Sixty years ago, i.e., ten years before the decree just referred to was issued, the visiting committee of Hanwell Asylum was inspired by Conolly to include in its annual report similar enlightened views regarding the necessity of basing the treatment of mental diseases on a scientific knowledge of the subject. And about the same period there came a plea from the medical staff of the Forston Asylum in Dorsetshire that means should be adopted to ensure the early treatment of cases of mental breakdown.

Appendicitis in Private and Public Hospitals for the Insane. By JOHN FREDERICK BRISCOE, M.R.C.S., Westbrooke House, Alton, Hants.

THE excuse for a discussion on this physical affection in association with the insane mind is an attempt to prove by its rarity in county and county-borough asylums, asylums for idiots, mental hospitals and licensed houses of England and Wales, that it is preventable. In ten years from 1902 to 1911 there are recorded by the English Commissioners in Lunacy seventy-five deaths from appendicitis, typhlitis or perityphlitis, ascertained in the majority of cases by post-mortem examination, as having occurred among the insane population of the above institutions. And of the seventy-five deaths it would be instructive to know how many of these had the relics of this disease upon them or were suffering at the time of admission from acute or chronic symptoms. In making the statement that appendicitis is a rare malady in private and public hospitals for the insane, I do so with the support of several practitioners of psychiatry. Not only do these clinical observers give me their assistance, but further I have the help of the pathologist to the London County Asylum at Claybury who states, "I do not believe there has been a single case of appendicitis on the post-mortem table at Claybury since I have been pathologist. Consequently in more than 2000 post-mortems there has been no case." In comparing the Claybury Hospital for the insane with two general hospitals, St. Bartholomew's and Guy's, we can make a valuable contrast. For instance, at St. Bartholomew's Hospital 1645 autopsies were made between 1909 and 1911, and of these, 69 were recognised as appendicitis.

At Guy's Hospital in the year 1900, of the first 500 post-mortems 12 were recorded as cases of appendicular disease. As regards the proportion of cases of appendicitis to the number of admissions I find that at the same hospital in 1890 there were 8588 admissions. Of these admissions, 306 were subjects of appendicitis, 187 being under the care of surgeons, while 119 were under the care of physicians. The death-rate from appendicitis recorded in the Registrar-General's Report for 1909 shows a slight gradual increase from 1901 to 1909. Referring to other parts of the Kingdom in this investigation I find the statistical tables from the Lunacy Board of Scotland show that formerly deaths from appendicitis were usually returned as deaths from peritonitis, that appendicitis had no separate heading in the Board's tables of causes of death, and is not yet separately notified. If a case of appendicitis were returned it would be placed in the table of Diseases of Digestive System; but it has been ascertained that no death in a Scottish asylum has been returned during the past five years as due to appendi-Again the Blue Book of the Inspectors of Lunatics for Ireland in the issue for 1911 gives typhlitis grouped among the causes of death, but the table gives no return of the complaint for that year. And in the table there are only eleven cases of peritonitis. Likewise the Secretary of the Office of Lunatic Asylums, Dublin Castle, sends me the returns for typhlitis for the period 1902 to 1910 as follows: 1902, 0; 1903, 1 male; 1904, 0; 1905, 1 female; 1906, 0; 1907, 1 male; 1908, 2, male and female; 1909, 0; 1910, 0-viz. five in all. And the cause was ascertained, except in one case, by post-mortem examination. With these figures for your guidance I would remark that in experimental research and statistical calculations, extreme care and accuracy should survive comment. But with the greatest attention and thoroughness that any of us can spend on the subject matter of a professional inquiry in medicine, exception will be sure to prove the rule.

Diagnostic skill must be an accomplishment of the future general practitioner if he is to weather the storm of criticism. I admit the responsibility is a great one, but with the modern instruments of research the practitioner has the advantage of his forefathers if he uses these instruments with care, skill and ingenuity. Yet he must not lay aside altogether the older methods as if they were of no value to-day.

I am desirous of your assistance in this preliminary inquiry on "appendicitis in asylums." The cæcum with the bud of the appendix we are told blossom forth from a straight uniform piece of intestine, at the sixth week of intra-uterine life. This is a persistent abdominal occurrence in the plan of the permanent anchorage of the intestines. At first a movable piece of intestine of like structure, the appendix eventually comes to an anchorage, but there is much doubt as to its further use, for we have no definite facts to rely upon. Moreover, its cavity exhibits a tendency to become obliterated, according to Quain in 25 per cent.

