substance was hard and collapsed in the upper half, but friable and evidently pneumonic in the lower half. On section, muco-pus was seen in the tubes, and several small collections of pus were seen in the periphery of the consolidated lower lobe; one of these was in direct communication with the pleura by means of a widely patent fistula. The whole of the pleura was lined with a greyish-yellow lymph, and the subcutaneous and muscular tissues of the thoracic wall were infiltrated with a sanguinolent serum.

The history of the case was most probably this: After a catarrh severe broncho-pneumonia set in, and in places proceeded to the formation of small abscesses; one of these burst into the pleura, and set up pyo-hæmothorax of fulminating intensity. Relief naturally followed the removal of the positive intra-thoracic pressure, but the bronchial fistula in the lung allowed of the development of a pneumothorax of such severity as to jeopardise life by its intra-thoracic pressure on the mediastinal contents.

Harley-street, W.

A CONTRIBUTION TOWARDS THE DISCUSSION ON THE EMPLOYMENT OF ALCOHOL IN MEDICINE.¹

By A. G. BARTLEY, M.D., M.R.C.S.

MY opinion is adverse to the use of alcohol, and I might proceed to give grounds for this opinion; statistics, quotations from authorities, as well as facts, I might supply myself, so as to make my paper more or less exhaustive. My aim is, however, less ambitious. I have called my paper a contribution merely. It is, in short, an account of certain incidents in my experience which bear upon the question; and these I relate as briefly as possible and in the order of their occurrence. I will begin by relating an incident which first directed my attention to this subject, and which will show that I had taken up a strong ground in this controversy even before I was aware there was such a controversy at all.

After I took my degree in medicine I passed at once into the army, and my first cases of independent medical practice were in a battery of artillery in the Punjab. After a year or so with this corps I served two years in an infantry regiment without a senior surgeon, all this time acting to the best of my lights, but entirely independent and uncontrolled. At the end of this period, and about my fifth year of service, a senior surgeon joined the regiment with power of superintendence. He was an able and a kind man, and it was not at all in a spirit of unfriendliness that, going into dinner one night, he said to me, "I was in your ward this afternoon and found a bad case of delirium tremens in which you had omitted to order stimulants; however, I have made it all right." I replied, "I have no case of delirium tremens at present." He said, "Yes, a bad case, which will probably not survive, and so you had better take care." After some consideration I at length made out the case he referred to, and replied, "That man has no delirium tremens and will certainly be at duty in a week." We thus had a difference of opinion. I begged him, however, to leave the case in my hands, which he did, and the man was at duty in fair health in a week. It was, in fact, a discovery to him, an old soldier, that delirium tremens could be treated successfully without stimulants; and, I must add, it was a discovery to me that, although I knew there was such a disease in the regiment, I had actually treated cases of the ailment myself without knowing it. That delirium tremens can be, and ought to be, treated without stimulants is now a commonplace of practice. I speak of the year 1866. At that time the treatment consisted chiefly in administration of stimulants and opium, and I take no great credit to myself for breaking away from the traditions of the profession. I simply did not treat the disease by name. It would now be called "alcoholic poisoning." I looked on recovery as a matter of course, recorded the case as debility, sometimes from drunkenness, but more generally omitted the remark as likely to draw down the attention of the commanding officer to the offender. On the occurrence of the above incident, however, my attention was directed

to the subject. I continued my treatment. My two colleagues continued theirs, and, although we were seldom without a case of delirium tremens, no case of any severity occurred among my patients. I need not say that the matter was often warmly debated. In those days Aitken's Practice of Physic was, as it still is, the chief authority in the medical service, and it was with keen delight that in the new edition of that year I found the treatment of this disease laid down: that, as it proceeded from an irritation of the nervous system by alcohol, the first condition of cure was to remove the cause, to forbid alcohol, and to give food in all possible ways, as the patients were dying of starvation—in fact, the treatment I had been pursuing. Aided by this book, I had the pleasure of making a convert of my senior.

