so that the masses shall enjoy a larger share of the wealth-producing power of the world is one of the greatest problems of the age. It is the unequal distribution of wealth and the stern struggle with poverty which is the millstone about the neck of the masses that is dragging them down to mental, moral, and social degradation.

The rapid fluctuation of industrial methods, the shrinkage in values, the depression in trade, is each reflected in the ever-increasing demand for charity and the destruction of true manhood. It blights ambition, destroys aspiration, and petrifies all the higher and nobler feelings of humanity, and leaves the hapless victim a candidate for either the asylum, the poorhouse, or the prison.

We turn with pleasure from this pessimistic view of the social situation to the development of that splendid altruistic spirit among the classes which is doing so much to ease the burdens and succour the distressed of the masses. Wherever the cry of the needy and distressed is heard, whether at home or abroad, the purse strings of the well-to-do are open, and money is poured out in rich abundance for its relief. No better evidence can be found of our advancing Christian civilisation than in the many agencies, individual and corporate, for the relief of the poor. Unfortunately it only relieves the symptom, while it intensifies the cause. If the money spent in indiscriminate and organised charity, and in the maintenance of public institutions, were expended in adding to the earning power of the poor, it would not only add to the productive capacity of the nation, and a more equal diffusion of wealth, but it would also tend more than anything else to uplift the social condition of the masses by developing a spirit of self-reliance instead of a spirit of helpless dependence which submerges them deeper and deeper into the slough of despond, and into a condition of hopeless mental and physical inertia.

As Britons we rightly boast of our free institutions and equal rights to every citizen, of government by the people and for the people, but we sigh for the dawn of a richer inheritance yet, namely, equality of opportunity. May we hope to see inaugurated that mythical period in the history of ancient Rome, so graphically described by Macaulay:

Then none was for a party,
Then all were for the State;
Then the rich man helped the poor,
And the poor man loved the great;
Then lands were fairly portioned,
Then spoils were fairly sold,
The Romans were like brothers,
In the brave days of old.

Dr. CAMPBELL quoted the case of a woman who, in four generations had some 500 descendants, who had cost the State of New York some 100 million dollars, every one being either criminal, prostitute, or insane.

Dr. CLARK (Toronto) alluded to the position held by syphilis in the causation of insanity. He thought its influence over-exaggerated.

Dr. URQUHART (Perth, Scotland) spoke of the Scottish tradition that once all epileptics were castrated, with the result that there are extremely few epileptics now in Scotland.

LOCOMOTOR ATAXIA AS A FORM OF CHRONIC PARENCHYMATOUS DEGENERATION OF THE PARANEURAL SYSTEM.

By Professor VAN GIESSEN, M.D.

PROFESSOR VAN GIESSEN gave a most interesting address on parenchymatous degeneration of the nervous system in locomotor ataxia. He commenced by tracing analogy between stroma and parenchyma in organs of the body. He showed how the cells may be regarded as working units, their expression of function varying with their health. He showed how, under suitable hardening reagents, an intercellular structure could be demonstrated; and how this structure was interfered with by poisons, especially alcohol. The rate of this cyto-closis, as he called it, depended on (1) the intensity and (2) duration of poison. This was the probable cause of temporary improvement in locomotor ataxia. Finally, he showed that similar changes took place in mental disorders.

Dr. URQUHART (Perth) begged to thank Dr. Van Giessen for

the admirable demonstration which he had favoured them with, and welcomed the aid to be given by investigations outside asylums. He considered the work done by Dr. Van Giessen, and put forward with every modesty, was most important to them. Dr. Urquhart referred to the establishment of a conjoint pathological laboratory by the Scottish asylums, on similar lines to that conducted by Dr. Van Giessen, and expressed the hope that time would approve what had been done on these lines. He asked if they could have Dr. Van Giessen's opinion as to the research of Dr. Hutchinson, who had found vacuolation of the cells in the brains of the sane. He (the speaker) did not feel surprised that such degeneration should take place in chronic exhausting diseases.

ON "TOUCH PARALYSIS," OR THE INABILITY TO RECOGNISE THE NATURE OF OBJECTS BY TACTILE IMPRESSIONS.