The appendix, like a tendril, would seem to pilot the cæcum to its anchorage in early life. In fact, is it not part of an arrangement in which the intestines become suitably settled and restrained in the bed of the abdomen? If there were not supports or stays in the abdominal cavity the outer and inner circle of the intestinal tubing would become hopelessly dis-There seems to be, too, another duty of the mesenteric stays, especially of the large bowel, namely, that of dividing and interrupting the peristaltic wave at certain points. The fæces are carried onward from the cæcum by not only a circular squeeze, but also by a detrusor thrust of contraction. And in the normal abdominal cavity we thus observe bends here and turns there. If a physical kink can excite the nervous system to madness, I am sure there is also an associated neuropathic kink of far more importance in the estimation of the causes of insanity. It is my purpose, in opening the debate on this subject of appendicitis to travel over the diseases peculiar to the tubing of the gastro-intestinal track and it is worth while comparing them with the local The same poisonous consequences of condition, appendicitis. micro-organisms and decomposing food, detained and brought to an anchorage may afflict any part of the tube, and especially the fermenting vat of the intestinal cesspool which we are now considering. If it is a difficult matter to keep the mouth of the intestinal track free of dirt it is not a difficult problem to rid the intestines of it. We all know that a common aperient like Epsom salts will answer our object.

As we proceed along the lines of the science of civilisation many hints fall to the medical profession besides the essential points of cleanliness. Surely appendicitis is nothing more or less than a local virulent growth of the Bacillus coli communis or of its relatives, sealed up, as it were, in a pouch—the fight of the lymphoid tissue against an invasion. I have observed this in the cæcal appendages of poultry. In one case in particular I noticed an enormously distended appendage. I was unable to press out the contents from the mouth of the tube, for it was obstructed. The closed pouch contained turbid fluid, micro-organisms and parasitic thread-like worms with fæcal products. Inflammatory changes of redness and swelling were noticeable.

Other domesticated creatures like the horse, the cow or the hen equally come under the eye of the pathologist and bacteriologist as instances of comparative disease. The horse suffers from staggers and other ill-health owing to the teeth not meeting properly during mastication. The result is a foul motion and auto-intoxication and is easily remedied by the use of the file. Likewise the hen emaciates, loses its feathers, and the cæcal appendages become inflamed when the gizzard is without grit, as so often happens in a badly managed poultry run. And in man we know that convulsive seizures such as epilepsy are better prevented by attention to the chylo-poietic viscera than by the administration of bromides; for although chemical restraints are convenient they are dangerous if their use is prolonged, inasmuch as they encourage degeneration of the tissues. In rest and pain we have similar cause and effect when there is plugging of the cavities of the body. A most familiar instance is tinnitus aurium. It has to be proved whether the newer surgical operations of short circuiting of the intestines or fixation of movable kidneys are so effective in the treatment of constipation as the physician's older remedies of blue pill and black draught. Undoubtedly aperient medicines drive not only visible dirt but also muddled ideas and delusions into the closet. No one who has lived in a hospital for the insane can contradict me. That is why I conceive appendicitis is so uncommon among the institutional insane. Thus, if dirt and spiritual vapours can be readily expelled by the skill of the asylum physician, how is it that the physician in charge of the sane population has not yet succeeded in teaching the public that the first principles of healthy life are based rather on education than on operation? I do not believe that it can be often necessary to open a patient's abdominal cavity for

626 APPENDICITIS IN HOSPITALS FOR THE INSANE, [Oct., relief of chronic constipation unless the classical signs of ob-

struction are present.

The perfect system of dieting, as practised in asylums for the insane, now comes under our review. Food that is put into the stomachs of the institutional insane is, as we know, of the dietetic order and amount consistent with health. It is also of the best quality—simple and wholesome; not least, it is well prepared by cooking. It is carefully macerated and divided beforehand, and is given to the patients in this prepared state; while, on the other hand, it is spoon-fed to those who are without teeth, or who are accustomed to scramble and bolt their food. The indifferent feeders then are always under notification and are individually superintended at the meal hours. Constipation is never permissible in asylums, and this is the only sensible explanation in my opinion why their cæcal appendages are less often affected by inflammatory attacks. It is a very large matter in the treatment of all diseases to first acquaint one's self of the condition of the bowels. The axiom "Are your bowels open?" has been handed down to us from time immemorial. And whatever views we may hold as to the predisposing causes of appendicitis, one cannot remove from the mind the exciting effects of a succus enterious chemically disarranged with foul accumulated fæces irritating the mucous membrane, filling-up and ballooning the cæcum and the large intestine beyond, for a lengthened period. If medical men, outside asylums, could guarantee the condition of a person's bowels beyond hearsay evidence, they would be hideously surprised to find how imperfectly is this essential factor of health attended to as compared with the procedure in asylums for the insane.