The next three years are barren of incident. I served in the Channel Islands the greater part of the time with a battery about one hundred strong, and quite isolated. After this I returned to India, and was put in medical charge of the Artillery Division at Mooltan. It was in this station that I studied the heat fever, in which I was led to adopt a modification of treatment, which included, I may add, an avoidance of alcohol. I early made observation of another troublesome and prevalent Indian ailment—diarrhœa. Patients admitted to hospital with diarrhœa very rapidly recovered by dietetic means alone, and without drugs. The climate of the Punjab is dry, very different from that of Bengal, where, we know, diarrhœa does not always tend to cure itself. In truth, the diarrhœa was curative, proceeding from some improper ingesta, very frequently a symptom of alcoholic poisoning. On coming to hospital, milk and arrowroot were given as diet, and, with rest and quiet, in a day or two the man was well. Similarly among the children diarrhœa, which was in any case rare, proceeded from something unwholesome they had eaten, or from fever. That arising from the former cause cured itself, and fevers in the hospital, cooled artificially, quiet, and darkened, seldom lasted over the second day. So that a child brought to hospital almost insensible with vomiting and diarrhœa would be quite lively next day, and without any special treatment other than cold applications. Thus, in addition to delirium tremens, which was very rare, two other important Indian diseases, diarrhœa and heat fever, were treated by sanitary measures, any drugs employed being mere adjuncts, and alcohol would only have marred the cure.

There were many cases of acute chest disease in the cold weather. On admission to hospital, they had plainly one thing in common with those suffering from alcohol; they were exhausted from sheer want of food. It was the first and main point of my treatment that this should be met by prompt feeding, most generally by repeated cupfuls of arrowroot and milk. I gave nitre or other neutral alkaline salt, and morphia for hacking cough. The tongue began to clean at once and the temperature to fall, and the haggard and worn patient got refreshing sleep and began to convalesce. In fact, the cases ran parallel with the former ailments I have mentioned, and I soon ceased to employ with them any form of alcohol. They usually passed through a crisis, sometimes extremely severe. The temperature became subnormal—at least, as evidenced by the thermometer; the face shrunken, with feeble pulse. My practice was, at first, to give hot wine-and-water in this stage. However, I found that the stage was very transitory, and that hot milk-and-water was quite as restorative; the patient soon went to sleep; and normal warmth returned.

Hepatic disease is not so frequent in the Punjab as it is found down country, nor by any means so severe. I cannot recollect any deaths due to it directly during my stay, or any case of hepatic abscess. Minor congestions and enlargements were a frequent cause of sickness and invaliding. The treatment a few years earlier consisted in blistering, stimulants, and a mercurial course. Some time in 1863 a surgeon in Burma, whose name I cannot now recall, recommended ammonium chloride. This I tried, and thought it acted very favourably. About 1866 an immense change for the better was brought about by the introduction of podophyllin. It was called the vegetable mercury, having quite supplanted that metal, which indeed became on all hands, in all diseases, quite decried. At the time I now refer to (1870) I began to discontinue the use of podophyllin in hepatic disease, finding Epsom salts far more active and rapid in effects. I remember getting the idea from a translation in the Sydenham Society series of some German researches on the effect of certain saline springs, and made for myself an artificial mineral

¹ A paper read before the Æsculapian Medical Society.

water. This, the equivalent of the present white mixture, eased the pain and reduced the size of the liver, just as we are now familiar with, but which was then to me a real discovery. After a few days of this treatment the patients were very much the same as convalescents from chest disease. They needed time and rest and suitable food—in short, nursing,—and had a chance of regaining health. Hepatic disease is, however, ineradicable. It soon recurs in the great heat of the climate and in men not very abstemious, and few once ailing with it serve long in hot climates.

