

and 28·7 in Paisley. The 429 deaths in the eight towns showed a decline of 15 from the numbers returned in the previous week, and included 18 which were referred to diarrhoea, 9 to measles, 9 to diphtheria, 4 to "fever" (principally enteric), 4 to whooping-cough, 1 to scarlet fever, and not one to small-pox; in all, 45 deaths resulted from these principal zymotic diseases, against 57 and 54 in the preceding two weeks. These 45 deaths were equal to an annual rate of 1·8 per 1000, which was 1·0 below the mean rate from the same diseases in the twenty-eight English towns. The deaths attributed to diarrhoea, which had been 29 and 23 in the preceding two weeks, further declined last week to 18, and were 4 below the number in the corresponding week of last year; 7 occurred in Glasgow, 4 in Edinburgh, 4 in Dundee, and 2 in Paisley. The 9 fatal cases of measles, which included 7 in Paisley, corresponded with the number in the previous week. The 9 deaths from diphtheria, on the other hand, showed a further increase upon recent weekly numbers, and included 3 in Glasgow, 3 in Edinburgh, and 2 in Dundee. Three of the 4 fatal cases of whooping-cough and 2 of the 4 deaths from "fever" were returned in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 81 and 74 in the previous two weeks, rose again last week to 76, but were 2 below the number in the corresponding week of last year. The causes of 44, or rather more than 10 per cent., of the deaths registered in the eight towns during the week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 18·5 and 24·4 per 1000 in the preceding two weeks, declined again to 23·3 in the week ending Oct. 6th. During the thirteen weeks of last quarter the death-rate in the city averaged 20·1 per 1000, the mean rate during the same period being 16·2 in London and 15·5 in Edinburgh. The 158 deaths in Dublin last week showed a decline of 7 from the number in the previous week; they included 19 which were referred to diarrhoea, 7 to "fever" (typhus, enteric, or ill-defined), 7 to whooping-cough, 2 to scarlet fever, 2 to measles, and not one either to small-pox or diphtheria. Thus 37 deaths resulted from these principal zymotic diseases, against 18, 23, and 27 in the preceding three weeks; these were equal to an annual rate of 5·5 per 1000, the rate from the same diseases being 2·2 in London and 1·6 in Edinburgh. The deaths attributed to diarrhoea, which had increased in the previous five weeks from 7 to 18, further rose last week to 19, and exceeded the number in any previous week of this year. The 7 deaths referred to "fever" and to whooping-cough also showed an increase upon the numbers in recent weeks. The fatal cases of measles and of scarlet fever also showed an increase. Three deaths from violence and 3 inquest cases were registered, and 45, or nearly a third, of the deaths occurred in public institutions. The causes of 20, or more than 12 per cent., of the deaths in the city were not certified.

Correspondence.

"Audi alteram partem."

THE MECHANICAL RESTRAINT OF THE INSANE.

To the Editors of THE LANCET.

SIRS,—I quite feel with you that the whole question of what has been called the mechanical restraint of the insane needs calm and careful consideration, and I therefore followed the course, of which I am glad you approve, of declining to take any part in its discussion in the daily press. Following the suggestion of your leading article, I hasten to supply some facts. I feel that it is unfortunate that this discussion has arisen after I had sent in my resignation of the post of superintendent to Bethlem Hospital. I purpose setting out my views and avoiding all personal matters, which can have nothing to do with the question. I shall divide the subject into three parts. First, I shall consider what I understand by mechanical means of treatment of the insane; secondly, whether any real increase has taken place in recent years in the use of such means at Bethlem; and, thirdly, if such

increase has taken place, whether there are any and sufficient reasons for such increase.

The mechanical means used were—(a) "Soft gloves," of which each hand is separate and padded to the thickness of about an inch, and which are fastened by a strap round the wrist with a screw button. (b) "Strong dresses," made of stout linen or woollen material, and lined throughout with flannel. The limbs are all free to move, but the hands are enclosed in the extremities of the dress, which are padded. (c) "Side-arm dresses" made of the same stuffs as the last, but in these there are two attached pockets to the side of the body of the dress, into which the hands of the patient are placed. By this means, though the patient can walk about his room, such dresses being used at night, he cannot make use of his hands to injure or destroy. (d) I employ the wet and also the dry pack. The former is so commonly used that I need not describe it; but as the dry pack is seldom used with the insane, I therefore wish to point out that in this mode of treatment I have the patient wrapped in a sheet or a blanket, and if very restless a second may be used. The patient is then placed on a mattress, and retained there either by means of an attendant or else by applying a sheet over the patient, which is fastened under the bed. In a few instances, in which there was exhaustion, with some bodily ailment as well, such as swelling of the feet, I have placed the patient in a side-arm dress, and then lightly packed him, so as to ensure the recumbent position, and in one similar case I had tapes applied to the side-arm dress and fixed to the bed. The result was the saving of the patient's life. I have used a belt once with attachment of the elbows to it, so that the patient, who was given to injuring himself by picking and rubbing, was thus prevented from so doing. I maintain that every physician with experience has a right to private judgment in the treatment of his cases, and that is practically what I claim and for which I suffer abuse. There are no straitwaistcoats, handcuffs, or what may be called true instruments of restraint in Bethlem; no patients are ever kept quiet by means of drugs; and it is very rare for patients to be held by attendants after the first day or two, when, this method failing, others are sought.