The voice of the dentist is carrying weight with medical officers of health to the extent that "tooth-brush drill" is a coming fashion. Since the entrance of the intestinal tract is so constantly foul imagine what the track must be lower down. And what a short distance there is between the lumen of the gut and its peritoneal covering! Is this not a far-reaching factor in auto-intoxication, having regard to the enormous powers of absorption of the inner and outer side of the intestinal tubing? Therefore I should like to point out that "intestinal drill" in the school is just as important as "scalp drill" or "tooth-brush exercise."

The technique of "intestinal drill" in asylums is complete,

the plug of the W.C. is under lock and key, and the mental nurse can notify a stool, its odour, colour, consistence and appearance. This discipline enables the nurse to give a report to the medical superintendent, and the chemical and bacteriological examination of the fæces can be made in a routine manner like urine analysis. At Earlswood Asylum for Idiots "intestinal drill" with these young people is a feature in the management of this institution, and they rarely have appendicitis.

The operations for chronic constipation and appendicitis may be very fascinating to the surgeon, yet to prevent them by "intestinal drill" is a greater clinical achievement, although the burden of its practice lies on the shoulders of the physician. And this education is the reason why asylum physicians are more skilled in the prevention of appendicitis than are other members of the profession.

Discussion,

At the Annual Meeting held on July 11th, 1912, at Gloucester.

The President said the subject which had been brought forward for discussion in this paper was of interest, and the author was turning the tables on the profession outside, and saying in effect: "If you want to know how to prevent appendicitis, see how we do it in asylums." He was glad to see present one or two of the local surgeons, and he hoped they would join in the discussion, and let the meeting know whether from the asylum side the profession could throw some light on the matter, or whether the surgeons outside asylums could throw light on asylum medical officers' understanding of it. His own view was that appendicitis was extremely rare in asylums. During the twenty-nine years he had been at Barnwood House, he had known of only two cases. One was that of an old lady who had peritonitis, and was found to have a necrosed appendix when a post-mortem examination was made. In the other case there was found to be rigidity in the right flank on admission, and next morning there could be no doubt that she was suffering from appendicitis. She was operated upon, and did well. But cases amongst the staff of asylums more nearly approached the normal incidence of the disease outside. The subject was of importance, and it had a considerable bearing on the probable causation of this common disease.

Sir George Savage said that one or two things struck him as interesting in relation to this paper. One was that when influenza, as an epidemic, appeared, for a year or so afterwards papers appeared in the medical journals pointing out how free the insane were from influenza, and discussing it as something special. It was found later that the insane, when placed under similar conditions, suffered from influenza as did other people. That made one think that people in asylums lived in a way which was healthier than that of the majority of the population. His experience had been that appendicitis was very exceptional in asylums. During his seventeen years' residence in Bethlem Hospital there was only one case of this discase, and that occurred in a house-physician. Another point which might interest the meeting was that three or four years ago he was asked to take part in a discussion which was held by the Association of Medical Officers connected with insurance offices; and the two questions for debate on that evening were the insurability of people who had suffered from insanity, and the insurability of the lives of those who had suffered from appendicitis. The surgeons maintained stoutly that a man who had had appendicitis should not be

insured, unless he had had his appendix removed. He regretted to say that the feeling in the Life Assurance Medical Officers' Association was that no person who had ever been insane should be insured.

