- 2. The diseases of the heart most liable to cause sudden death are aortic regurgitation and fatty disease.
- 3. That in aortic stenosis the patient has generally the longest lease of life given with any valvular disease, and may live for years after moderate hypertrophy exists.
- 4. That aortic obstruction and aortic regurgitation when associated constitute the most grave of all cardiac lesions
- 5. That lesions of the mitral valve, both obstructive and regurgitant, are slow in causing death
- 6. That simple irregularities in the heart's beat may be classed with functional disorders as not showing liability to organic disease.

In these few remarks I have not attempted to discuss all the points bearing upon the subject of cardiac disease. Such would not be possible in an address of twenty minutes. I have merely hoped to suggest a few points upon which a profitable discussion may result. I trust the experience of those before me, greater and better than my own, may be given for the elucidation of this very interesting subject.

Selections.

A NEW ANTISEPTIC DRESSING.*

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Mr. President and Gentlemen,—When I last had the honor, five years ago, of addressing this Society at the request of its President, I brought before you an attempt that I had made to utilise the purely antiseptic properties of corrosive sublimate without the disadvantages attending its highly irritating qualities. I had ascertained that when corrosive sublimate precipitates albumena precipitate is formed, as was generally supposed, of albuminate of mercury, that is to say, a combination of albumen as an acid with mercury as a base. The bichloride, however, really remains intact, the albumen being only loosely associated with it. I found moreover that this precipitate even after it had been dried, was capable of being dissolved in the serum of the blood, and that this solution in blood serum was powerfully

antiseptic and non-irritating. It was then that I proposed and brought before you a new dressing in the form of what has since been known as a sero-sublimate gauze. This gauze gave very satisfactory results. Nevertheless it was not all that could be desired; it was harsh, it was not very absorbent, and the material of which it was made, the serum of horses' blood, was not always obtainable, and in hot weather it was apt to be decomposed. Soon after that a firm of manufacturing chemists suggested to me that if a fifth part of the weight of sal ammoniac were added to the bichloride of mercury and serum, a much more liquid preparation was obtained, my original preparation being so thick as to be with difficulty diffused in water. This proportion of sal ammoniac in combination with corrosive sublimate constitutes a double salt known to the old chemists as sal alembroth. The next step was to find out whether this double salt possessed the same antiseptic properties as the sublimate. I made experiments and found that the change in no wise impaired the antiseptic properties of the latter; on the contrary it improved them, in that a less proportional quantity of the sublimate in this form answered the same purpose. I found that with both of them, dealing with blood serum, sp.g. 1025, a proportion of about 1-1500 was required to prevent the development of micro-organisms in the serum. My experiments showed that, weight for weight, the sal alembroth was more efficacious than the sublimate. Another point is that the addition of the ammonia prevents to a large extent the injurious effects of the sublimate on the albumen. Morever, sal alembroth is very much less irritating than the sublimate. I was at first very pleased with the discovery of these advantages in sal alembroth. But it soon transpired that there were certain disadvantages connected with the use of this double salt, dependent upon its solubility. Sal alembroth is washed out of the dressings with the greatest ease. Another disadvantage on account of its solubility is that the discharge, in permeating the dressing, took up the antiseptic as it went along until, if the discharge were copious and the dressing large, before it got to the edge of the dressing it became so concentrated as to prove extremely irritating. I was, therefore, not satisfied with sal alembroth as an antiseptic dressing, and I have consequently

^{*}Delivered before the Medical Society of London, Nov. 4th, '89.