Next I shall give some of my reasons for the adoption of this increased amount of control. A patient who has "gloves" on can be allowed an amount of personal freedom which could not be granted otherwise. I allow patients who would undress themselves, who would attack others or injure themselves, all but uncontrolled liberty when they wear these soft gloves. I find the results highly satisfactory. Strong dresses, too, allow a large amount of liberty to more dangerous, and especially to destructive patients, without the irritation of the personal interference of attendants. The side-arm dresses have proved of the greatest benefit to patients who were constantly masturbating or who were given to determined attempts at self-mutilation, to fits of impulsive violence, chiefly at night, or to wanton destructiveness. The way in which such patients have quietly submitted, and for the first time for weeks have spent a quiet and restful night when they found they could not destroy, was very instructive to me, and I have acted upon it since, especially when I found other means for giving rest either useless or harmful. An inspection of the list of patients returned as being restrained in Bethlem would show that the greatest number were those who had soft gloves on, and were thus really granted liberty by means of the slight restraint put upon them. There are a large number of physicians to asylums and others who have seen the cases under treatment without any reserve, and could testify to the results of the so-called mechanical restraint. I am satisfied that many persons who were thus treated were saved from death, and some have even expressed a hope that similar treatment should be followed in case of a relapse. To sum up this part of my letter, I feel that if, on the one hand, I can grant more freedom by using one form of so-called restraint, while on the other I can induce rest and quiet, leading to recovery by another method of control, I should be wanting in courage if I refrained from the use of these means simply because similar means in other times have been abused. As our profession has not reached the point of having fixed principles, we must be chiefly directed by experience. In support of this, I quote Dr. Pye-Smith in the last edition of Fagge's "Medicine," where he says, "Hence all systems of medicine, like all universal remedies, are of necessity false."

I do not wish here and now to enter into all the cases of mechanical restraint which are recorded in the "visitation

book," though I am prepared to do this if need be. At present it must suffice for me to say that I felt for a time restrained from doing what seemed likely to be useful to my patients because of this so-called principle of "non-restraint," but during the past two years I have gained confidence from experience, and I have tried the experiment with results which have justified my action, and, with Dr. Yellowlees of Glasgow, I would say that I acknowledge no principle of "non-restraint," but only the higher one of humanity and humane treatment, which, if it mean anything, means the use of every method likely to restore health. The dread of the return to the use of fetters appears to me as groundless as though, because we use domestic servants, there should arise a scare lest slavery should re-develop. Service will last, and though the slavery of restraint is over, its service as a handmaid to the physician will continue to have its place and be better understood.—I am, Sirs, yours faithfully,

GEORGE H. SAVAGE, M.D., F.R.C.P.

Henrietta-street, Cavendish-square, W., Oct. 1888.

ON THE FOOTBALL ACCIDENT CALLED THE "POOP."

To the Editors of THE LANCET.

SIRS,—In your last issue, under the above heading, Mr. George Wherry, of Cambridge, wrote a short paper with the hope of gaining some information from the experience of others, and I am happy in being able to add my mite to his interesting article. During an experience of nearly eighteen years I have seen a great many "popes taken." The derivation of the expression I am unable to supply, but it is a well-marked accident well known throughout the football world. It is a term applied to a certain condition which arises during the game of football in the front muscle of the thigh—the rectus femoris, which, it must be remembered, is a bipenniform muscle. There are certain analogous conditions incidental to our various English sports, which almost invariably arise from a similar cause, and essentially consist in a too great strain applied to muscles which have not been recently accustomed to the exertion which has been suddenly required of them. At the commencement of the seasons of the various sports, or occurring in those who at any time play vigorously when they first begin to take such exercise, there are certain accidents which are constantly happening, and all bearing the same characteristics. As soon as the muscles have become accustomed to, and trained for, the exercise required, such accidents rarely happen. At the commencement of the hunting season there are always a large number of cases of the "rider's strain" arising. At the beginning of the lawn-tennis season the "lawn-tennis leg" frequently occurs. In the early days of football, or amongst those who only play occasionally, there are always a large number of "popes taken," which occur less frequently as soon as the muscles are better adapted to the strain put upon them in the exercise. The history of these cases is, that a boy, while playing vigorously, running, or placing a sudden strain upon his leg, as in standing against force, or wrestling, or in dodging and stopping suddenly to turn, in a moment feels something go wrong in his thigh, which he almost invariably attributes to a blow from an opponent's head, elbow, or knee. He is often obliged to stop at once, if he does not fall, on account of the pain and lameness, and he is conscious that his "pope is taken." When the thigh is examined, it is found that the rectus femoris is felt rigid, as hard as a piece of wood, and stands out in front of the thigh arched like a bow which has been tightly strung. This condition continues, according to the severity of the injury, for many hours or several days, and the whole thigh, including the knee joint, may become considerably swollen. The swelling and rigidity of the rectus are instant in their advent, and do not arise from effusion, as does the later and diffuse swelling which frequently takes place. I have never seen the vastus internus or the vastus externus involved in the primary swelling and rigidity.