Thus in one after the other of these important diseases experience was altogether against the employment of alcohol. It must be borne in mind that I began with no theory. I gave alcohol in pneumonia and hepatitis, while rigidly withholding it in fever and diarrhoea. I delayed the alcohol, however, in those diseases to a later stage, until the temperature was nearly normal, and at length discontinued it altogether, finding that it retarded the cure and prolonged convalescence. I lost some cases of course, and among others one from delirium tremens, an old soldier who had frequently suffered before, and it was at first a matter of great pain to me to think that if I had followed the usual routine of treatment the cases might have ended differently. My colleagues, I knew, would probably have held so. However, my confidence revived in watching their practice. I had not the mortality or the severity of forms of disease in hospitals around me. I have seen two waiting men attending on delirious cases, holding the patients in their beds, and preventing their injuring themselves, just as I had seen in the old regiment typical cases of delirium tremens; but I had no such cases, and I had no doubt then, nor have I now, that the delirium arose from the free use of stimulants combined with want of food.

After the regimental system had been abolished I found myself superseded in charge of the corps of artillery with which I had served four years, and was attached to a regiment of infantry. The surgeon-major in charge went on leave soon after I joined, and as I was the next senior, according to the new regulations I assumed charge, although quite a new comer. It was then for the first time I became aware how much I had diverged from the ordinary practice—at least, as it was then in the service. The surgeon of the regiment next in rank to myself soon after I joined consulted me about a bad case of hepatitis, with high fever, foul tongue, and diarrhoea. He had given a variety of drugs which I do not remember. I found, however, that he was giving large quantities of food: jugged hare, strong soups, and six or eight ounces of port wine daily. I said I thought the man was getting too much food to digest, recommended milk diet, to stop the wine, and give salines. He replied, to my astonishment, in a nervous way, he would ask—his opinion. Now this man he mentioned was only a short time in the country. He was ten years my junior, and six or seven years his junior. I said no more, and went about my business. A few days afterwards, however, the matter cropped up again, and he spoke with an astonishing degree of bitterness on the subject. He said he had once before met a man with these views, and he proceeded to refer to a case of mine which he had visited for me on the previous day as likely to die of hectic from want of support. I pointed out to him reasons why the ailment was not hectic, and assured him the man was not in danger. In truth, my case was severe Peshawur fever which resisted quinine, and the diagnosis was doubtful, as the man had originally come to hospital for treatment of a stricture. And, I may add, the man did not die. I saw him often years afterwards at Woolwich. I was greatly surprised at the degree of irritation this surgeon displayed, and became aware that the administration or withholding of alcohol was not merely a scientific question, but one for faith and belief, with strong feeling attached thereto. His case of hepatic disease died; so did at least one other in the two months I had charge of the regiment. My colleague did not again seek my advice in his difficulties, and he was clearly not converted, for, I regret to say, he died himself from the disease in the following hot weather.

A few months after my transfer to this regiment I came home in a troopship, and there again my divergence of treatment left me utterly isolated. I was third in order of seniority on board, and was put in medical charge of the women and children. It was the last troopship of the season, and carried only invalids and soldiers' families. Of the latter there were about seventy,