Mr. Buckell said he thought any statistics of this kind were of very great importance in elucidating the ætiology of disease. It was only in matters of this kind, where one had the opportunity of comparing the disease incidence amongst a large number of people similarly circumstanced, that one could really get much in the way of valuable information. It did look as if Dr. Briscoe had proved his thesis, namely, that careful attention to the action of the bowels and to the food had much to do with the question of the incidence of appendicitis. Of course, statistics were rather dangerous things to base theories upon, and one would like to know a little more, to have more detailed figures, before coming to a definite conclusion. Dr. Briscoe quoted deaths from appendicitis, and compared them with deaths from the same condition in the large general London hospitals. But in London hospitals people were admitted for the treatment of appendicitis, whereas in asylums the patients were admitted for the treatment of their insanity. Another point was, that one might consider the age-incidence of appendicitis in connection with this matter. He was not well acquainted with the figures dealing with the age-incidence of insanity, but he imagined that the greater part of mental trouble occurred in the later decades of life, whereas it was well known that the incidence of appendicitis was chiefly in the earlier period, and that, of course, would have some influence on the statistics. Naturally the occurrence of an attack of appendicitis depended upon something which happened at the time, but it had been prepared for by what had gone on previously. It surprised him to hear that there were so few cases of appendicitis in asylums, because at those institutions fresh cases were constantly being admitted, many of whom must previously have suffered from chronic constipation, and one would think there would be sufficient opportunities for outbreaks, even though the bowels were kept regularly acting. Considerations such as those made him feel that they were not yet quite at the end of the matter. Still, he thought it very likely that regular attention to the action of the bowels might be an important factor in preventing the incidence of an acute attack of appendicitis. Dr. Briscoe suggested to outside practitioners that they should prevent appendicitis among the general population by ensuring that the latter kept free from constipation. He feared, however, that that was a counsel of perfection, because the practitioners did not get the lives of their patients to regulate until they fell ill. Of course, school drill might do something; but he feared that young people, as soon as they left school, were too careless to be bothered by such things

Dr. Percy Smith said his own experience was very similar to the President's. He had been connected with lunacy about the same number of years. While he was physician at Bethlem Hospital 3,000 to 4,000 cases were admitted (and most of the cases admitted there were acute cases); he remembered only one case of appendicitis. That patient died, and post-mortem an abscess was discovered in connection with the appendix. It was the sort of case which he described as veterinary medicine, because one could not get any help from the patient, and if one did not happen to detect the physical signs independently one was at sea. This patient had melancholia, with very bad constipation, which the use of enemas relieved. He appeared to be improving, but he again got constipation, with complete stoppage, and he died. The other case of appendicitis which he remembered happened since he had been in practice as a consultant; this patient also had melancholia. man had been sent abroad by a London physician, but got worse rather than better from travelling about on the continent. He came home very ill and depressed, and with suicidal tendencies. He was at first placed under observation in a nursing home, where he swallowed his teeth, and it was necessary to perform an operation to remove them. He was then certified and sent to a private asylum, and he, Dr. Percy Smith, was asked to see him again there. Later he had a definite attack of appendicitis. He advised that the patient should be operated upon for it, but it was not done and he died. Those were the only two cases of the condition which he had seen since 1884 among cases of insanity, and apparently it was not heard of much in asylums. Dr. Briscoe's statistics showed that at any rate in the London county asylums, where they had a central pathological department, they did not find a large number of cases of the disease, yet it seemed to occur in increasing numbers

among people outside those institutions. It seemed as if most of one's friends had had the condition, and a definite proportion had had operation for it. Recently he heard of seven cases of appendicitis having occurred in one family, and two daughters at one time had operations for it. Why such a large number of cases should arise now it was difficult to say. Recently he was discussing the matter with Dr. Hobhouse, of Brighton, and his opinion was that it was due to influenza. He said that since the influenza epidemics, which began about 1890, cases of appendicitis had increased. With reference to what Sir George Savage said, he remembered that at the first epidemic in 1890, when he was at Bethlem Hospital, most of the staff got influenza and many of the nurses, but there were practically no cases among the patients of the institution. But in connection with Bridewell Hospital or King Edward Schools, the medical officers of which were also medical officers of Bethlem, of 240 girls in the school, 177 were in bed at one time with influenza. So that influenza definitely attacked people in institutions other than mental hospitals, whereas in mental hospitals the patients did not seem so liable. There had been epidemics of influenza at asylums, but they were, he considered, less frequent there than outside. Whether the absence of influenza lessened the liability to appendicitis he would not like to say.

Dr. Blair considered that it was interesting to raise the question as to what diseases were less common amongst the insane in asylums. He had been struck by the small number of cases of acute rheumatism one saw, and he had been all the more impressed by it because he had found it among the nurses with an unusually high frequency. With regard to appendicitis, he could remember seeing only one case of it, and it was not diagnosed until pus was pointing over Poupart's ligament. The patient was a very demented woman. Post-mortem, the appendix was found to be quite adherent. In asylums there was no doubt that one would not operate for appendicitis so readily as one would when it occurred in people outside, and, as Dr. Percy Smith had indicated, one would scarcely operate for subjective symptoms; one must wait, in these patients, for the occurrence of physical signs, and

no surgeon would wait for those in ordinary cases.