In my opinion, there are three injuries which arise in this condition, varying according to their severity and their mode of occurrence—a bruising of the muscle, a tearing of some few muscular fibres, and a complete severance of it in bulk.

1. The thigh has actually had a blow on it from a head,

elbow, or knee. This blow has taken place when the muscle was in the *act of firm contraction*, such a contraction that it was totally unfitted for, owing to the newness of the exercise and its want of training for it. The blow, while in this state of high tension, has so bruised the muscle and nerves which supply the muscle that it induces a more or less persistent spasm of it, according to its severity. If the blow has been slight, or the muscle be fairly well conditioned, the boy will continue playing, and it will only cause him stiffness and consequent lameness. This is the way it is usually accounted for by boys themselves; but I do not myself think that this is the usual way in which it is occasioned, though doubtless it is sometimes thus produced. In "the lawn-tennis leg," the individual who is hurt usually states and believes that someone has hit him with a racquet, or that someone has thrown a stone which has hit him in the calf of his leg, while those with whom he is playing know that nothing of the kind has taken place. I believe this is the same that usually happens when "the pope is taken," and that the following is the true interpretation of the accident in the majority of the cases.

2. That the muscle, not being used of late to the technical exertion suddenly required of it in the game of football, in a moment pops, or gives way in some of its fibres, and thus the great pain and spasm of the muscle arise, causing it to stand out, as I have said, like a highly strung bow. It is usually tender at a certain spot, and the fibre-tearing causes the pain and spasm, and, when the tear is considerable, entails the general swelling, which extends even to the knee joint. Ecchymosis is not often seen, owing to the strong sheath of the muscle retaining the ecchymosed blood.

3. I have seen one case of this condition so severe that the rectus femoris was ruptured completely in two. It occurred in a master, who was not in condition, and was playing with his boys, and while running with the ball with all his might into goal he ruptured the muscle with the unaccustomed exertion, and fell. I could place my forefinger horizontally in the furrow, and in so doing it was below the level of the skin. The muscle was severed in bulk, and not torn in its fibres.

Except the latter, the cases all soon recover with rest and support. But the remedy against its occurrence seems to me to be that no one should play hard at this or any other game at the beginning of the season, but should gradually train his muscles to bear the exercise and the strain.

I am, Sirs, yours truly,

Rugby, Oct. 8th.

CLEMENT DUKES, M.D. Lond.

To the Editors of THE LANCET.

SIRS,—In reference to the football accident called "poop," I find the word occurs in Shakespeare's "Pericles," act iv., 2, 25, Globe edition, in a speech by Boult: "Ay, she quickly pooped him; she made him roast-meat for worms." Here it may mean to strike fatally, but the context suggests by a disease rather than by a blow. It is quite probable that the word, like the game of football itself, is an ancient one.

I am, Sirs, yours truly,

Cambridge, Oct. 10th, 1888.

GEORGE WHERRY.

THE LAW IN RELATION TO ABORTION.

To the Editors of THE LANCET.

SIRS,—With regard to your remark in THE LANCET of Oct. 6th, that it would be wise for a medical man to communicate with the police when applied to by a woman to produce abortion—would this really be justifiable? I have twice in thirty years been asked to produce abortion, and the women have appeared surprised at my informing them they were asking me to do a criminal act, and have expressed their belief it was frequently done. Is it criminal for the *woman herself* to induce *herself* to abort? It is illegal for her to solicit another to do the criminal act; would the police prosecute? And, then, how could the medical man avoid the trouble and scandal of being an informer and witness? Would a surgeon be justified in informing the police that a certain woman was pregnant and would suffer greatly to escape her shame, when the fact had come to his knowledge as a professional matter, the woman possibly not knowing that her desire was criminal as well as immoral? I can hardly think he would be justified—at any rate, I should like to know definitely if I