By R. T. WILLIAMSON, M.D. LOND., M.R.C.P.,
Medical Registrar, Manchester Royal Infirmary; Honorary Medical Officer, Pendleton Dispensary (Salford Royal Hospital).

In all cases in which there is marked anæsthesia of the hands the patient is, of course, unable to recognise the nature of objects placed in the hand when the eyes are closed. But when anæsthesia is less marked or slight, often the nature of objects can be made out readily by tactile impressions alone. Cases of cerebral disease are occasionally met with, however, in which there is either no tactile anæsthesia whatsoever in the fingers or hands, or, if present, the impairment of tactile sensibility is exceedingly slight, and yet the patient is quite unable to tell the nature of objects placed in the hand when the eyes are closed. For example, a coin placed in the hand is felt at once, but the patient cannot tell what it is. The following are brief notes of two well-marked examples of this condition, which has been described as "touch paralysis" by some writers:

CASE 1.—A. B., aged 26, came under my care at the Pendleton Dispensary in January, 1896, having been sent to me by Dr. Edward Roberts, of the Manchester Eye Hospital. She complained of headache and impairment of vision. In June, 1895, the patient had a fit, in which she lost consciousness and fell. After the fit there was loss of power in the left thumb. For a time she had at least one fit every week. On one occasion she had seven fits in one day. The fits always commenced with a sensation of numbness in the left thumb; this was followed by twitching in the left thumb; then the arm became affected by the twitches, and the patient lost consciousness. Altogether, she had about fifty fits up to the end of August, 1895; since that date she has only had a few slight attacks of "faintness" accompanied by twitching of the left thumb. For three months previous to coming under observation she had suffered from headache, occasional vomiting, and impaired vision; the headache was worse at night. A history of syphilis was obtained; there was no history of ear disease.

On examination in January, 1896, the patient was well nourished and healthy in appearance; there was no affection of the first, third, fourth, fifth, sixth, seventh, eighth, and twelfth cranial nerves. Vision was much impaired, and she was unable to count fingers held in front of the eyes. Ophthalmoscopic examination revealed intense double optic neuritis. There was no hemianopsia of the right field of vision. On the left side, vision was so much impaired that the field could not be taken. There was a tender spot on percussion of the skull in the right parietal region; no definite paresis of the limbs was detected; there was no ataxia; the heart, lungs, and urine were normal.

On March 18th, it was noticed that when the patient was told to show the teeth, the left naso-labial fold was not so well marked as the right; that the left angle of the mouth was not retracted so much as the right, and that the left side of the upper lip was not elevated so much as the right. The grasp of the left hand was weaker than that of the right, but the difference was scarcely more than exists in most healthy persons. Though there was no anæsthesia in the left hand, it was noticed that she was unable to tell the nature of objects placed in the hand when the eyes were closed. She could do so quite readily with the right hand. During the next three weeks the patient was examined repeatedly, but the condition of the left hand remained unaltered. The following is a more exact description:

Left Arm.—Patient could perform all the movements quite well, including those of the small muscles of the hand. Grasp of the left hand good. Power of the right hand registered by the dynamometer = 40; left hand = 30. She could pick up a pin (placed on a book) with the right hand, but could not succeed in doing so with the left hand. She was able to touch the top of the nose, the chin, and the ears, with the index finger of each hand (the eyes being closed) without exhibiting any unsteadiness in the movements. When the eyes were closed, she could tell the exact position in which the left arm, wrist, fingers, and thumb were placed, and she was also able to put the right arm, wrist, fingers, and thumb in exactly the same position.

Sensation.—The patient had no pain and no feeling of numbness or tingling in the left hand.

Tactile Impression.—A touch with a pin's head was felt and localised

quite well on the left hand and on the fingers thereof, apparently as well as on the right hand. A touch with a hair was not felt on the palmar surface of the left fingers and hand, but it was also not felt on the right hand and fingers. The points of a pair of compasses, separated at a distance of $\frac{1}{2}$ of an inch, were felt as one point only on the palmar surface of the index finger of the left hand, whilst at a corresponding part of the right hand they were recognised as two points.