Mr. Wallace said he did not think appendicitis was more common to-day than it was some years ago. He thought the apparent increase was due to the better capacity possessed by the profession for diagnosis of the complaint. We knew that abdominal surgery had made very great strides during the last twenty-five years, and in that time diagnosis was much improved. With regard to what the reader of the paper said, he, the speaker, took exception to what he regarded as the extraordinary use of purgatives. By taking them one was educating the bowels not to act. There were plenty of means of inducing an action of the bowels

without taking sulphate of magnesia and similar drugs.

Mr. Howell said that those who practised medicine and surgery outside asylums owed a debt to Dr. Briscoe for having brought to their notice an indisputable fact, one from which they could not get away. He was glad that the author did not bring it forward in a spirit of exultation and superiority, but rather as one of the inquiring habit, in the hope that the debate which would ensue would lead to some elucidation of the ætiology of the condition. It could not be a coincidence; what, then, was the explanation? Dr. Briscoe said the cause of appendicitis was intestinal stasis. Those were the terms to which the physician reduced all his talk on every medical subject, hoping, he supposed, to thereby confound the surgeon. Intestinal stasis produced symptoms of its own. If intestinal stasis were the precedent condition to appendicitis, then the latter would be a condition of old age, whereas it occurred amongst young people as a rule. Appendicitis produced intestinal stasis, but not vice-versa. What was the function of the appendix? Inflammation was a reaction to injury. If they could be sure of the function of an organ, they could deduce some of the methods by which it was liable to injury. Anatomically, it was a test-tube, the walls of which were lined or packed with lymphoid tissue and glands. The glands could be left out of consideration because they were present in the whole of the intestine. Therefore the cause must be something in the lymphoid tissue. The appendix was a Peyer's patch infolded, the lumen of which opened at the junction of the small and the large intestine. It was the last Peyer's patch along the course of the intestinal canal. What was the function of the Peyer's patch? If that could be found out, the function of the appendix itself could be discovered. Peyer's

patches consisted of lymphoid tissue, and they increased in size as one went along the course of the intestine towards the ileum. They consisted of a delicate meshwork, holding very many phagocytes. He believed those Peyer's patches had a particular function to perform. The food taken teemed with foreign microbes, bacilli for which the body had no use, and he believed that the bodies of the higher mammals had learned to depend, in large measure, on the normal presence in the intestinal canal of certain bacilli for much of the rough work of digestion. The work of dissolving off fibrin was carried on with the assistance of the hydrochloric acid. But in the cæcum the work of dissolving off the coating of cellulose was done with the assistance of certain special bacilli; and he asked his hearers to remember that those microbes were the only agents in the human body which could do that work. And it was to the advantage of the host, i.e., that person's body, to protect those specal microbes from attack by foreign or deleterious microbes. With all our indiscreet meals taken outside asylums—not one such meal, but a series—we were constantly taking food unwisely and eating in a hurry-we were, perhaps, supplying a pabulum which helped the growth of the injurious microbes, and at the same time rendered the existence of the native microbe precarious. Therefore these lines of Peyer's patches and these scavengers came to the rescue in the lower reaches of the intestine; the phagocytes were sent into the lumen of the bowel to devour the inimical microbes. The finishing touch to that work was given in the cæcum, where the appendix should pour out a flood of fluid charged with phagocytes; then the native microbe had fair play to dissolve off the coating of cellulose. But the foreign microbe did not take all this lying down, especially if he were virulent. He penetrated and permeated up the lumen of the appendix, and carried war into the appendicular camp. Therefore the amount of reaction required in this appendix lymphoid tissue to set the tide of battle in favour of the host was the determining factor as to whether there should or should not be appendicitis. The reaction of the lymphoid tissue might be so slight as to escape notice; or it might be so severe as to call forth all the reserve force of the individual to rescue him from death. Very often a breach was made in the walls of the fort, or the enemy compelled to entrench in a fæcal concretion. In that case, battle was suspended and the enemy awaited further reinforcements. In any case the leucocytes would find that the very repair of these walls would be a handicap when an attempt was made to drive them out. The case in regard to tonsils and adenoids was not very dissimilar; there was not, however, time to go into the points of similarity of function in the two and the baleful effects of injury in both, and the benefit from the removal of the tissue in each case when that occurred. Follicular tonsillitis was not a trouble in asylums, because the air was so wholesome, and the patient always had definite and ample periods of rest, which was the great difference between the surgeon and the inmate. In the case of the latter, too, the food was wholesome and suitable, and was given at regular intervals, and the time devoted to meals was ample. In the vigorous adult food was made subsidiary to more intensive pursuits. He therefore did not wonder that appendicitis was more common outside than inside asylums.