with an average of perhaps two children in each. On the day after leaving Bombay a case of measles was found on board. I took the case into hospital, and every precaution to isolate it was adopted—unavailing, however. The sixth day afterwards six cases were reported. After another six days thirty more were found infected, and put under treatment; and I think that every child on board passed through the disease. The only number I can now recollect is that, after discharging all convalescents, thirty-six cases were sent to Haslar Hospital on arrival at Portsmouth. There must have been from eighty to one hundred cases in all. All these I treated myself in the hospital, restricting myself to this duty at first with the idea of isolation, afterwards in order to control the treatment, for which I was personally responsible. I gave no stimulants, and met every case of high temperature promptly by wet towels to the chest and abdomen, and by giving for food very dilute Swiss milk *ad libitum*. This treatment met with deep disapproval on the part of the mothers, who were all strangers to me, and accustomed to very different treatment. Towards the end of the voyage I found the women were not unsupported in their disapproval. They carried their complaints to the various officers commanding detachments, and thus officially to my senior, the surgeon-major in charge. Now this surgeon-major had been unlucky. He had treated only two children on board, one of them his own son. They were both dead, whereas I had lost no cases, and so, although there was a difference of opinion between us, I had not much difficulty in arranging that the treatment should be left entirely in my hands. I will summarise the result. I was the only medical officer on board who gave no alcohol. I treated personally the largest number of cases, and I alone lost no patients. Moreover, of three children who died on board, two, as I have said, were treated by the senior medical officer, and the third by my assistant. I will give particulars of this, as it is a most illustrative case. It was not a case of measles, and was treated by him in the women's quarters, and I first heard of it when he told me the child was dying. I asked him to let me try to save it, which he gladly did. I put it in hospital with my measles cases. I stopped the wine, very much to its mother's disgust, stayed with it almost an hour, feeding it with milk-and-water, which it took greedily, and left it fully assured it was out of danger. The child lived for a week, and was slowly improving. I gave it no drugs, as it had no symptoms. At the end of this time I told my assistant, whose patient it had nominally remained, to take it again to the quarters, as the hospital had become so crowded. He did so, and, notwithstanding all he had seen of my practice, he put the child at once on brandy, and it died in a few hours. I will make no further comment on these occurrences except to say that perhaps a more crucial experiment could not be devised.

I reached Portsmouth in April, and expected to find the alcohol question a matter of keen debate in England. I need not say I was in this disappointed. I found matters running in the old groove. This is several years ago. We know matters are now righting themselves. To continue. During three years' tour of duty at home I avoided discussion, and, as far as possible, all consultations. I have, however, one instructive instance to bring forward from that period. In the family of a sergeant of the commissariat two well-grown lads, the eldest about ten years old, had caught measles and were very ailing. The mother frequently suggested that the boys should have stimulants, which I refrained from. Now it happened that this sergeant was married without leave, and his wife and family were not recognised. My attendance on them was therefore voluntary; not only so, but her acceptance of my attendance was voluntary, and I found before many days that the children were taking stimulants under the direction of some private practitioner, and I ceased attending. The father, however, was displeased at this, and in a day or two begged of me to call. I did so, and found a great change for the worse, in the eldest especially. To me the cause was patent; besides that, the room smelt strongly of brandy. I did not mention this, but said to the mother as kindly as I could that the boy had no more chance of dying than she or I had if she would follow my directions. She was obdurate, however, and I did not call again. In a day or two afterwards the father came and told me the boy had died. This is the last instance I will bring forward from my military service.

I may mention a case which occurred since my coming to North London, a case of unusually large pleuritic effusion.

In consultation with a physician, specialist in chest disease, the fluid was evacuated, and the patient made a rapid recovery. This physician some time afterwards remarked to me what an excellent case it was—what a remarkably rapid convalescence. I did not emphasise in my reply, as you may suppose, that which it is my duty now to do, that I had carefully omitted the six ounces of port wine daily he had prescribed for my patient. I did once succeed in converting a hospital physician to my views—a *rara avis in terris*. I one day undertook to stand in the middle of his largest ward, and from that position to point out every patient therein who had been taking stimulants for three or four days at least, and I succeeded. To me the paleworn aspect of the patient is unmistakable.

With this I end my paper. It is not for me to go into statistics on the point, such as may be found, I dare say, in books or hospital reports. I know that such statistics are scant, for the question has not yet become a matter of calm scientific investigation. It is still one of the “fads” of the day, which the practical physician has not time to trouble about. Nevertheless, the reform is irresistibly advancing. No one can overlook the unmistakable diminution of the consumption of alcoholic liquors in hospitals. This is probably due in great measure to the greater temperance of the general community—a change of fashion rather than a reform of practice. It has been said long ago that the evils wrought by a theory have never in history discredited the theory; and certainly this would seem to be true in the practice of medicine. The melancholy history of the use of calomel and of opium in India is a saddening illustration. A few men here and there question the theory, and gain adherents chiefly among the young. The older men are not so much converted. They die out, and by-and-by the world awakes and exclaims how foolish the last generation was.