Painful Sensations.—The prick of a pin gave the usual painful sensation on the fingers and hand of each side; the patient stated, however, that the pin prick was not quite so sharp on the left hand as on the right. There was no delay in the conduction of the sensation of the pin prick on either side. The weakest current of a faradic battery was felt on both hands.

Sense of Temperature.—The patient was able to feel and distinguish between a hot and a cold test tube applied to the hands and fingers equally well on each side.

Sense of Pressure.—The patient was able to estimate correctly the weight of objects placed in the left hand.

Though the examination of the above-mentioned forms of sensation gave almost negative results, there was nevertheless marked inability to tell the nature of objects by tactile impressions alone. Objects placed in the left hand were felt distinctly; the patient could feel at once when they were placed in the hand or on the fingers, however light and small the object might be. She could also feel at once when the hand was very lightly touched with the object; but she was quite unable to tell the nature of objects placed in the left hand, even when she grasped them tightly and handled them most carefully (the eyes of course being closed). With the right hand the nature of the same object was recognised at once (the eyes also being closed). The following were some of the objects used in examination: Penny, halfpenny, sixpence, shilling, half-sovereign, latch key, penknife, pencil, pen, small book, small piece of paper, watch, chain, card case, pin. All these objects were recognised exceedingly readily with the right hand and fingers (the eyes being closed), but were not recognised at all with the left hand and fingers. The patient knew that there was something in the left hand, but was quite unable to say what it was. If when examining the patient two or three fingers were placed in the palm of her left hand, she felt the tactile sensation at once, but even on tightly squeezing the fingers she was unable to say what they were. With the right hand she recognised them at once, and was able to tell readily how many fingers she was grasping.

In the right parietal region of the skull there was a small area which was tender on deep percussion with the finger. There was no superficial tenderness, and no other part of the skull was tender on percussion. This spot was situated near the parietal eminence and behind the position of the fissure of Rolando. The distance over the vertex, between the bridge of the nose and the occipital protuberance, was 12 inches; therefore a point $\frac{1}{3}$ of an inch from the bridge of the nose would indicate the upper end of the fissure of Rolando. A line drawn from this point, at an angle of 33° , with a line drawn in the position of the fissure of Rolando, or at an angle of 100° , with a median line from the nose to the occiput, passed through the tender area. The distance between the median line and the tender spot was 2 inches.

Potassium iodide in 10-grain doses three times a day, and mercurial inunctions were prescribed. The headache and the tenderness of the skull on percussion disappeared. She had no recurrence of the fits, but the vision remained impaired, and the optic neuritis was followed by partial optic atrophy.

In June, 1896, no sign of facial paresis could be detected; the grasp was not impaired. She could feel, localise and differentiate the head and point of a pin quite well on both hands, but she was still unable to recognise the nature of objects placed in the left hand when the eyes were closed. In November, 1896, the condition as regards sensation in the left hand continued unaltered.

CASE II.—E. R., aged 37, admitted as an in-patient at the Manchester Royal Infirmary, under the care of Dr. Leech, to whom I am indebted for permission to refer to the case. Well-marked symptoms of cardiac failure were present. The left ventricle of the heart was much dilated, and there was a loud systolic murmur heard at the apex. Twelve months previously she had suffered from an attack of right-sided hemiplegia of sudden onset. The paralysis had gradually disappeared, and the only sign thereof which remained was the slightest impairment of the grasp of the right hand. A touch with the head of a pin was felt and localised readily on the fingers and palm of the right hand; the point of a pin was also felt distinctly (as a painful impression) on the same parts. Nevertheless the nature of objects placed in the right hand could not be recognised when the eyes were closed. Thus, when a key, watch, penknife, shilling, or other coin was placed in the right hand, the patient knew at once that some object was in the hand, but, even after carefully feeling at the object, she was quite unable to tell what it was. With the left hand she could detect the nature of objects at once. The patient died suddenly three days after admission, and no necropsy was obtained.

In the first case recorded, it appears probable that there was a small gumma or other syphilitic lesion implicating the cortex of the brain on the right side, near the arm centre, and beneath the part of the skull which was tender on percussion. This tender area corresponded to the region of the supra-marginal convolution and the middle of the ascending parietal convolution.