Dr. Menzies said he had looked up the results he had had in the last five years in the matter of appendicitis. It certainly was uncommon in asylums, but not, in his opinion, so uncommon as some of the speakers had said. During the last five years he had had five patients operated upon for the condition, four of them successfully. In one the condition was not discovered until after general peritonitis had supervened. In a sixth the condition was not diagnosed during life, but was found on the post-mortem table. There had been six operations for the condition in members of the staff. The fundamental difference between those was that the staff consisted of young and selected lives. In connection with the rarity of appendicitis one must consider the enormous frequency of intestinal kinks in the insane. Those who had taken the trouble to investigate would find the old men's and old women's wards crammed with such cases. Practically every old case which came to post-mortem examination had these intestinal kinks in the hepatic flexure, the splenic flexure, and in the cæcal and sigmoid areas. Clinically, one found the signs in nearly all the cases; nodular mastitis and pigmentation of skin, and one could feel, when the patient's colon was constipated, the transverse colon below the brim of the pelvis, over the sacrum. Those things were very evident if looked for. The trouble was that they were not usually looked for, so it was won-

derful for appendicitis to be so uncommon in asylums and yet for intestinal kinks to be so common, obstruction being one of the causes of appendicitis. He did not know whether one should not consider that appendicitis had killed off those patients who were going to die of it before they became insane. Perhaps the old people who did not get appendicitis were protected from it by the chronicity of the kinks; and when they came to asylums and had laxative medicines administered to them, they were not liable to develop appendicitis. His statistics referred to an institution with a population of about 1050 patients and 150 staff. He remembered the surgeon operating upon two cases on the same morning. Both of them had pusformation. In the North Stafford Infirmary he understood that the statistics of appendicitis were falling gradually, so one might conclude that it was now on the decline.

Dr. J. F. Briscoe, in reply, said he was extremely obliged to the various gentlemen who had discussed his short paper, and he was indebted to the Commissioners in Lunacy for their help in the matter, for he had addressed the secretary, who kindly sent him the figures. Those figures set him thinking, and he began to read the subject up. He believed he had read every book on the subject, and from them he collected a large number of statistics. His original address would have been such a long affair that it would have been very tedious to listen to, and accordingly it was necessary to crystallise it. He might have added to it many points, some of those which had been raised in the discussion. He was obliged for the President's remarks. It was satisfactory to find that Dr. Soutar's experience coincided with his own as to the rarity of appendicitis among the insane. The remarks of his old his own as to the rarity of appendicitis among the insane. The remarks of his old teacher, Sir George Savage, interested him very much. With regard to the age-period, it was known that youths were more liable to appendicitis than were persons of greater age, and he reminded Mr. Buckell, who raised the point, that at Earlswood Asylum all the inmates were young. Dr. Percy Smith's remarks as to influenza, and Dr. Blair's concerning rheumatism, were very interesting. Dr. Fletcher Beach, who was formerly at Darenth Asylum, agreed that appendicitis was very rare there. Dr. Douglas Turner informed him that he found the disease rare also among his feeble-minded young people in the institution for idiots of which he was superintendent. A certain London surgeon had declared that it was possible to get rid of tuberculosis and rheumatism from the system by shortcircuiting the intestine. He agreed that there should be no abuse of aperients. He agreed as to the function of Peyer's patches. There were those who likened the function of the appendix to that of an oil-can or lubricant. Some surgeons believed that in 25 per cent. of people the appendix was obliterated. The exciting cause of the condition in many cases was the entry into the appendix of foreign matter, which caused strangulation. The point raised by Dr. Menzies that intestinal kinks were common in the aged insane was of much interest.

Clinical Notes and Cases.

A Case of Acromegaly with Mental Symptoms. By GUY ROWLAND EAST, M.D., D.P.H., Assistant Medical Officer, Northumberland County Asylum.

A. B—, æt. 43, was admitted to Northumberland County Asylum suffering from delusional insanity. His bodily condition was one of well-marked acromegaly. Occupation—coal miner.

Family history.—None of his near relatives have been affected by acromegaly, or any similar or allied disorder such as myxædema, exophthalmic goitre, brain tumour or diabetes. His relatives have all been tall and well developed. His family has not been subject to any hereditary disease.

His grandmother, a tall, strong woman, died, aged eighty-six, from a