooks off each hand alternately, and laying the handfuls of the barbed tormentors carefully on the table. She stated subsequently that she was half ashamed of this conduct, but so vivid was the sensation, and so well did the fish hook theory account for it, that, though no hooks were visible, she was constrained to believe that they were there.

There was a good deal of emotional disturbance. She was harassed by groundless fears, she fidgetted about, and would get up at night to start on some journey or other.

TREATMENT.

Alcohol was forbidden, and a sufficiency of digestible food was given regularly. Three minims of liquor strychninæ were given thrice daily, and half a drachm of liquor morphiinæ at night when required. The limbs were rubbed every morning by a *masseuse*.

In three weeks the power of co-ordination began to return in the lower limbs, where it had first been lost. The sleeplessness disappeared; then co-ordination in the hands and arms gradually returned.

The physical symptoms had improved considerably before the mind began to clear up. As the tingling in the hands became less distressing, the delusion that accompanied it was curiously modified. She thought that the tormenting fish-hooks were replaced by the milder annoyance of a watch buried in the substance of the hand, where she could feel it ticking. In six months all the physical symptoms had disappeared except a trace of numbness in the fingers. Of the mental symptoms, the delusions had entirely vanished. The memory had made an imperfect recovery, and the recollection of recent events was uncertain. There was some weakening of volition. Her judgment in impersonal matters was good, but she could not realise, with regard to her own state, that she was mentally crippled to some degree.

COMMENTARY.

The following are the chief points of interest in the case:

1. It exemplifies the risk attending the exhibition of

alcohol as a habitual medicine in chronic disease. The risk was increased in the present case by the facts that the patient was a woman at the climacteric, and that the disease for which alcohol was prescribed was a functional nervous one.

2. The moderate quantity of alcohol sufficient to produce such serious effects when taken habitually for a long time. The exact amount was not ascertained, but it was probably not large, as no sign of intoxication was ever observed.

3. The two falls, especially the second. It was just after the second fall that distinct symptoms appeared, and these were at first attributed to the shock of the accident. The history proves, however, that the falls were not the cause of the disease, but a symptom. At the same time, it was no doubt the fall that caused the obscure and insidious symptoms to explode in an acute form. A case of alcoholic neuritis, in this particular curiously parallel to the present, has been reported by Dr. James Taylor.² Attention has been called by Dr. Savage in his paper on The Warnings of General Paralysis of the Insane to the significance of falls in that disease. They occur in the early and insidious stages, as they did in these alcoholic cases, and, as in these, they are liable to be mistaken for the exciting cause of the disease.

4. The prominence and complexity of the mental symptoms. So great was the mental disorder and weakening that a prognosis adverse to mental recovery was given. In six months, however, all the more obvious mental symptoms had disappeared; but some enfeeblement of memory and volition will probably be permanent.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, Etc.

A CASE OF IODOFORM POISONING.

THE patient, W. W., aged 32, a foreman mechanic, met with an accident on January 10th last. The middle finger of his left hand was lacerated, laying bare the bone of the second phalanx. I examined the wound, and found that the periosteum was not in any way injured. I then washed it out well with carbolic solution, and having brought the parts together I dressed it with iodoform and boracic lint. All went well for three days, when I noticed blisters form on the first and third fingers, which at first I attributed to friction of the bandage on the injured finger. I continued the iodoform dressing a little longer. The external surface of the hand then commenced to swell, the skin peeled off the fingers, a rash as of measles appeared, and a glairy exudation showed itself; this was infectious, for when the patient touched it with the opposite hand a blister and rash appeared on it. The temperature of the hand was very high, and I applied lotio plumbi to cool it, but without effect. Every treatment failed to stay the swelling from advancing up the arm, till the iodoform was discontinued, and Lassar's ointment applied instead. The swelling then rapidly subsided, the rash disappeared, and the temperature of the part also fell. The wound quickly healed, and the hand is now perfectly well.

Otley.

H. McCORMACK, L.R.C.P.I., etc.

PEPSIN IN ENURESIS.

THE notes of treatment of enuresis in the BRITISH MEDICAL JOURNAL of February 8th and 15th have caused me to wonder if others have found pepsin of value. The treatment by belladonna and bromides does not appear rational for a phenomenon probably associated with digestion, and it having failed utterly in the case of a boy, aged 6, under my care, with extreme diuresis and incontinence (both by day and night), I gave him: R Liq. ferri perchlor. ℥ij; acidi nitro-hydrochlorici dil. ℥ij; glycerini ℥x; essence pepsin (Armour's) 3ss; aquam ad. 3j, t.d.s. There had been a small quantity of sugar in the urine for some months. Specific gravity varied from 1010 to 1025. While taking the mixture the sugar disappeared, and the boy improved much in weight and appearance. At the end of a fortnight he seemed

² The Phonographic Record of Clinical Teaching and Medical Science for October, 1894.