In the second case, it appears probable from the history that there had been embolism of the left middle cerebral artery, and, as a result, hemiplegia of sudden onset. All the signs of hemiplegia had passed away with the exception of the slightest impairment of the grasp of the right hand, and the symptom above described.

In both cases tactile and painful sensation, when tested in the ordinary manner with the head and point of a pin, appeared quite normal; but though the patients were able to feel very light tactile impressions on the fingers and hand quite

well, and were able to feel objects placed in the hand readily, they were quite unable to tell what these objects were if the eyes were closed. Now, this peculiar inability to recognise the nature of objects by tactile impression alone is not due to paralysis or paresis of the muscles of the hand. I have often placed objects in the hands of hemiplegic patients who have not been able to perform any movement of the fingers, and yet they have been able to recognise the nature of the object at once from the tactile impressions alone (the eyes being closed). Neither is the inability to recognise the nature of the objects, in the cases above recorded due to a diminution of ordinary tactile sensibility. In both cases the patient could feel and localise very slight tactile and painful sensations. On the other hand, I have found that patients suffering from hemianæsthesia have been able to distinguish the nature of objects placed in the hand readily when the anæsthesia to tactile impressions has been well marked but not complete. Thus, in a case of partial hemianæsthesia and hemiplegia the patient was quite unable to feel the touch of a pin's head on the right hand and fingers thereof; notwithstanding this considerable degree of anæsthesia, he was able to tell the nature of various objects placed in the hand quite readily when the eyes were closed. Again, in the first case recorded, no change in the muscular sense could be made out by the usual methods of examination.

In a case of Friedrich's disease which I examined some time ago there was considerable inco-ordination in the movements of the hands, yet the patient was able to recognise quite well the nature of objects placed in the hands when the eyes were closed. The symptom does not appear to be due simply to loss of muscular sense.

The appreciation of the nature of objects placed in the hands (when the eyes are closed) has been termed the power of "active touch." Tactile sensation, associative processes, and often the muscular sense are thought to be brought into play. "Active touch," according to Dana, is dependent on motor and tactile memories, each associated with the special cortical cerebral motor centre for the particular part.

The peculiar sensory condition, in the two cases above recorded, appears to me to be analogous to that of word blindness and word deafness. In the former variety of aphasia printed and written characters are seen, and in the latter words spoken are heard, but in each case the meaning thereof is not appreciated. So in the cases in which there is inability to recognise the nature of objects by tactile impressions, the patient is able to feel the tactile impressions produced by these objects readily, but, probably owing to some cortical lesion, he is not able to tell the nature of the object from touch impressions alone. I have recorded these two cases because I believe that the peculiar symptom which they presented is comparatively little known, though I find that a few similar cases have been previously recorded.

In the systematic examination of cerebral cases it is necessary, before stating that sensation is normal, not only to test the sensation for ordinary tactile and painful impressions, but also to ascertain whether the patient can tell the nature of object placed in the hand. The cases above recorded show that, though the patient may be able to feel and localise tactile and painful impressions quite well, he may be unable to tell the nature of object placed in the hand when the eyes are closed.

BIBLIOGRAPHY.

Dana, *Journal of Nervous and Mental Diseases*, December, 1894. Riegner, *Deutsche med. Wochenschrift*, No. 23, 1894. Dubbers, *Neurologisches Centralblatt*, No. 2, 1897. Wernicke (quoted by Dubbers), *Arbeiten aus der psychiatrischen Klinik zu Breslau*, H. 2.

NEW CONVALESCENT HOME AT RAMSGATE.—A gentleman, who at present does not wish his name known, and who has already been a most liberal benefactor of the Victorian Convalescent Home for Women, Surrey—the county memorial of the Queen's long reign—has intimated to the Lord Lieutenant of Surrey that he will be ready to build at his own cost (estimated at £3,000) a home upon the Ramsgate site given by Mr. Maurice Beddington, provided the Committee can assure him that an income of £800 is provided by the endowment fund and the annual subscriptions. The Committee are likely soon to appeal to the county to make this guaranteed income good. In the meantime the temporary home at Bognor is full, and there are sufficient applications to keep it so for a considerable period.