Stoke Newington.

DISSECTING ANEURYSM OF THE TRANSVERSE AORTA RUPTURING INTO THE PERICARDIUM.

By F. W. JOLLYE, M.R.C.S., L.R.C.P. LOND.

THE following case may be of interest, as showing that a dissecting aneurysm commencing in a part of the arch of the aorta beyond the pericardial sac may nevertheless travel backwards and burst into it, causing death.

J. P—, an old man of seventy-six, who was suffering from senile decay, with occasional attacks of bronchitis, but with no symptoms of cardiac mischief, was in his usual health until getting up about 8 A.M. on Feb. 13th, 1889, when he felt a sudden præcordial pain and was a little giddy. These symptoms passed off, and he felt as usual until about 9 A.M., just after drinking some tea, when he again complained of epigastric pain and faintness. He was held in the chair by two persons until I saw him, about twenty minutes afterwards, when he was collapsed, his pulse very feeble and irregular, hands cold and livid, and quite unconscious. He was immediately laid on the floor, hot-water bottles applied to his feet, and brandy administered in small doses gradually for twenty minutes, when consciousness returned. His heart sounds, on auscultation, were irregular, feeble, and muffled. I left strict orders that he was on no account to be allowed to move his head off the floor or to go upstairs (as he was constantly asking to do), and he obeyed these instructions until 2 P.M. (nearly five hours afterwards), when he suddenly sat up and said he would go upstairs, but immediately fell back dead.

Necropsy.—Abdominal cavity natural. On opening the thorax, an immensely distended pericardium, triangular in shape, apex upwards, presented itself. On opening the pericardial sac, I should say about from half to three-quarters of a pint of blood-stained serum escaped, and a blood-clot covering the right auricle and ventricle, and extending round to the right and behind, was removed, and found to weigh $\frac{3}{4}$ lb. On looking at the heart and vessels from the front, there was seen to be a blood-clot under the outer coat of the aorta at the base, especially marked between the aorta and pulmonary artery, and from this a clot extended up to the base of the internal carotid and for an inch up its wall. There was also a small clot under the outer coat of the innominate and the third part of the arch. Looking from behind, the external coat of the arch was

found ruptured close to its base, and blood-clot extended from the rupture upwards under the external coat nearly to the origin of the innominate. On opening the outer coat and washing away the blood-clot, no rupture of the inner wall could be found near the base; but, on splitting up the arch, a small clot was found protruding from a rupture of the internal coat, about three-quarters of an inch long, and lying obliquely on the anterior wall just below the origin of the internal carotid. This rupture was situated in a raised, calcareous, yellowish plaque; just beyond this there was another small stillate rupture in a similar calcareous patch. The whole arch was much dilated, and the inner surface was mottled with yellowish patches of various sizes, raised above the surface, some being calcified, others still soft. (See Figs. 1 and 2.)

FIG. 1.

Anterior view of the arch of the aorta, showing the staining by blood-clot between the external and middle(?) coats of the vessels. *a* Corresponds to the external coat seated over the rupture of the middle and internal(?) ones (the external coat is not ruptured here). The track the blood has taken can be traced downwards to the base of the aorta (*c b*); the blood-clot does not surround the whole of the anterior half. There are also effusions of blood staining the first inch of the internal carotid, slightly the innominate, and a few stains beyond the subclavian (*e*). The greatest collection of blood-clot in front was between the pulmonary artery and the aorta (*b*). (Reduced $\frac{1}{2}$ diameter.)

FIG. 2.

Posterior view of the arch of the aorta, showing the blood-clot surrounding the posterior half of the base of the aorta for about an inch, and also the internal carotid artery and a few other scattered clots. The external coat ruptured over the lower part of this blood-clot on the posterior surface, allowing the blood, to the amount of a pint, to collect in the pericardium. (Reduced $\frac{1}{2}$ diameter.)

Remarks.—I think there can be little doubt that the internal coat gave way whilst getting up, and that the